

**PROCEEDINGS**  
**OF THE**  
**ILLINOIS MINING INSTITUTE**

---

FOUNDED FEBRUARY 1892

---



1999



PROCEEDINGS  
OF THE  
ILLINOIS MINING INSTITUTE

FOUNDED FEBRUARY 1892

**1999**

ANNUAL MEETING  
COLLINSVILLE, ILLINOIS  
AUGUST 31-SEPTEMBER 2, 1999

ILLINOIS MINING INSTITUTE, CHAMPAIGN, ILLINOIS

Published by  
Illinois Mining Institute, Southern Illinois University, Carbondale, Illinois 62959  
September 2000

Editing by Dr. Y. P. Chugh and Nancy Cline  
Typesetting by Nancy Cline

Photography by Robert Fox and Don Buchanan

Printed by United Graphics, Inc., 2916 Marshall Avenue,  
P.O. Box 559, Mattoon, Illinois 61938



Mark Cavinder  
PRESIDENT 1998-99



### THE COAL MINER

TRUE—he plays no grandstand role in life  
But his importance is vital, great and just:  
For without his toil in earth's caverns deep,  
Civilization would soon crumble into the dust.  
AD 1964      From his poem – Vachel Davis

(Dedicated on State Capitol Lawn, Springfield, Illinois, October 16, 1964)

IN MEMORY  
of  
All Deceased Members  
of the  
ILLINOIS MINING INSTITUTE

Nick Andos  
D. Leo Gilmartin  
Robert A. Houser  
Tom Sawyer  
Clayton Slack  
Ray Taucher

# OFFICERS 1998-99

## PRESIDENT

Mark Cavinder  
Old Ben Coal Co.  
Coulterville, Illinois

## FIRST VICE PRESIDENT

Philip Ott  
Freeman United Coal Mining Co.  
Springfield, Illinois

## SECOND VICE PRESIDENT

Will Border  
Joy Machinery Co.  
Mt. Vernon, Illinois

## SECRETARY-TREASURER

Y. Paul Chugh  
Mining and Mineral Resources Engr.  
Southern Illinois University  
Carbondale, IL 62901  
(618) 536-6637  
e-mail: chugh@engr.siu.edu

## ADMINISTRATIVE ASSISTANT

Cindy Johnson  
Mining and Mineral Resources Engr.  
Southern Illinois University  
Carbondale, IL 62901  
(618) 536-6637  
e-mail: cindy@engr.siu.edu

## EXECUTIVE BOARD

Joseph Angleton ('99)  
Darrell Auch ('99)  
Gregg Bierei, *ex officio*  
Will Border ('00)  
Terry Bouvet ('00)  
Y. Paul Chugh ('99)  
David Finnerty (01)

Richard Mottershaw, *ex officio*  
Philip Ott, ('00)  
Howard Schultz ('01)  
Steve Short ('01)  
Taylor Pensoneau, *ex officio*  
Maynard St. John (01)  
John Wilson ('99)

## IMI COMMITTEE CHAIR PERSONS FOR 1998-99

### ADVERTISING COMMITTEE

Fred Bauer, *Co-Chairman*  
Jim Zwahlen, *Co-Chairman*

### NOMINATING COMMITTEE

Howard Schultz, *Chairman*

### AUDITING COMMITTEE

Will Border, *Chairman*

### PROGRAM COMMITTEE

Darrell Auch, *Co-Chairman*  
Terry Bouvet, *Co-Chairman*

### HONORARY MEMBERSHIP COMMITTEE

Philip Ott, *Chairman*

### SCHOLARSHIP COMMITTEE

D. J. Johnson, *Chairman*

## OFFICERS 1999-2000

### PRESIDENT

Phillip Ott  
Freeman United Coal Mining Co.  
Farmersville, Illinois

### FIRST VICE PRESIDENT

Will Border  
Joy Mining Machinery, Inc.  
Mt. Vernon, Illinois

### SECRETARY-TREASURER

Y. Paul Chugh  
Mining and Mineral Resources Engr.  
Southern Illinois University  
Carbondale, IL 62901  
(618) 536-6637

### ADMINISTRATIVE ASSISTANT

Cindy Johnson  
Mining and Mineral Resources Engr.  
Southern Illinois University  
Carbondale, IL 62901  
(618) 536-6637

### EXECUTIVE BOARD

Joseph Angleton (02)  
Tom Austin  
Fred Bauer  
Mark Cavinder  
David Finnerty (01)  
John Henriksen  
Leonard Hopkins  
Maynard St. John (01)

D. J. Johnson  
William Kelly  
Tom Bubanovich  
Richard Mottershaw, ex officio  
Howard Schultz (01)  
Steve Short (01)  
Taylor Pensoneau, ex officio  
Michael P. Murphy

### IMI COMMITTEE CHAIRPERSONS FOR 1999-2000

#### ADVERTISING COMMITTEE

Fred Bauer, Co-Chairman  
Jim Zwahlen, Co-Chairman

#### NOMINATING COMMITTEE

Howard Schultz, Chairman

#### HONORARY MEMBERSHIP COMMITTEE

Philip Ott, Chairman

#### PROGRAM COMMITTEE

Thomas Denton, Chairman

#### SCHOLARSHIP COMMITTEE

D. J. Johnson, Chairman

## PRESIDENTS OF ILLINOIS MINING INSTITUTE\*

|           |                                                               |
|-----------|---------------------------------------------------------------|
| 1892-93   | JAMES C. SIMPSON, Consolidated Coal Co., St. Louis, MO        |
| 1893-94   | JAMES C. SIMPSON, Consolidated Coal Co., St. Louis, MO        |
| 1894-95   | WALTON RUTLEDGE, State Mine Inspector, Alton, IL              |
| 1895-1911 | Institute Inactive                                            |
| 1912-13   | JOHN P. REESE, Superior Coal Co., Gillespie, IL               |
| 1913-14   | THOMAS MOSES, Bunsen Coal Co., Georgetown, IL                 |
| 1914-15   | J. W. STARKS, State Mine Inspector, Georgetown, IL            |
| 1915-16   | WILLIAM BURTON, Illinois Miners, Springfield, IL              |
| 1916-17   | FRED PFAHLER, Superior Coal Co., Gillespie, IL                |
| 1917-18   | PATRICK HOGAN, State Mine Inspector, Carbon, IL               |
| 1918-19   | WILLIAM HALL, Miners Examining Board, Springfield, IL         |
| 1919-20   | WILLIAM HALL, Miners Examining Board, Springfield, IL         |
| 1920-21   | FRANK R. TIRRE, North Breese Coal & Mining Co., Breese, IL    |
| 1921-22   | H. H. STOEK, Mining Dept. University of Illinois, Urbana, IL  |
| 1922-23   | JOHN G. MILLHOUSE, State Mine Inspector, Litchfield, IL       |
| 1923-24   | D. D. WILCOX, Superior Coal Co., Gillespie, IL                |
| 1924-25   | H. E. SMITH, Union Fuel Co., Springfield, IL                  |
| 1925-26   | E. G. LEWIS, Chicago-Sandoval Coal Co., Sandoval, IL          |
| 1926-27   | WILLIAM E. KIDD, State Mine Inspector, Peoria, IL             |
| 1927-28   | JAMES S. ANDERSON, Madison Coal Corp., Glen Carbon, IL        |
| 1928-29   | JOHN E. JONES, Old Ben Coal Corp., West Frankfort, IL         |
| 1929-30   | A. C. CALLEN, University of Illinois, Urbana, IL              |
| 1930-31   | JOSEPH D. ZOOK, Illinois Coal Operators Assn., Chicago, IL    |
| 1931-32   | GEO. C. MC FADDEN, Peabody Coal Co., Chicago, IL              |
| 1932-33   | CHAS. F. HAMILTON, West Virginia Coal Co., St. Louis, MO      |
| 1933-34   | HARRY A. TREADWELL, C.W. & F. Coal Co., Benton, IL            |
| 1934-35   | C. J. SANDOE, West Virginia Coal Co., St. Louis, MO           |
| 1935-36   | T. J. THOMAS, Valier Coal Co., Chicago, IL                    |
| 1936-37   | W. J. JENKINS, Consolidated Coal Co., St. Louis, MO           |
| 1937-38   | H. H. TAYLOR, JR., Franklin County Coal Corp., Chicago, IL    |
| 1938-39   | PAUL WEIR, Consulting Mining Engineer, Chicago, IL            |
| 1939-40   | ROY L. ADAMS, Old Ben Coal Corp., West Frankfort, IL          |
| 1940-41   | M. M. LEIGHTON, State Geological Survey, Urbana, IL           |
| 1941-42   | J. A. JEFFERIS, Illinois Terminal Railroad Co., St. Louis, MO |
| 1942-43   | CARL T. HAYDEN, Sahara Coal Co., Chicago, IL                  |
| 1943-44   | BEN H. SCHULL, Binkley Mining Co., Chicago, IL                |
| 1944-45   | GEORGE F. CAMPBELL, Old Ben Coal Corp., Chicago, IL           |
| 1945-46   | JOSEPH E. HITT, Walter Bledsoe Co., St. Louis, MO             |
| 1946-47   | ROBERT M. MEDILL, Dept. Mines & Minerals, Springfield, IL     |
| 1947-48   | HARRY M. MOSES, H. C. Frick Coal Co., Pittsburgh, PA          |
| 1948-49   | J. ROY BROWNING, Illinois Coal Operators Assn., Chicago, IL   |
| 1949-50   | T. G. GEROW, Truax-Traer Coal Co., Chicago, IL                |
| 1950-51   | G. S. JENKINS, Consolidated Coal Co., St. Louis, MO           |

\*Affiliations listed at time of presidency.

1951-52 CLAYTON G. BALL, Paul Weir Co., Chicago, IL  
 1952-53 WILLIAM W. BOLT, Pawnee, IL  
 1953-54 HAROLD L. WALKER, University of Illinois, Urbana, IL  
 1954-55 J. W. MAC DONALD, Old Ben Coal Corp., Benton, IL  
 1955-56 EARL SNARR, Freeman Coal Mining Corp., Hindsdale, IL  
 1956-57 PAUL HALBERSLEBEN, Sahara Coal Co., Harrisburg, IL  
 1957-58 H. C. LIVINGSTON, Truax-Traer Coal Co., Chicago, IL  
 1958-59 A. G. GOSSARD, Snow Hill Coal Corp., Terre Haute, IN  
 1959-60 H. C. MC COLLUM, Peabody Coal Co., St. Louis, MO  
 1960-61 STUART COLNON, Bell & Zoller Coal Co., Chicago, IL  
 1961-62 ROBERT J. HEPBURN, United Electric Coal Co., Chicago, IL  
 1962-63 JOHN P. WEIR, Paul Weir Co., Chicago, IL  
 1963-64 E. T. (GENE) MORONI, Old Ben Coal Corp., Benton, IL  
 1964-65 JOHN W. BROADWAY, Bell & Zoller Coal Co., Chicago, IL  
 1965-66 B. R. GEBHART, Freeman Coal Mining Corp., Chicago, IL  
 1966-67 C. A. BROECKER, Ayrshire Collieries Corp., Indianapolis, IN  
 1967-68 JOSEPH CRAGGS, Peabody Coal Co., Taylorville, IL  
 1968-69 CLAYTON F. SLACK, Sahara Coal Co., Chicago, IL  
 1969-70 JOSEPH Q. BERTA, Truax-Traer Coal Co., Pinckneyville, IL  
 1970-71 R. F. DONALDSON, United Electric Coal Co., Chicago, IL  
 1971-72 CECIL C. BAILIE, Old Ben Coal Corp., Benton, IL  
 1972-73 E. MINOR PACE, Inland Steel Coal Co., Sesser, IL  
 1973-74 ARTHUR L. TOWLES, Zeigler Coal Co., Johnston City, IL  
 1974-75 DALE E. WALKER, Southwestern Illinois Coal Corp., Percy, IL  
 1975-76 M. V. (DOC) HARRELL, Freeman United Coal Mining Co.,  
 Chicago, IL  
 1976-77 JOHN J. SENSE, Tosco Mining Corp., Pittsburgh, PA  
 1977-78 BILL F. EADS, Monterey Coal Co., Collinsville, IL  
 1978-79 WILLIAM E. WILL, Peabody Coal Co., Evansville, IN  
 1979-80 CHARLES E. BOND, Consolidation Coal Co., Springfield, IL  
 1980-81 WALTER S. LUCAS, Sahara Coal Co., Inc., Harrisburg, IL  
 1981-82 JACK A. SIMON, Illinois State Geological Survey, Urbana, IL  
 1982-83 H. ELKINS PAYNE, AMAX Coal Co., Indianapolis, IN  
 1983-84 JAMES D. CHADY, Old Ben Coal Co., Benton, IL  
 1984-85 ROBERT M. IZARD, Midland Coal Co., Farmington, IL  
 1985-86 DAVID A. BEERBOWER, Freeman United Coal Mining Co.,  
 Mt. Vernon, IL  
 1986-87 MACK H. SHUMATE, Zeigler Coal Co., Fairview Heights, IL  
 1987-88 M. E. HOPKINS, Peabody Development Co., St. Louis, MO  
 1988-89 GEORGE L. MAY, Monterey Coal Co., Carlinville, IL  
 1989-90 RICHARD R. SHOCKLEY, Illinois Department of Mines &  
 Minerals, Springfield, IL  
 1990-91 DAN G. WOOTON, White County Coal Corp., Carmi, IL  
 1991-92 MICHAEL K. REILLY, Zeigler Coal Co., Fairview Heights, IL  
 1992-93 J. ROBERT DANKO, Peabody Coal Co., Marissa, IL

|         |                                                                    |
|---------|--------------------------------------------------------------------|
| 1993-94 | ROBERT W. SHANKS, Arch of Illinois, Inc., Percy, IL.               |
| 1994-95 | DAVID L. WEBB, Freeman United Coal Mining Co.,<br>Springfield, IL. |
| 1995-96 | BERT HALL, Lane Erectors, Harrisburg, IL.                          |
| 1996-97 | JOHN LANZEROTTE, Monterey Coal Co., Carlinville, IL.               |
| 1997-98 | GREGG BIERREI, Thunder Basin Coal Co., Wright, WY.                 |
| 1998-99 | MARK CAVINDER, Old Ben Coal Co., Carterville, IL.                  |

## SECRETARIES AND SECRETARY-TREASURERS

|           |                                                        |
|-----------|--------------------------------------------------------|
| 1892-95   | JOHN S. LORD, Chicago and Kansas City Coal Co.         |
| 1895-1911 | Institute Inactive                                     |
| 1911-23?  | MARTIN BOLT, Illinois Department of Mines and Minerals |
| 1923?-29  | FRANK R. TIRRE, St. Louis, MO                          |
| 1929-54   | B. E. SCHONTHAL, B. E. Schonthal & Co.                 |
| 1954-63   | GEORGE M. WILSON, Illinois State Geological Survey     |
| 1963-68   | JACK A. SIMON, Illinois State Geological Survey        |
| 1968-75   | M. E. HOPKINS, Illinois State Geological Survey        |
| 1975-78   | HAROLD J. GLUSKOTER, Illinois State Geological Survey  |
| 1978-98   | HEINZ H. DAMBERGER, Illinois State Geological Survey   |
| 1998-     | Y. PAUL CHUGH, Southern Illinois University            |

## LIST OF HONORARY MEMBERS\*

Listed are honorary members from the beginning of the Institute as far as our records reveal. Honorary members were not approved or elected every year. According to the IMI Constitution and Bylaws adopted June 24, 1913, Article II, Section 2: *"Any person of distinction in mining may be elected an honorary member of the Institute by two-thirds vote...."* In 1983, this section of the Constitution was amended to: *"Annually, one or more members recommended by a committee and approved by the Executive Board, who has rendered outstanding service to the Illinois Mining Institute, and thereby to the coal industry of the state, may be elected as an Honorary Member with dues being waived."*

- 1928 A. J. Moorshead, La Jolla, CA  
Hugh Murray, Equality, IL  
John Rollo, North Breese Coal Mining Co., Breese, IL
- 1929 Frank Tirre, St. Louis, MO
- 1932 Thomas R. Stockett, Spring Canyon Coal Co., Spring Canyon, UT
- 1939 John F. Goally, Morris, IL  
Eugene McAuliffe, Union Pacific Co., Omaha, NB  
Thomas Moses, Bunson Coal Co., Danville, IL
- 1940 F. E. Weissenborn, IL Coal Operations Association, St. Louis, MO
- 1945 J. A. Jefferis, IL Terminal Railroad, St. Louis, MO  
W. J. Jenkins, Consolidated Coal Co., St. Louis, MO
- 1948 J. W. Starks, IL Department of Mines & Minerals, Springfield, IL  
L. E. Young, Mining Engineer, Pittsburgh, PA
- 1949 John E. Jones, Old Ben Coal Corp., West Frankfort, IL  
F. S. Pfahler, Superior Coal Co., Chicago, IL  
B. E. Schonthal, B. E. Schonthal Co., Inc., Chicago, IL  
Paul Weir, Paul Weir Co., Chicago, IL  
D. D. Wilcox, Superior Coal Co., Gillespie, IL
- 1955 George C. McFadden, Carmac Coal Co., Chicago, IL
- 1958 D. W. Buchanan, Jr., Old Ben Coal Corp., Chicago, IL
- 1961 Fred S. Wilkey, IL Coal Operators Association, Chicago, IL
- 1963 George M. Wilson, IL State Geological Survey, Urbana, IL
- 1965 M. M. Leighton, IL State Geological Survey, Urbana, IL
- 1966 Carl T. Hayden, Sahara Coal Co., Chicago, IL
- 1968 John W. Broadway, Bell & Zoller Coal Co., Chicago, IL  
Jack A. Simon, IL State Geological Survey, Urbana, IL
- 1969 B. H. Schull, Benkilley Mining Co., Marion, IL
- 1970 J. W. MacDonald, Consultant, Benton, IL
- 1971 H. C. McCollum, Peabody Coal Co., St. Louis, MO
- 1972 Frank Nugent, Freeman United Coal Mining Co., Chicago, IL
- 1973 Paul Halbersleben, Sahara Coal Co., Inc., Harrisburg, IL

- 1974 Clayton G. Ball, Paul Weir Co., Evanston, IL
- 1975 CC. Conway, National Mine Service, Nashville, IL  
M.E. Hopkins, IL State Geological Survey, Urbana, IL
- 1976 Nate G. Perrine, Peabody Coal Co., St. Louis, MO
- 1978 Cletus A. Broecker, AMAX Coal Co., Indianapolis, IN
- 1979 Thomas L. Garwood, Freeman United Coal Mining Co.,  
Benton, IL
- 1980 George C. Lindsay, Coal Mining & Processing, Chicago, IL
- 1981 Joseph Schonthal, J. Schonthal & Associates, Highland Park, IL
- 1982 J.A. Bottomley, Sahara Coal Co., Inc., Harrisburg, IL
- 1983 Betty Conerty, Illinois Mining Institute, Urbana, IL  
Joe Craggs, Peabody Coal Co., Taylorville, IL
- 1984 E.T. Moroni, Old Ben Coal Co., Herrin, IL  
E. Minor Pace, Inland Steel Coal Co., Mt. Vernon, IL
- 1985 Russell T. Dawe, Inland Steel Coal Co., Valier, IL
- 1986 E.H. Roberts, Inland Steel Coal Co., Mt. Vernon, IL
- 1987 William E. Will, Peabody Coal Co., St. Louis, MO
- 1988 Lanny Bell, Roberts & Schaefer Co., Chicago, IL
- 1989 M.V. (Doc) Harrell, Freeman United Coal Mining Co.,  
Mt. Vernon, IL
- 1990 John C. Bennett, Peabody Coal Co., Belleville, IL
- 1991 Richard R. Shockley, Center for Research on Sulfur in Coal,  
Carterville, IL
- 1992 Walter E. Brandlein, Roberts & Schaefer Co., Chicago, IL  
Dayton McReaken, Zeigler Coal Co., Fairview Heights, IL  
Thomas Sadler, Old Ben Coal Co., Benton, IL  
Raymond C. Taucher, Consolidation Coal Co., Pinckneyville, IL
- 1993 Fred Rice, Peabody Coal Co., Beaver Dam, KY
- 1994 Walter S. Lucas, Sahara Coal Co., Harrisburg, IL
- 1995 William H. Mullins, Freeman United Coal Mining Co.,  
West Frankfort, IL
- 1996 Michael K. Reilly, Zeigler Coal Holding Co., Fairview Heights, IL
- 1997 Fred Bowman, IL Office of Mines and Minerals, Springfield, IL  
Heinz H. Damberger, IL State Geological Survey, Champaign, IL
- 1998 Ron Morse, IL EPA, Marion, IL
- 1999 Joseph S. Spivey, President, IL Coal Association, Springfield, IL

\*Affiliations listed are at time of award.

## CONTENTS

|                              |      |
|------------------------------|------|
| President Mark Cavinder..... | iii  |
| The Coal Miner.....          | iv   |
| In Memory of.....            | v    |
| Officers, 1998-1999.....     | vi   |
| Officers, 1999-2000.....     | viii |
| Presidents.....              | xi   |
| Secretary-Treasurers.....    | xii  |

## ANNUAL MEETING

### WEDNESDAY MORNING

|                                                                                  |   |
|----------------------------------------------------------------------------------|---|
| Welcome-Mark Cavinder.....                                                       | 1 |
| Keynote Speaker - General Richard L. Lawson.....                                 | 2 |
| America's Coal and Mining Technology: Resources<br>For The Next American Century |   |

### TECHNICAL SESSION I

|                                                                                                   |    |
|---------------------------------------------------------------------------------------------------|----|
| Mining, Processing, and Utilization.....                                                          | 14 |
| Continuous Haulage at the Marissa Mine-Peabody Coal<br>Company - Terry Hurd and Dave Gargacz..... | 15 |
| Plugging Wells in Rend Lake- Consolidation Coal<br>Company - Jim Hinz.....                        | 20 |
| Galatia Preparation Plant Expansion-American Coal<br>Company - Bob Milligan.....                  | 25 |

## ALL INSTITUTE MEETING

|                                |    |
|--------------------------------|----|
| Honorary Membership Award..... | 28 |
| Changing of Presidents.....    | 29 |
| Mine Rescue Awards.....        | 30 |
| Special Awards.....            | 32 |
| Scholarship Awards.....        | 33 |

## TECHNICAL SESSION II

### Health, Safety, and Environment

|                                                                                            |    |
|--------------------------------------------------------------------------------------------|----|
| Keynote Speaker - Robert C. Winchester<br><i>(Not Available for Publication)</i>           |    |
| Dry Diesel Scrubber System-Cyprus Amax Coal Company,<br>Tommy McDonald.....                | 38 |
| Emergency Preparedness-MSHA Academy - Bill Moser<br><i>(Not Available for Publication)</i> |    |
| Four Headed Bolter Presentation - Phil O'Malley<br><i>(Not Available for Publication)</i>  |    |

## MEMBERSHIP, EXHIBITORS AND ADVERTISERS

|                                             |     |
|---------------------------------------------|-----|
| Exhibitors of the Annual Meeting.....       | 55  |
| Membership List.....                        | 63  |
| Advertising Committee.....                  | 93  |
| Exhibitors.....                             | 94  |
| Advertiser Products and Services Index..... | 170 |
| Alphabetical Index.....                     | 177 |
| Candid Photographs.....                     | 179 |

**Plan to Attend!!**  
**ILLINOIS MINING INSTITUTE**  
**108<sup>th</sup> Annual Meeting and**  
**ILDNR MINE RESCUE COMPETITION**  
**October 30-November 1, 2000**

**Gateway Center**  
**Collinsville, Illinois**

**Want to exhibit?**

**Contact:**

**Nancy Cline or Fred Bauer**

**Illinois Mining Institute**  
**Engineering Building**  
**Southern Illinois University**

**Carbondale, Illinois**

**Phone 618/536-6631**

**e-mail: [imi@enr.sui.edu](mailto:imi@enr.sui.edu)**



PROCEEDINGS  
OF THE  
ILLINOIS MINING INSTITUTE

ANNUAL MEETING  
107<sup>th</sup> YEAR  
COLLINSVILLE, ILLINOIS  
Wednesday and Thursday  
September 1-September 2, 1999

*The opening session of the 107<sup>th</sup> Annual Meeting of the Illinois Mining Institute was convened at 10:00 A.M., Wednesday, September 1, 1999, in the Mississippi Room of the Gateway Center. Mark Cavinder, President of the Institute, presided.*



**AMERICA'S COAL AND MINING TECHNOLOGY:  
RESOURCES FOR THE NEXT AMERICAN CENTURY**

**RICHARD L. LAWSON, PRESIDENT**  
*National Mining Association*



There's much industrial achievement and history behind this first joint meeting of the Illinois Mining Institute and the Illinois Mine Rescue Association. The National Mining Association's recent economic survey reported that Illinois mining has a \$24 billion economic presence when the direct and indirect impacts are counted up.

Illinois in 1998 was America's 7<sup>th</sup> ranked coal producer by tonnage; and it is the 16<sup>th</sup> ranked mining state by value of product, excluding coal. Thus, the invitation to keynote one of your sessions was an offer I could not refuse for several reasons.

First, in no state are mining companies more keenly oriented toward advancing their efficiency, productivity, safety and competitiveness. These qualities will be most important to the future of all mining.

In this tradition, your secretary and conference organizer, Dr. Chugh of Southern Illinois University, is among those who were early to interest themselves in the new Industries of the Future program. We'll examine this initiative in more detail as we move ahead.

However, I should explain now that the intent of Industries of the Future program is to synergize the intellectual power and professional judgement found in leading research universities, national laboratories, and the industry. The energies will be directed toward identifying and developing the technologies that will shape our industry's future.

Established by the National Mining Association in cooperation with the Department of Energy, this initiative is dedicated to bringing into early use new technologies that will help all segments of the mining – cross-cutting technology -that will advance economic performance, that will deliver gains in health and safety, and that will resolve reasonable environmental concerns.

Next, I could not refuse because no state is more involved than Illinois with the future of its coal-mining industry – in direct support of research and development, in the development of infrastructure and in marketing.

Finally, the recoverable reserve of coal in Illinois is an asset of world-class importance – at least the energy equivalent of Iraq's recoverable reserves of oil, more than the combined reserve of all the nations of the Far East and Asia. Many estimates hold that the Iraqi reserve is the world's second largest of oil. Illinois holds one of the foremost of U.S. coal reserves.

The first joint meeting is an event of transition in a time of transitions.

One of America's greatest early statesmen said of transitions, and I quote him directly, "...such times must always be (intervals) of uncertainty, confusion, error, and wild...fanaticism."

I suspect that to many in Illinois mining, this sounds like – well, like a slow day at the office.

Today we're in the middle of an ongoing national debate on the future and on the economic organization of the next century. It's an argument that ranges at the federal level through the courts, the Congress and the regulatory agencies, and between them as well.

Mining is in transition. The coal industry is in transition. Its principal customer, the electric power industry, is in transition. The national economy, the world economy and world population are in transition. Population will be up to seven billion at some point relatively early in the next century and to eight billion somewhat later.

Relations and relative standings among nations of the world are in transition as these new human beings maneuver for energy and resources to improve their lives.

Illinois mining will be important in the future of the United States, and the world – no less important than it has been in this century in creating and sustaining the industrial foundation that upholds America's current preeminence in world affairs and world economics.

What I want us to do in our few minutes together is to examine some of the transitions and some of the activities to orient those transitions that the

National Mining Association and its member companies are undertaking activities to turn the transition away from confusion and error; and to turn them toward useful action and effectiveness.

I also invite you to set aside for the moment the concerns of the day to give some thought to the promise of the future; and to the kinds of things that might be done to make it come to be promises fulfilled.

We'll look specifically at the following:

- At causes underlying some of the confusion and uncertainty in this particular time of transition – causes in both the political and explanatory senses of the word;
- At the direction of events in the deregulation of electric power;
- At the technology program *Industries of the Future*;
- And, at a companion program called *Vision 21 Energyplex*.

With all of this in mind, some perspective is required. The best perspective may be found in touching on the following:

- First, on a phrase everyone has heard at least once here at century's end: *The American Century*;
- And then on some findings in a remarkable book that was given to me not long ago – a book entitled *Energy in the Future*.

The phrase *The American Century* was once only a promise awaiting fulfillment. It comes from another time of uncertainty, confusion, and fear – from a few months before the 1941 surprise raid on Pearl Harbor and our entry into World War II. It was meant to predict this nation's eventual rise to current preeminence in world affairs and world economics.

The publisher Henry Luce coined the phrase in his magazine *Life* in another policy debate. The question then was whether America would defend freedom and democracy or remain a bystander to what looked like totalitarian conquest of most of the world.

Of all such predictions on the formative forces and probable outcome of the 20<sup>th</sup> Century, Mr. Luce's came closest to the truth. America has led in bringing about a long period of general peace – has done so with resolution and despite many threatening events and long odds. America has led in

establishing a world economic system that is capable of sustaining that peace, if let to function freely.

Not the least of the reasons Mr. Luce proved a prophet are the strength of America's economy and the productivity of country's workers. Not the least of the reasons the American economy is strong and American workers productive is the following:

- America possesses material resources in variety and volume unsurpassed by any other nation – metal ores, industrial minerals, materials, and energy;
- The free flow of material resources is critical to efficiency, to economic performance and to innovation;
- Low-cost energy is critical to efficiency and economic performance;
- The American mining industry excels in delivering these material resources to public use most competitively – delivering on demand and at low cost.

The standard references say 75 material resources are critical to the operation of a modern economy. America possesses 60 of them. It may be the world's most useful collection of ores, minerals, materials and energy.

America ranks first or second in global production of about 20 essential metals, minerals, and coal. We rank high in many more. We hold significant shares of world reserves.

Electric power has proved the most useful energy in making possible *The American Century*. It is the most versatile and the most widely used – industrial, commercial and personal.

Almost every new economic activity or new amusement or convenience requires electric power, and it improves the performance of most existing ones. It is the feedstock of much activity and the genesis of more. It drives virtually all advanced technology.

It's estimated that 13 percent of the nation's power output is required for all the activities associated with computers – for their fabrication, to operate them and their peripherals, and for the operations of the internet. The power demands of new technology grow every year.

An abundance of electric power is a condition requisite for a modern economy. Its presence is required for strength and growth, its absence a predicate for decline.

If power is not in the right place at the right time in the right amounts at the right price, everything either slows down or – in the case of computers – goes down.

Mining delivers the two fuels that together account for almost 80 percent of America's electric power- coal at 57 percent and uranium at 20 percent.

In the global economy, the U.S. average of industrial rates has been:

- 37 percent below the average for Europe;
- 49 percent below Germany, where subsidized coal and nuclear power predominate;
- And 73 percent below Japan, where nuclear and liquid natural gas predominate.

Electric power from coal is one of America's competitive advantages in the global economy – an edge for the goods and services of All-American workers.

Federal projections say that soon we must find ways and means to generate much more power – over the next 20 years as much as 1.6 to 1.7 trillion more kilowatt-hours of electric power a year.

This growth in requirement will be more than the present combined output of our primary economic competitors, Japan and Germany. It is more than five times the leading economies of Europe in combination. It is two times America's growth requirement over the last 20 years.

The book *Energy in the Future* is all about transition in the electric power industry, and about the promise of the future. It is not remarkable for what it says. It enters into policy discussions some speculation on why increased coal use may well not be possible. It also postulates the possibility of a carbon-dioxide-driven change in climate.

*Energy in the Future* is remarkable for the perspective it offers. You see this book is close to 50 years old. It was a best seller. It is all about the promise of nuclear power. The future to which it referred was 50 years hence – that is, just about now. The expected transition did not come about.

Something like it might have happened. It did not happen because:

- First, the coal industry's productivity increased by almost 600 percent between 1950 and 1997 – the result of a still-ongoing modernization;
- Next, coal is a competitive industry;
- Next, the combination of productivity and competition mean the average price of coal at the mine-mouth in adjusted-for-inflation dollars is only 60 percent of the 1950 price;
- And, thus, in today's best power plants the cost of a kilowatt-hour works out approximately as follows:
  - Natural gas generation – 1.4 cents
  - Nuclear generation – 1.35 cents
  - Coal – 1.02 cents.

Productivity, competition, prices and performance meant that coal stayed in the mix. It also means that the adjusted-for-inflation average price of electric power has gone down continually since 1982 – fallen by about 30 percent.

At the same time, nuclear generation was forced to the side by factors that included:

- Big events outside the country;
- Missteps within the country;
- An inability to close with the concerns and causes of some underlying social and political challenges;
- And, an onslaught of campaigns based largely on uncertainty and fear-campaigns of persuasion and public opinion, of litigation, and of regulation.

The campaigns led to four developments of pertinence to this discussion:

- First concerns and then fears among the public;
- Next, increased attention and involvement by public officials – by federal and state regulator and policymakers, elected and appointed;
- Next, uncertainty in financial markets, and resistance among investors;
- And, finally, to rising costs in nuclear generation.

Now the official federal outlook for nuclear power over 20 years is this: early retirement of many plants due to inability to compete, and a 41 percent decline in power output from last year.

Similar campaigns at the extremes of speculation are being conducted against coal and against mining in general by advocacy groups and advocates both in and out of government.

The climate postulation is one such campaign and the Kyoto Protocol to the UN Framework Agreement is one such mechanism. Another is the concept of Sustainable Development, which is new political clothing for the recurring and ages-old concern about resource exhaustion.

Mounting the campaigns are domestic groups and individuals that advocate and strive to establish international regimens devoted to:

- Allocation of resources by bureaucratic decision rather than by the workings of a free market;
- The close control of technology;
- Enforced rations of reserves to production in material resources;
- Limits on production;
- And what they call the “calibrated” use of minerals and energy.

Recently the Director, Herr Toepfer, of the United Nations Environmental Programme volunteered this opinion: “...Development must be separated from the use of natural resources.”

Last month the Worldwatch Institute of Washington proposed worldwide policies to phase out the use of coal, the world's most abundant energy. A few years ago this same U.N.-supported organization in another paper declared mining in general an “inherently destructive industry” and called for government actions to reduce the demand for its products.

Other advocacy groups take up the goals and apply different tactics. Once more, the staples of the campaigning are uncertainty, confusion, fear and resentment.

The programs *Industries* and the *Vision 21* begin to come to grips with the underlying concerns. There are ways of responsibly addressing the concerns and misunderstandings of reasonable people that often are

exploited by advocates at the extremes of speculation to advance personal beliefs and causes.

Before we examine the programs, let's give some thought to a transition. The situation in electric power is as follows:

- America's growing requirement for power is coming very close to overrunning America's capacity to generate power;
- The requirement is expected to grow by about 40 percent through 2020;
- The combined requirement of growth and the replacement of lost nuclear and hydro output may call for additional yearly output of 1.7 trillion kilowatt-hours;
- The power industry is restructuring – generation in regional and national markets may be dominated by new entities and new combinations of companies now unknown;
- There will be direct, price-driven competition at all levels – wholesale, retail, industrial, commercial and residential;
- Only two fuels are available for more power in big increments – coal and natural gas;
- Coal is 95 percent of the U.S. recoverable reserve of fossil fuel and natural gas is 3 percent;
- Coal is the low cost fuel for power generation;
- Regional and national competition is expected to result in a near-term increase in coal use at existing power plants;
- All current environmental goals are being met and exceeded – all reasonable concerns addressed;
- And, there should be a longer-term trend to coal-based generation when the time comes to add baseload capacity.

The Environmental Protection Agency has been thwarted in a campaign to deter increased reliance on coal at the outset of competition – to do so through new regulations based on creative readings of the Clean Air Act in combination with imaginative<sup>3</sup> interpretations of scientific research. EPA's own panel of scientific advisors protested its reading of the science. And the courts rejected its misuse of the law – its assumption of authority unauthorized by law.

Appellate rulings have blocked the new regulations on National Ambient Air Quality Standards and on nitrogen oxide that were aimed at coal use in existing plants.

The National Mining Association participated in the litigation that brought on these rulings along with many others, including other industry groups, states and concerned companies.

The rules are stayed pending further action, which may well carry them past this sponsoring administration's expiration date – the end of the year 2000. Meantime, the capacity levels at existing coal-fired plants are free to rise as the demand for base load power increases. They are rising each year.

The stayed rules were an attempt by this administration to do indirectly in policy on the climate postulation what it cannot do directly – to impose on Americans the energy rationing and economic reorganization envisioned by the drafters of the Kyoto Protocol.

Meantime, the formal protocol is stayed at the front door of policy. The National Mining Association also participates in coalitions and congressional activities seeking balance in climate policy. The postulation that drives the protocol is fraying scientifically and coming unraveled as a matter of public policy.

If the protocol is to apply to the United States, it must be formally submitted to the U.S. Senate and consented to by it. This administration has not and will not submit it. The reason: it would require an extraordinary majority for approval; and, in fact, there is a more-than-extraordinary majority against it.

The Senate has warned, by a 96-to-nothing vote, that it will reject the protocol as it now stands. In addition, both House and Senate in appropriations bills have forbidden the administration to spend any money to impose any Kyoto-related goals.

Once more this administration's 2000-expiration date is a consideration. Next year's presidential election may well seat a new administration and new administrators; and bring on reviews, reassessments, and reorientation of many policies.

Meantime, the mining industry, and others are stressing before Congress a technological approach to both the concerns of the present and the causes that underlie them. Congress is responding.

Behind the approach is a series of studies, findings and realizations that sum up as follows:

- If carbon dioxide proves a concern in climate, no reductions by any or all industrialized nations alone will materially alter its accumulation in the atmosphere in the next century;
- The economic deployment of advanced technology as it matures will alter the accumulation just as soon as – and more effectively than – either taxes or other artifices of disguise for rationing and allocation;
- Technology will alter it with none of the economic dislocations associated with rationing and allocation;
- Every one percent increase in generating efficiency with coal begets a three-to-four percent decrease in carbon dioxide output per unit of power produced;
- The efficiency gains available in upgrades of existing plants may offer six-to-12 percent in reductions in CO<sub>2</sub>;
- The gains from the present average efficiency available with the best of pulverized coal generation and the fluidized bed and gasification technologies in the Clean Coal Technology Program offer ten-to-20 percent reductions in CO<sub>2</sub>.

As the requirement for base load power rises through the mid-term, older plants will be repowered and, eventually, new plants built. The Clean Coal Technologies and new pulverized-coal technology will be available for this transition. All hold emissions of present regulatory concern far below federal requirements.

A competitive market will expect power without hiccup or hesitation and at steady rates. Absent government intervention, predominant factors in fuel and generation choice in all but the shortest term will be reliability, availability and cost, just as they have been.

It is essential that coal producers retain their cost advantage and, when possible, extend it.

Goals for new mining technologies in Industries of the Future include:

- A doubling of output per miner;
- A halving of energy use in production;
- Dramatic improvement in miner health and safety;
- Dramatic improvement in resource recovery;
- Dramatic reduction in disruption – less effect on air, water and countryside plus advanced reclamation and remediation;

- And, dramatic improvement in the techniques and capabilities of discover.

In general, high priority goes to developing the technical capability for economic production from small, difficult, or low-grade seams and ore bodies that are beyond the capabilities of today's technology. This could mean eventual exponential growth in estimates of world reserves of almost all mined material.

Ten first-round projects were recently selected and a little over \$5 million has been awarded. A second round is in the works. The initial projects include the following:

- Robotics technology for improved underground mining productivity;
- Application of high-temperature superconductors to improved underground communications;
- Advanced maintenance to decrease downtime of mining machinery;
- Selective fine-particle processing of materials;
- A system for imaging conditions ahead of mining to improve the quality of the material produced and otherwise facilitate operations;
- More efficient blasting technology;
- And replacement of diesel engines with fuel cells.

The program *Vision 21 Energyplex* looks beyond the middle term – toward 2010 and beyond. It arises within the Department of Energy. The industry is committed to it and its goals that include the following:

- 60 percent generating efficiency with coal as soon as possible;
- Carbon sequestration and near-zero emissions of any kind;
- To developing as it becomes economic – and as soon as it becomes economic – the concept and component parts of coal-based energy complexes that deliver at low cost material resources that include the following:
  - Electric power;
  - Natural gas, other fuels, and fuel additives;
  - Chemical products;
  - Higher levels of recovery from existing oil and gas fields;
  - And, through reuse of heat, an overall energy efficiency of 85 percent.

It becomes very hard for any advocacy group to convince reasonable Americans that they are to blame for the world's carbon dioxide concerns when they can use energy at thermal efficiencies of 60 percent and 85 percent, and all emissions of anything are near zero.

It becomes very difficult to convince reasonable people that resource exhaustion are at hand when the technologies of production and recovery have just combined to expand the recoverable reserve of a mineral or metal by a factor of 10 or so, the recoverable coal reserve by two or three hundred billion tons and time to coal depletion two or three centuries.

Ours is a time of transition – a time vulnerable to confusion, error and fanaticism.

The mining industry intends to lead in showing reasonable people that their reasonable concerns are being responsibly addressed – that the technology is ready if and when science identifies and specifies a problem.

This is the response the National Mining Association proposes for the doomsday forecasters of the 21<sup>st</sup> Century – useful action and effective action rather than confusion and error.

Join us where you can, when you can. But above all, hold fast to your traditions of embracing advanced technology and stay productive.

I believe the 21<sup>st</sup> Century will be The Second American Century.

And, I believe that Illinois mining and Illinois coal will be important factors in bringing it to be.

## **TECHNICAL SESSION I**

### **Mining, Processing, and Utilization**

Chairman, Darrell Auch of Consolidation Coal Company opened Technical Session I and introduced the first speakers, Terry Hird, Superintendent, Marissa Mine at Marissa, Illinois and Dave Garbacz of Joy Manufacturing Company at Franklin, PA.



## FCT HAULAGE AT MARISSA MINE

DAVE GARBACZ AND TERRY HIRD

*Illinois Mining Institute*

### INTRODUCTION

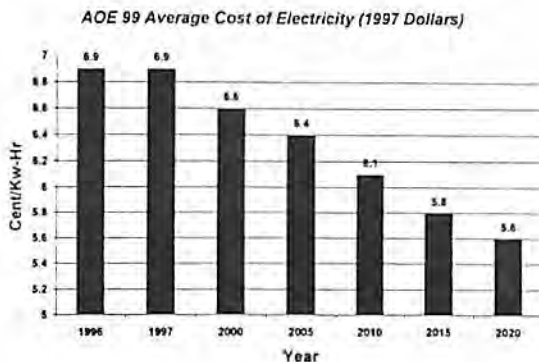


It is a pleasure to be here today and to be a part of this session of the 1999 Illinois Mining Institute. The format for the presentation today will be to look at the FCT through the eyes of the operation, basically looking at the production potential, mining methods and machine improvements throughout the years. Dave Garbacz will finish the presentation presenting Joy's view of future FCT's and their expectations. The FCT has been in production in some form or fashion since 1982. We will basically concentrate on the use of FCT's at the Marissa Mine and, hopefully, give you an idea of what can be expected in the future.

### BIG PICTURE

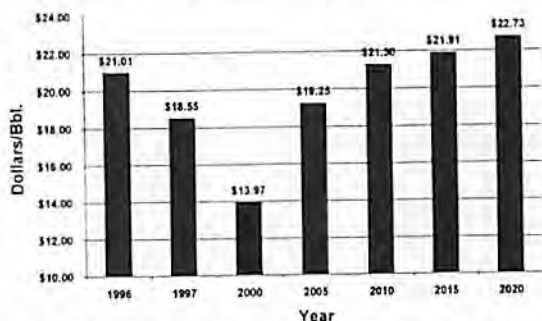
The American Energy Outlook (AEO) report for 1999 projects the production and utilization of energy needs through the year 2020. Let's take a look at their projections to give us an idea of where we have been and what the forecast for the coal industry might be.

The first graph shows that the average cost of electricity is trending downwards. Increased efficiencies, deregulation, and stable fuel prices will contribute to this trend.



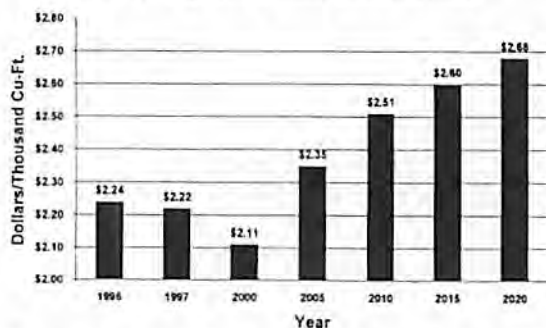
AEO 1999 forecasts the price of world oil to be on a downward trend going into the year 2000 and increasing thereafter to \$22.73 per barrel in the year 2020.

*AEO 99 Average World Price of Oil (1997 Dollars)*



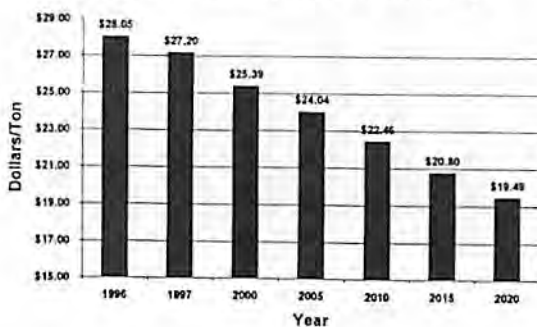
The AEO report for natural gas steadily increases from \$2.11 to \$2.68 per thousand cubic feet in the year 2020. The AEO report states that increased natural gas generation will reduce coal's market share to 49% in the year 2020.

*AEO 99 Average Cost of Natural Gas (1997 Dollars)*

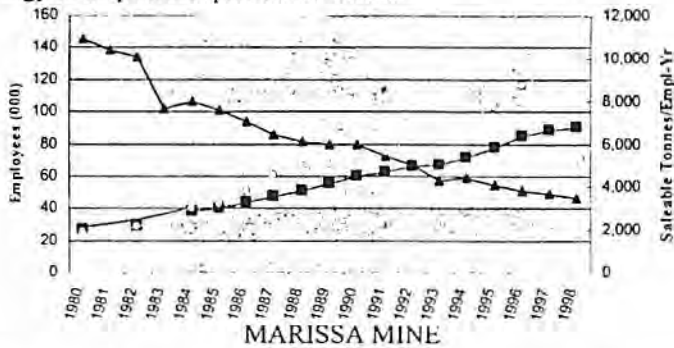


The trend for coal prices is also a downward trend. The trend is projected by AEO to decrease consistently throughout the forecasted period through the year 2020. If the forecast is accurate, the coal industry will reduce coal prices another \$5.90 per ton between the year 2000 and the year 2020.

*AEO 99 Average Delivered Price of Coal (1997 Dollars)*



The picture becomes quite clear that coal producers will be under constant pressure to reduce costs even further in the future. One way to reduce cost is to increase productivity. As can be seen by the following chart, there are fewer employees, thus fewer mines in the coal industry today (Lewis). As coal operators, we must continually be looking at technology to help us compete in the future.



The first FCT went into production at the Marissa Mine in 1993. This FCT was more than just a haulage unit, it was a system. This machine was the first Peabody FCT to have the self-advancing unit, which pulls up the FCT and low frame structure (LFS). The mining method used is the typical herringbone seven entry system with crosscuts turned on 60 degree angles. Notice that the crosscuts are staggered in the belt entry. The crosscut centers are on 60-foot centers in advance and 50-foot centers from entry center to entry center.

The typical FCT panel chute is 5,000-7,500 feet in length and we generally have four chutes pre-developed for the FCT to mine. The FCT transfers coal to a 48" panel belt driven by a 500 horsepower tandem belt drive. The unit belt drive is equipped with a 750-foot belt storage unit.

## MACHINE EVOLUTION

The following chart summarizes the development of the FCT at the Marissa Mine:

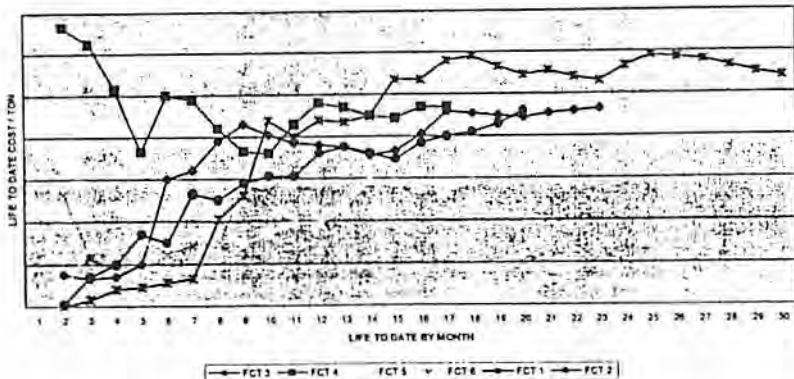
| MACHINE  | DATE-SERVICE   | MAJOR INCREMENTAL CHANGES                                                                                         |
|----------|----------------|-------------------------------------------------------------------------------------------------------------------|
| FCT 117  | March, 1993    | Self-advance unit                                                                                                 |
| FCT 117A | July, 1996     | Clutches on secondary tram reducers, heavy-duty drive sprockets                                                   |
| FCT 118A | July, 1997     | Solenoid-controlled oilers, wider kevlar belt                                                                     |
| FCT 119B | October, 1997  | Belt take-up                                                                                                      |
| FCT 117B | February, 1998 | Intermediate drive, skeleton frame take-up cars, impact rollers, roller modifications, 40 degree troughing roller |
| FCT 118B | November, 1998 | 42" belt, two intermediate drives, hopper and breaker                                                             |

Each of these changes were not the only changes made, but are the changes that made the greatest contribution to the improved efficiencies and productivity of the FCT.

By incorporating these improvements, we have seen the belt-life improve from 800 hrs. to 1300 hrs., tram chain and sprocket life improved from 400 hrs. to 1000 hrs. Each updated version has consistently been an improvement over their predecessor.

The latest improvements, the chain hopper, breaker, and 42" belt have enabled operators at Marissa Mine to convey the maximum tonnage the new Joy 12CM27 miner can produce (22 tons/min.). The hopper and breaker have also improved belt availability by reducing downtime caused by large material transfer and manual breakage of large chunks of rock.

In summary, the cost reductions can be seen in the following chart. The cost trend for the machines is lower for each series as this chart shows costs at equal points in the life of each FCT haulage unit.



## PRODUCTIVITY

The FTC record at Marissa Mine is 163,589 raw tons for the month and the best shift tonnage is 4,988 raw tons. Marissa FCT units occupy 15 of the top 25 record months; these records include tonnages from outside contractors and various operating methods and machinery.

The 42" FCT belt, running at 700 feet per minute, can convey plus 25 tons per minute. The productivity potential of the FCT is greater than our cutting ability at this time.

## CONCLUSION

The challenges that face us in the coal industry are staggering, but, if we survive, we must always keep improving. Technology will always be a major force in improving our bottom line. The employees at Marissa mine have made the FCT work and without their dedication and expertise, I would not be talking to you today. I would like to publicly thank these Illinois miners for their outstanding efforts.

The FCT may be a part of your future. As an operator you need to consider the following three points in making your decision: first, the geology and mining conditions; second, the amount of capital you want to invest; and third, the most important, the skills and talent of your work force. It takes dedication to make the FCT achieve what it is designed for and capable of achieving.

## REFERENCES

Energy Information Administration, (December 1999). Annual Energy Outlook 1999; [www.eia.doe.gov/oiaf/aeo99/pdf/0383\(99\).pdf](http://www.eia.doe.gov/oiaf/aeo99/pdf/0383(99).pdf)

Lewis, B.C., (1999, June 18<sup>th</sup>). Survival in the American Underground Coal Industry. Paper presented at the International Underground Coal Conference, Sidney, Australia.

## OIL WELL PLUGGING IN REND LAKE

### **JIM HINZ, PROJECT ENGINEER**

*Illinois/West Kentucky Operations  
Consolidation Coal Company*



Replugging of old oil and gas wells in preparation for mining through is no longer a new or unusual undertaking. Consol and others have been performing such operations for years. The difficulty lies in how to access the wells, and what conditions the abandoned wells are in.

*(Rend Lake Map Slide)*

Such were problems surrounding the 37 abandoned oil wells in the east reserves of the Rend Lake Mine. We had to deal with old wells in water depths ranging from 2 to 20 feet, in the middle of an 18,000-acre recreation and water supply lake, and also in a wildlife refuge. We were only allowed in the refuge area from May 1<sup>st</sup> through September 30<sup>th</sup> each year to prevent us from disturbing migratory waterfowl.

Well plugging affidavits were questionable at best.

The Consol Exploration Group started identifying, locating, and even attempted accessing these wells in the late 1980's. Eventually, the project became the responsibility of the operations engineering group in Illinois.

Our group first bid the job in 1995. Drilling companies of various sizes and types were talked to. Presentations were received from the best five or six. Their approaches varied widely.

Feeling that the work was premature for the mining plan, the project was delayed, with a new projected start date in 1998.

Based on the results of the earlier meetings, we decided to limit the bidding to only those companies that exhibited not only the drilling expertise, but also the ability to deal with the floating arrangements and environmental issues that would be needed. There were three such companies that fit.

*(Lake slide)*

Ultimately, we chose the Stolt-Comex-Seaway Corporation, with offices in Ohio, Texas and California. Their wide experience with all the potential problems we might encounter was one of the major deciding factors.

Stolt proved invaluable by providing most of the information needed to acquire US Army Corps of Engineers and Illinois EPA approval and permits to get the job done. Once the contract was awarded in October 1997, they immediately started the tasks before us: engineering, permitting, acquisition, and execution.

A project manager and two on-site assistant project managers direct the project for Stolt.

*(Dive barge slide)*

Site mobilization work began in April of 1998, with the dive barge heading onto the lake April 29<sup>th</sup>, and the drill barge leaving its port facility on May 1<sup>st</sup> as scheduled.

All diving equipment and personnel were employees of Stolt. The dive crew, generally four to five people, worked daylight hours only. This was due to the stump hazards in this area of the lake and the fact that they were sufficiently ahead of the drill.

The basic plan called for preparation of old well heads utilizing hard hat divers. Their work consisted of accessing each well area, clearing stumps, locating the well, clearing and cleaning of the old pipe, and attaching a new riser pipe to provide for the drill attachment. This crew also assisted with the supply and transport of men and materials to the drill barge.

*(Hard hat slide)*

The dive barge was loaded with all the necessary diving equipment:

*(Dive barge deck slide)*

crane and clam shell for stump removal, mud jetting tools, and pipe tools and attachments.

*(IPSCO clamp slide)*

Once the well pipe top had been cleaned and cut off flat, an IPSCO mechanical pipe clamp was attached. We kept clamps to accommodate various pipe sizes. The clamp was slipped over the old pipe and bolted tightly with the side bolts. A compressible rubber gasket inside the clamp seals tightly to avoid leakage. A riser was bolted to the clamp extending the pipe above the water.

*(Riser top slide)*

The installation was then complete and awaited the drill barge. The divers tried to stay at least three wells ahead of the drill, and were generally successful.

*(Drill barge general slide)*

The drill barge consisted of sectionalized floating steel boxes called Flexifloats, clamped together to form a complete work deck. The design, a combination of total desired equipment weight and needed deck area, belongs to Robishaw Engineering of Houston, Texas. Our vessel included 10 sections with a total surface area of 3200 square feet (total weight 500,000 lbs.).

*(Mindy Ann slide)*

The barge was pushed over the well with a diesel push boat.

*(Hydraulic leg slide)*

Once positioned, four hydraulic legs were pushed into the lake bottom, raising the entire barge slightly. Each leg is controlled independently to provide for deck leveling. The hydraulic fluids used were vegetable oil, not petroleum based, for environmental reasons.

*(Barge end slide)*

The top of the riser was then bolted to a sealed box, called a Moon pool, a blow out preventer attached, and the hole was ready for redrilling.

The fluid handling was an entirely closed loop, preventing any discharge into the lake.

*(Drill slide)*

The drill being used was a Gardner Denver truck- mounted unit. The drilling subcontractor was Grayson Service Company of Bakersfield, California. He had an eight-man crew working at all times.

*(Cuttings screen slide)*

Cuttings were passed over a screen to remove the solids, and were stored in bins for transfer to the shore. Roll off dumpsters were used to haul the material for disposal at the mine's refuse disposal site. Excess fluids were vacuumed from the bins and were disposed of in our slurry pond.

*(Fluid tank slide)*

Recycled fluids were stored in a large tank on the barge deck.

*(Material barge slide)*

Cement, fuel and other supplies were delivered on board a third barge, powered by the push boat we saw before.

Men were transported on a variety of other small boats and worked twelve-hour shifts, 24 hours per day, 7 days per week. The crews, including the managers, were rotated out every two weeks.

*(Container slide)*

Modified shipping containers were used for office space, crew assembly area and galley.

*(Galley slide)*

Each shift was furnished two meals on board. This facilitated continuous operation and provided a break away from the equipment.

*(General barge slide)*

Each completed well was logged and cemented according to our MSHA petition, the riser removed by the divers, and the drill barge lowered and moved to the next location.

The average well required about seven days from move on to move off. The diving requirements varied according to the stumps to be removed and the well top condition.

The last well was completed during the first week of August of this year. Demobilization was completed by the end of August.

Due to a minor change in the mine layout, we were able to avoid replugging two of the original 37 wells.

If we had to do the same project over again, I would not hesitate to duplicate the plan we used on this project. The approach was ultimately proven to be sound, productive, and environmentally compatible.

## GALATIA PREPARATION PLANT EXPANSION

**BOB MILLIGAN**

*Galatia Mine*

### INTRODUCTION



The American Coal Company's Galatia Mine is located in Saline County in Southeastern Illinois. Currently, the mine has 575 employees and produces around 10 million raw tons per year, which is processed and then shipped over the Illinois Central Railroad. Production is mined in the Illinois #5 seam with two longwall faces and miner support units. Because of the location of the longwall production, quality of the two is different with the North production being lower sulfur and the East production being higher in

sulfur. The current 1999 and future production has been increased by improvements to the mine run-of-mine (ROM) belt system. Bottlenecks were found in the plant's ability to handle and process these increases in raw production. Justifications to the raw coal handling and plant production were done with the following proposals.

### RAW COAL HANDLING

With the production projected to be eight million clean tons per year, the raw coal handling facility would have to handle around 12 million raw tons on a yearly basis. The current system was efficient to about nine million raw tons per year. The current raw coal handling facilities were made up of a raw stacking tube with a capacity of 35,000 raw tons. After the stacking tube was filled, dozers could push ROM material for additional capacity. Also available were two 12,500-ton capacity silos. In 1998, coal production started increasing to get to the projected tons. Problems arose with the raw coal handling system. Raw coal production is conveyed from the mine via two ROM belts. Each belt is fed from one longwall and two miner units. One belt feeds the stacking tube and the other feeds the two silos. Because of the quality differences, the two are kept separate. With the North low sulfur production feeding the silos, it was possible to fill these silos and shut the mine down if the coal was not run into the plant. Obviously, this option was not acceptable. So, at times, coal was being run out of the silos, not because the quality was needed for sales, but to insure the silos would not fill up. In addition, we were unable to shut down the plant for scheduled maintenance.

The problem of limited silo storage was addressed and the justification for additional storage was made. The plan called for the addition of a stacker reclaimer system to do away with the problem of filling the raw coal silos. In September

1998, bid requests were sent out to a number of contractors requesting proposals to upgrade our raw coal handling system. In February 1999, Mine Services and Construction Co. was awarded a contract to build a new stacking tube and reclaim tunnel system. The construction of this system would take six months to construct with a target date of August 2, 1999, to be able to start stockpiling coal on the new tube. The new system would allow us to stockpile an additional 100,000 tons of raw coal before any pushing with dozers would happen. The material would be reclaimed through four variable frequency feeders rated at 1000 tph each.

## PLANT EXPANSION

Upon completion of the raw coal handling system, the problem with expanding plant capacity could be addressed without affecting the production from the North through the filling up of the raw coal silos. To be able to meet the projected seven and eight million tons of sales per year and run as efficiently as possible, the decision was made to upgrade the plant from 1500 tph to 2100 tph. Requests for bids were sent out in October 1998 and the contract awarded to Sedgman in February 1999. The concern we had was how to upgrade the plant with a minimal amount of plant downtime and not affect our sales.

The following changes would allow these goals to be met. The present heavy media vessel would be modified from a 22' wide weir to a 12' 6" wide weir. In addition, a new 14' wide weir vessel would be added. The increased tonnage would be put into the two vessels by increasing feed tons to 2100 tph and by reducing the raw coal screening from 7/8 in. to 5/8 in. This allowed the increased tonnage to be shared between coarse and intermediate cleaning systems. The spiral circuitry processing capacity would be increased by adding eight triple start spirals. The froth flotation circuit would be significantly improved by upstream removal of ultrafine clay slimes, thus dramatically improving froth flotation performance efficiency. Only one bank of cells would be required. However, piping was provided to allow for feeding either of the two banks of four 500 cu. ft. cells. The existing bank of five 300 cu. ft. cells will be taken out of service. This is achieved with the addition of two banks of 30 ultrafine desliming 6-in. classifying cyclones.

## PLANT CONTROL SYSTEM

Along with process circuitry modifications, the plant process control system was also upgraded. The previous control system was an early 1980's vintage Texas Instruments Distributed Control System with a DEC PDP 44 Supervisory Computer. While this system was adequate to operate the plant, we were constantly plagued with hardware availability problems and strapped with inflexible software that required outside consultants to modify or service. Likewise, there were Y2K problems that had to be addressed.

The new system achieves year 2000 compliance and is arranged in a present day form factor that is modular in design allowing flexibility and economical service. The system is based on a Siemens 416 DP programmable logic controller with a

Profibus I/O structure. All communications between the PLC and remote I/O stations are achieved over a fiber optic system. The operator interface system is a Siemens PC based product running on Windows NT platform. The contractor (Robertson P&E) developed the program utilizing a configurable database which allows operators to modify process screens, alarms, equipment, and loop descriptions "on the fly" without any special programming knowledge.

#### CONCLUDING REMARKS

The American Coal Company has invested over five million dollars in upgrading its plant and coal handling facilities. This investment shows the commitment that The American Coal Company has with coal in the State of Illinois.

## HONORARY MEMBERSHIP AWARD

*Taylor Pensoneau:* The choice this year for honorary membership in the Institute could not be better one. Nobody has fought harder or more consistently for the interests of the Illinois coal industry during the last decades than this individual. And, as far as life goes, there is no better person. I can tell you this--and there can be no higher compliment--than when circumstances put you in a foxhole this is the guy you want in there with you .

I know what I'm talking about. Because the person being honored is friend and confidant, an individual I've been through thick and thin with the last twenty-one years. He is Joe Spivey, who ended more than two decades as president of the Illinois Coal Association last year.

Joe has crammed a variety of experiences into his life. Furthermore, whether as a soldier, an association executive or whatever, he always has been committed to doing the best job possible. For the information of those who don't know, Joe, who was born in 1940, grew up in the area of Myrtle Beach, South Carolina. He served in the Marine Corps from 1960 to 1967. In that time, he handled assignments in numerous parts of the world, including security and intelligence duties at the United States embassies in Mexico and Honduras.

His marriage to the former Lois Thomson of Petersburg, Illinois, in 1967 brought him to our state. Not long after his arrival here, he immersed himself in a variety of political and public issue activities that have him a rapid familiarity with the people and places of much of Downstate Illinois. In 1971 he was graduated from Mac Murray College in Jacksonville, majoring in political science and economics. From 1971 to 1973 he directed public relations and government affairs activities for the Illinois Association of Electric Cooperatives. After that, from 1973 to 1976, he was executive director of the Illinois Hotel and Motel Association.

Joining the Illinois Coal Association in 1976, he became its president in 1978. The rest is history, and maybe someday I'll write a book about it. Suffice it to say there have been few dull moments.

After living in the Menard County town of Petersburg through his years in Illinois, Joe and Lois recently moved to a new home that they built miles outside of the town, a house surrounded by water and timber in the kind of natural setting that Joe dearly loves. Joe and Lois have a son, Joseph, and a daughter, Rachel, as well as two grandchildren, little Joe and Samantha, who are the apples of Joe's eye.

Joe has been having some health problems which prevented him from being with us here today. However, I can assure you that he is very grateful for this honor, especially in view of his long involvement with and esteem for the Institute.

## CHANGING OF THE PRESIDENTS



Mr. Phillip Ott passed the gavel to outgoing  
President Mr. Mark Cavinder

## **1999 Illinois Mine Rescue Contest**

This is the inaugural year for combining the Illinois Mine Rescue Association's annual contest with the Illinois Mining Institute's annual meeting. The association was mutually beneficial for both organizations. The contest was a great success and added a number of new members to the IMI.

Thirteen teams competed in the rescue competition and nine as Illinois competed in the benchman competition. The teams represented Alabama, Indiana, Kentucky, as well.

### **Mine Rescue Competition Final Results**

#### **Instate:**

- 1<sup>st</sup> - The American Coal Company Galatia Mine
- 2<sup>nd</sup> - White County Coal Company Patiki Mine
- 3<sup>rd</sup> - Freeman United Coal Mining Company Crown Mines

#### **Out of State:**

- 1<sup>st</sup> - Drummond Coal Company Shoal Creek Mine
- 2<sup>nd</sup> - Indiana Bureau of Mines Indiana State Team

### **Bench Competition Final Results**

- 1<sup>st</sup> - White County Coal Company Pattiki Mine- James Fishback
- 2<sup>nd</sup> - Drummond Coal Company Shoal Creek Mine - Tim Stockman

## MINE SAFETY AND RESCUE AWARDS



## SPECIAL AWARDS



Phyllis Godwin, Administrative Assistant,  
is presented a Certificate of Appreciation  
by Heinz Damberger for her twelve years of service  
to the Illinois Mining Institute



Nancy Stetler, Research Administrative Assistant,  
is presented a Certificate of Appreciation  
by Dr. Y. Paul Chugh for her seven years of  
service working on many research projects.  
She came to Southern Illinois University from  
Penn State University, Mining and Engineering Department

**DEPARTMENT OF MINING ENGINEERING  
UNIVERSITY OF MISSOURI-ROLLA**

*Dr. John Wilson:* The Department of Mining Engineering at the University of Missouri-Rolla continues to operate a strong undergraduate and graduate program.

Undergraduate enrollment has been maintained around 100 students for the five years and our graduate program has seen an increase to fourteen students last year.

We continue to place all our graduating seniors, undergraduates and graduates in the coal, metalliferous and stone and aggregate industries. Summer employment opportunities for our undergraduates continues to be excellent. I am pleased to report that all levels of students are taking advantage of this type of employment to enhance their knowledge of the mining profession.

Many mining companies in the Midwest continue to help our Mining program via scholarships, summer jobs and permanent positions. Without their help, we would not be able to maintain our student enrolment at the levels we do.

Our students continue to be active in a variety of extracurricular mining related events. For example, we continue to send teams to the Intercollegiate Mining Competition (and usually fair very well), two industry organized regional mine rescue competitions (came in 3<sup>rd</sup> in the South-East Mining Competition in New Iberia, Louisiana in May 1999), the annual meeting of the Society of Mining Engineers, etc. Our students also raise funds through a number of local events, such as the Haunted Mine at Halloween, and provide mining education to local schools in the south-central area of Missouri.

The faculty in Mining Engineering continues to be active in their respective research subjects, teaching, and the provision of extension courses on a variety of mining related subjects to mining people in the USA, Chile, Mexico, South Africa and Botswana.

The Mining Engineering program continues to be a leader in USA tertiary education and we are grateful for the student scholarship support that we obtain from the Illinois Mining Institute.

Scholarship recipients are:

Nick Blanco  
Mike Droszcz  
Rachel Kuro  
John Themig



**ILLINOIS MINING INSTITUTE SCHOLARSHIP  
UTILIZATION AT REND LAKE  
COMMUNITY COLLEGE**

*William Dill:* Rend Lake College provides educational programming for students who are pursuing careers as maintenance and manufacturing technicians. The programs include classes that cover specialty areas of electronics/electricity, hydraulics, pneumatics, welding, manufacturing, MSHA and OSHA safety regulations, and computers. Students' instruction in each class includes theory, application, problem solving, and team work. Instructors have been recruited from industry and bring a wealth of practical experience to the class room. The yearly curriculum reviews provide the instructors with information about the current status of industry, allowing curriculum to be kept up-to-date.

The scholarship is utilized at Rend Lake College to support students whose academic careers will be greatly aided by the scholarship award. Students are chosen that have a financial need and demonstrate the potential to become an asset to the Mining Community. These students are usually enrolled in a Maintenance or Electronics Degree program, or a Welding certificate program. Recipients of the scholarship have continued their education at Southern Illinois University at Carbondale or have moved directly into the workforce. Without this scholarship many of the past recipients would not have been able to continue or would have to reduce their status from full time to part time. Without the Illinois Mining Institute Scholarship many students throughout the years would not have had the opportunity to develop to their full potential, without a doubt future awards will prove to be as beneficial.

Scholarship recipient is:

Joseph Sullivan

**SCHOLARSHIP RECEIPT SOUTHERN ILLINOIS  
UNIVERSITY**



**Dr. Y. P. Chugh,  
Professor and Chairman  
Southern Illinois University  
Department of Mining Engineering**



**Lyle Cline, Program Coordinator, Southern Illinois University  
Department of Mining Engineering, presents scholarship  
Award to Howard Thomas**

**DEPARTMENT OF MINING AND MINERAL RESOURCES  
ENGINEERING  
SOUTHERN ILLINOIS UNIVERSITY AT CARBONDALE**

*Dr. Y.P. Chugh:* The Department is in sound health and developing nicely. During the last one year, our enrollment for juniors and seniors was 28 students. Our graduate student enrollment was 10 students. All undergraduates found summer jobs and full-time jobs on graduation. We graduated five (5) students with BS degrees and four (4) students with MS degrees. I would like to thank the Industrial Advisory Board Members for their advice and support for the department.

The Department initiated a dual degree MS program in cooperation with Manufacturing Systems. Graduates of the program can work with equipment manufacturing organizations such as Caterpillar, Joy Manufacturing, Fletcher, etc. There are two students enrolled in the program. One should graduate in December 2000 and the other in 2001.

The Department attracted about \$ 900,000 in research funds. The major areas of research include coal combustion byproducts management, coal and mineral processing, rock mechanics and ground control, and environmental issues of coal combustion. Most of the faculty was active in research. We supported over six post -doctoral staff and 10 technical support staff through research funds. Our research is highly applied and supports the needs of the coal and aggregate industries. The Department continues to develop a strong relationship with aggregate industries since most of our graduates are being placed there.

The Department also has a strong service program in support of industry needs. The department is working with Illinois Association of Aggregate Producers (IAAP) and the State of Illinois to support training requirements. In addition, the Department holds information transfer seminars from time to time on research results.

The department was awarded \$ 4,500 for scholarship support. The following students were awarded scholarship support from these funds. we sincerely appreciate this support and hope IMI would continue to support the mining schools with these monies. Thank you.

Students receiving scholarships for Fall 1999 were:

Robert Aranha  
Stewart Adams  
Toby Breedlove  
Andrew Ditch  
Robert Hogan

Bradley Hogan  
Herman Schaumburg  
Howard Thomas  
Brian Van Middendorp  
Jeff Williams

## TECHNICAL SESSION II Health, Safety, and Environment

Chairman, Thomas J. Austin, Freeman Coal Company, opened Technical Session II and introduced the Terry McDonald, Maintenance Manager, Cyprus Amax Coal Company at Keensburg, Illinois. Mr. McDonald presented an overhead projector program entitled *Dry Diesel Scrubber System - Cyprus Amax Coal Company*.

# THE DRY SYSTEM™

## WHAT IS INCLUDED FOR THE BASE COST?

### DST DRY SYSTEM

- A custom engineered package for Inby and Outby machines includes a complete exhaust and air intake system.
- Surface temperature control to 302 degrees by water jacketing.
- Exhaust gas cooling to 302 degrees by means of a self cleaning heat exchanger without direct water contact.
- Mechanical flame & spark arresting devices for intake and exhaust.
- A disposable paper filter with proven efficiency.
- Water-jacketed oxidation catalyst.
- Pressure tested to 150 Psi and fully explosion-proof.
- Complete engine cooling system.
- Safety shut down for high coolant & exhaust gas temperature.
- Modular components are easy to retrofit.
- An MSHA approval to operate anywhere in a coal mine
- A Pennsylvania approval, if applicable.



Wabash Mine

*15 years of research, experience and improvement*

# *Best Applications For The DST System In A Mine*

**Light duty support vehicles**

**Personnel vehicles**

**Vehicles with long operating periods  
under light load**



**Vehicles with highly variable duty cycle**

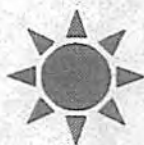
**Operation in areas where high DPM reductions  
are necessary or desired**

# *Features Of The DST Dry System™*

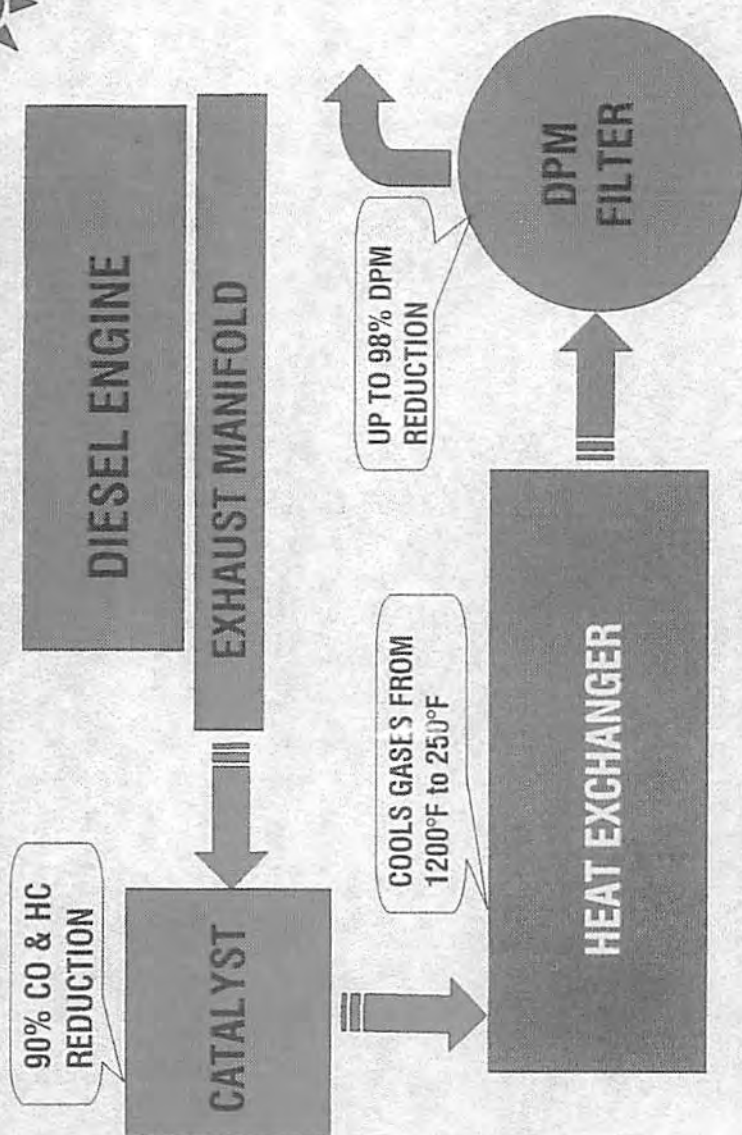
- PATENTED DST SYSTEM DESIGN PROVIDES UP TO 98.5% DPM EMISSIONS REDUCTION
- PATENTED WATER-COOLED CATALYST REDUCES GASEOUS CO AND HC EMISSIONS
- MODULAR DESIGN IS EASY TO RETROFIT
- LONG FILTER LIFE OF UP TO 100 HOURS WITH THE PATENTED HIGH CAPACITY PARTICULATE FILTER
- PATENTED ON BOARD CLEANING SYSTEM VIRTUALLY ELIMINATES MAINTENANCE
- LABORATORY PROVEN PERFORMANCE



**WABASH MINE**

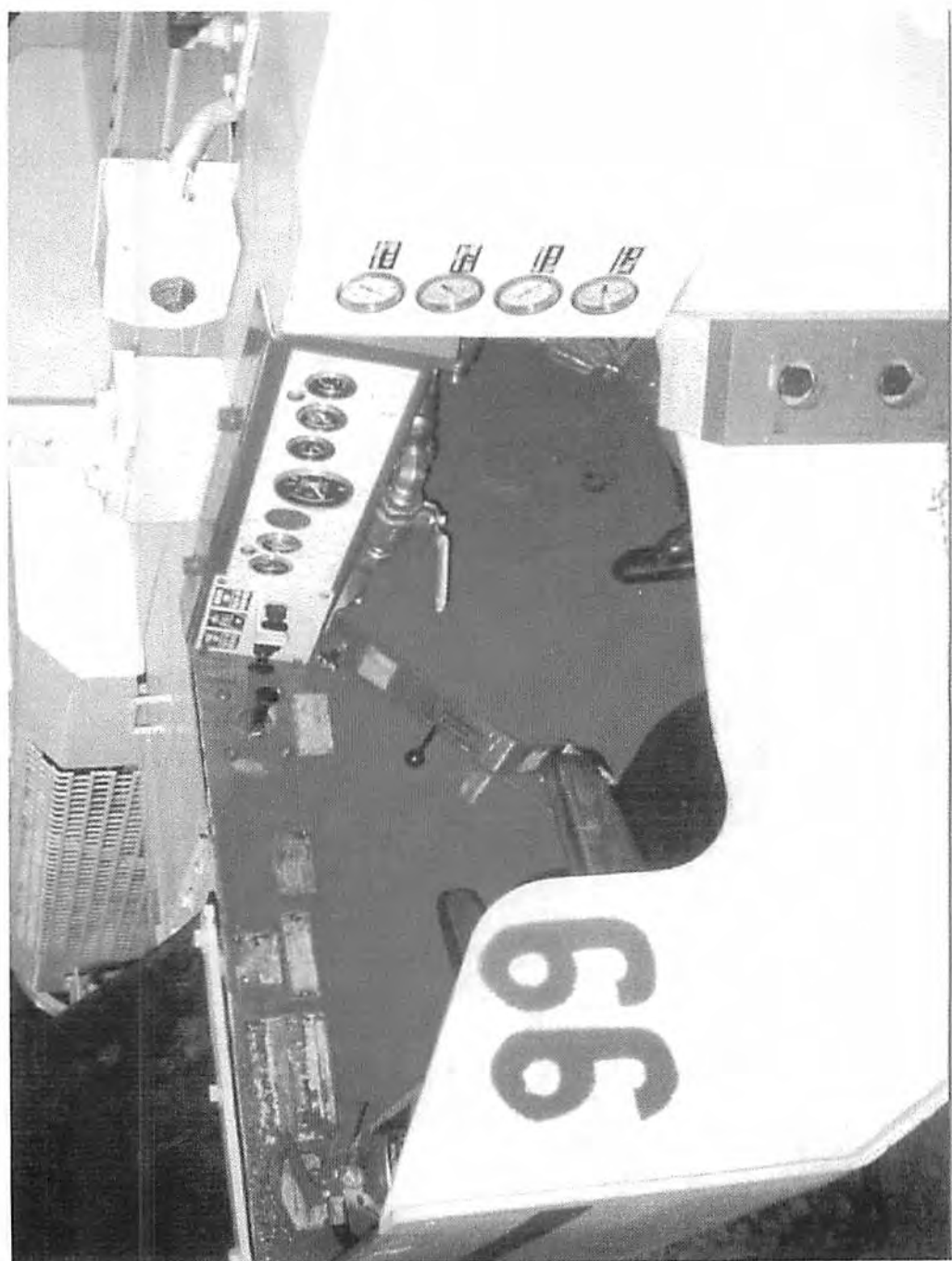


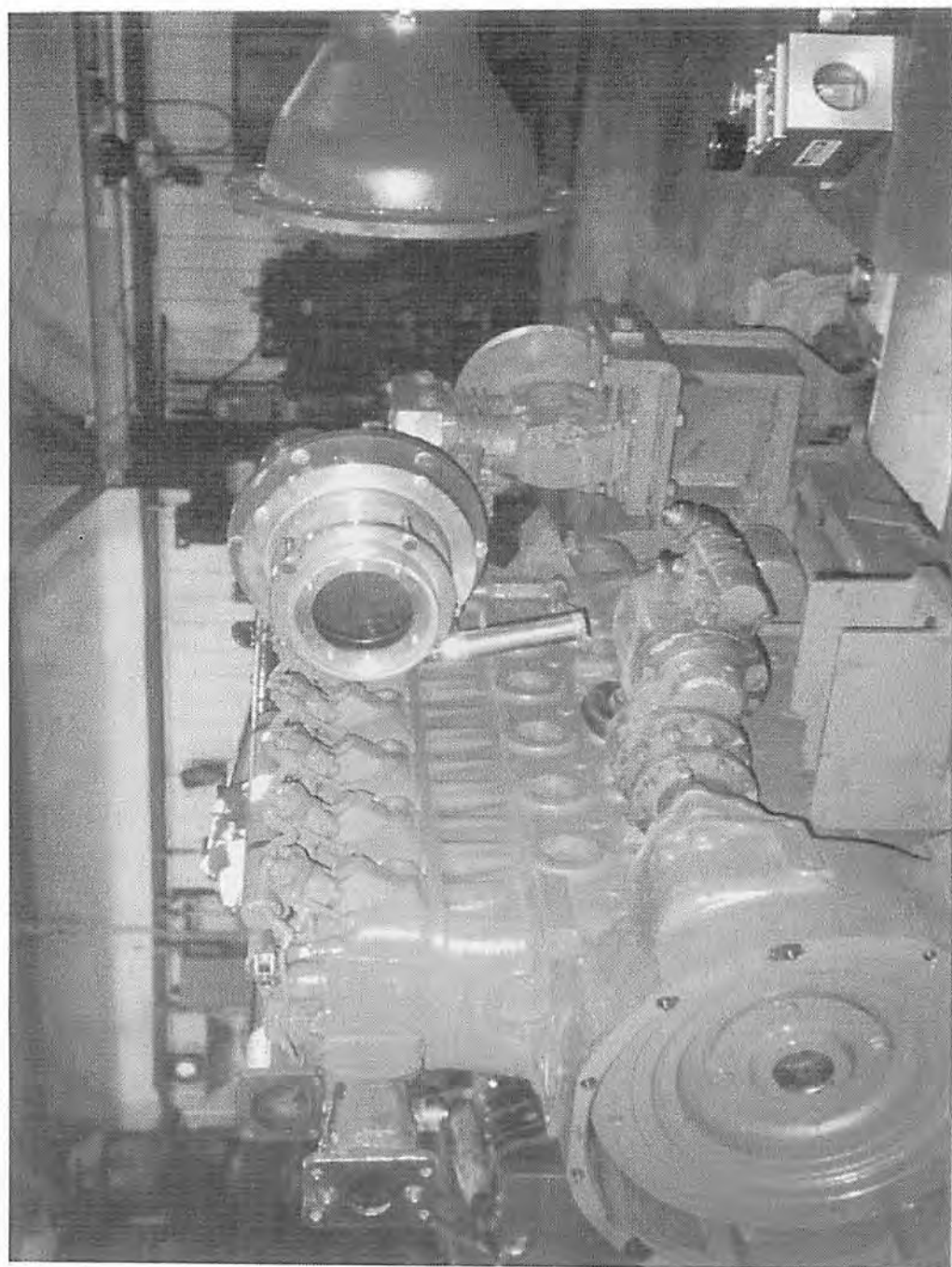
# THE DST DRY SYSTEM™

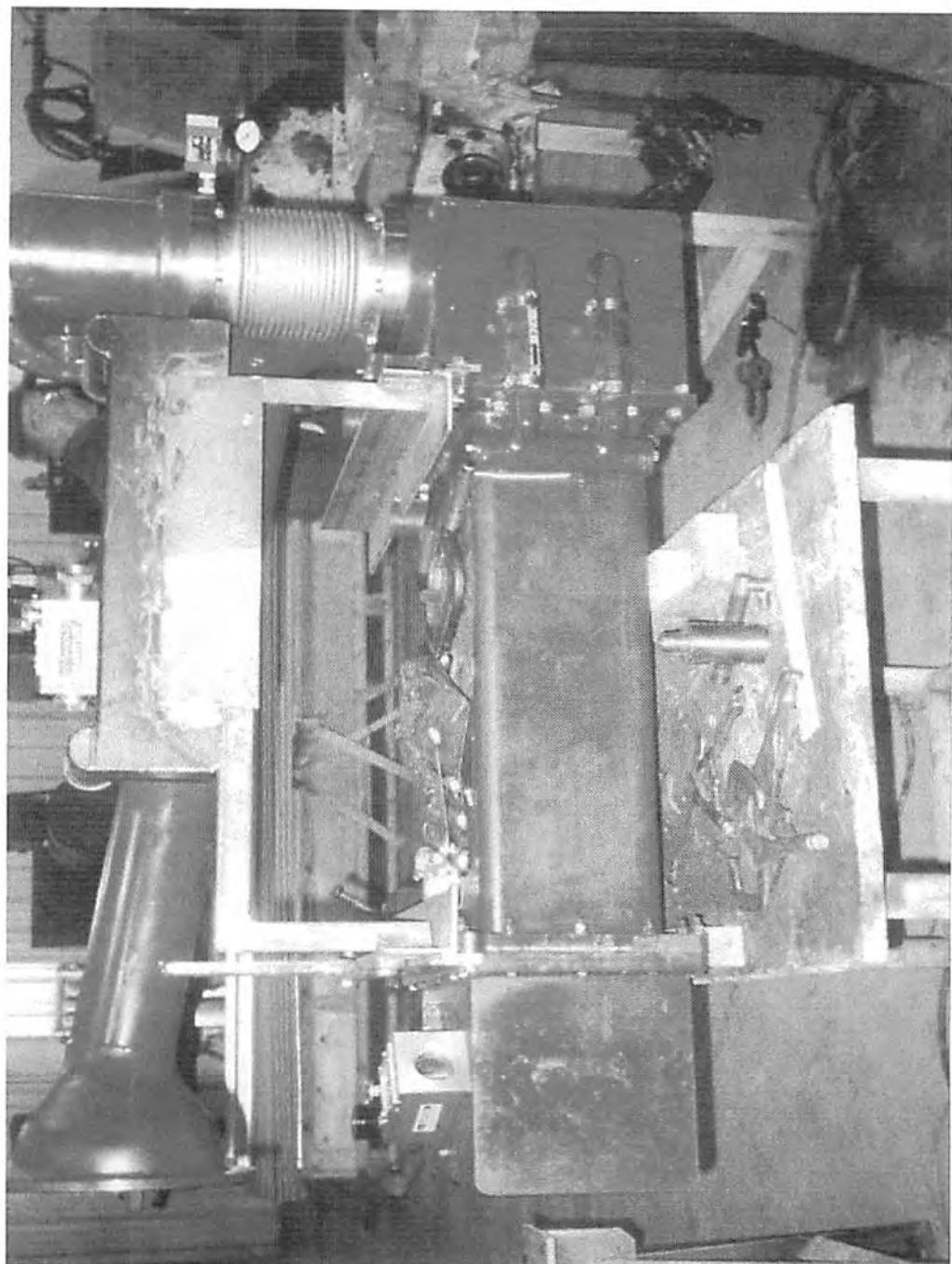


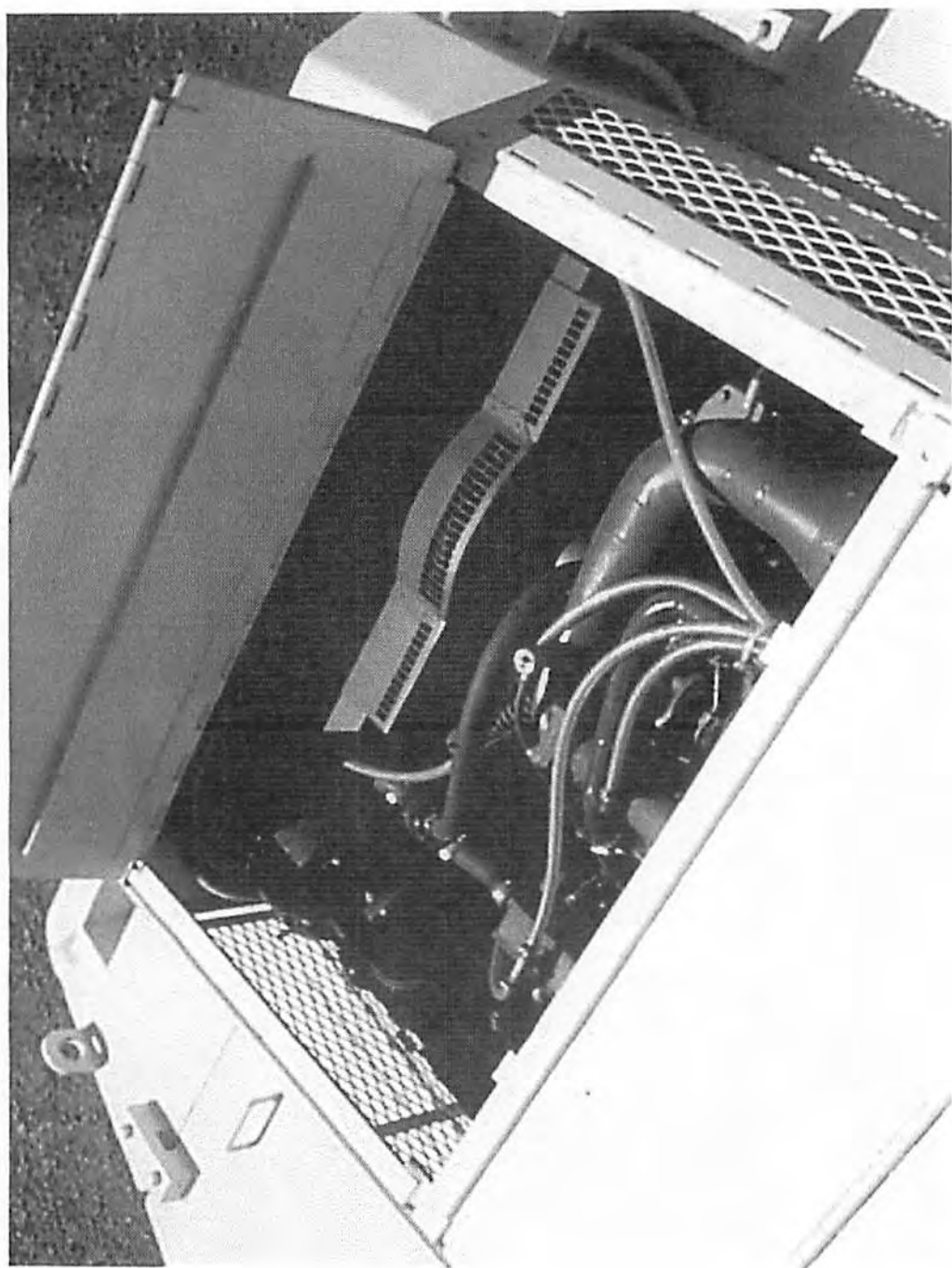
**IT'S SIMPLE - IT WORKS**

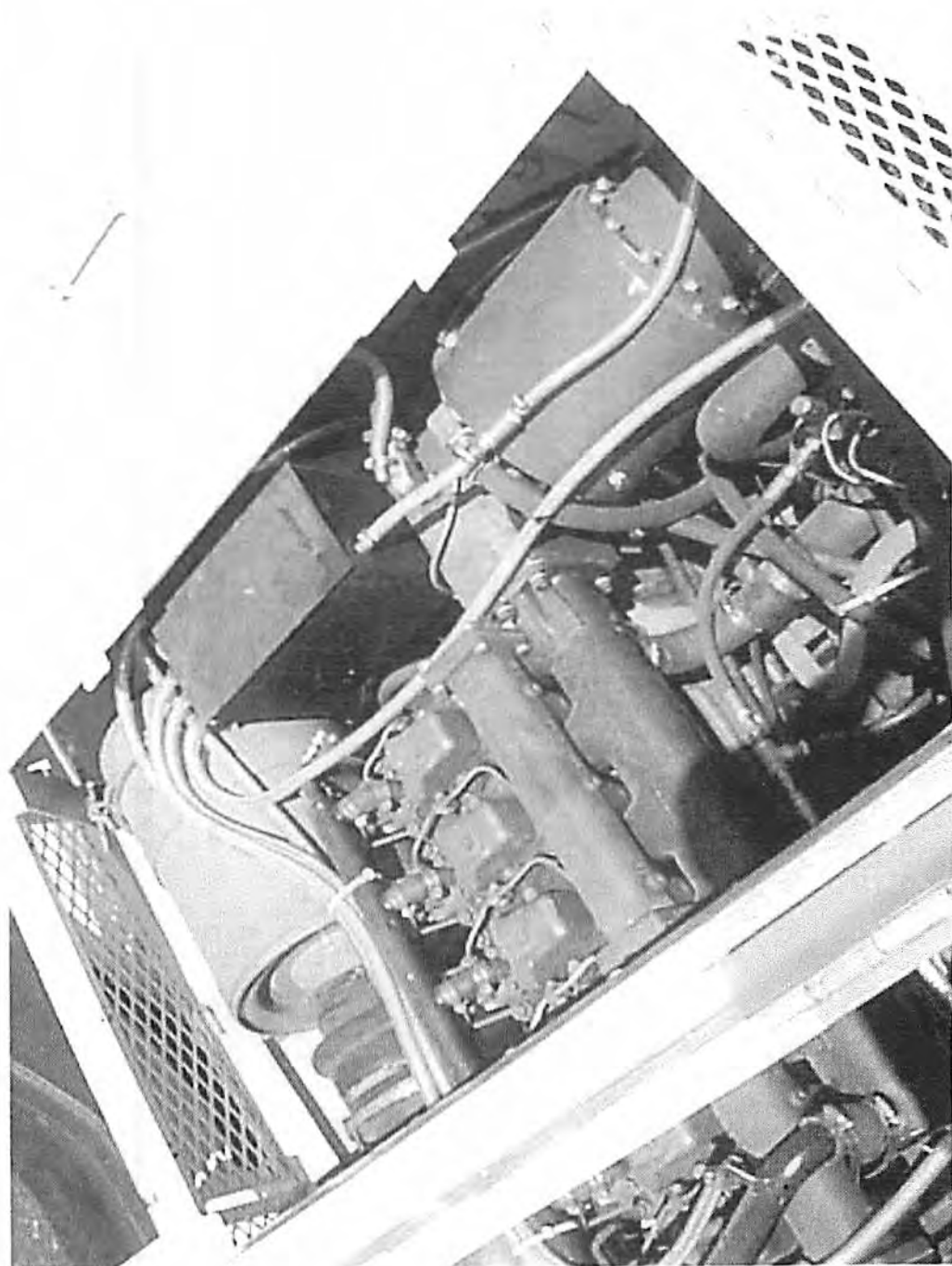


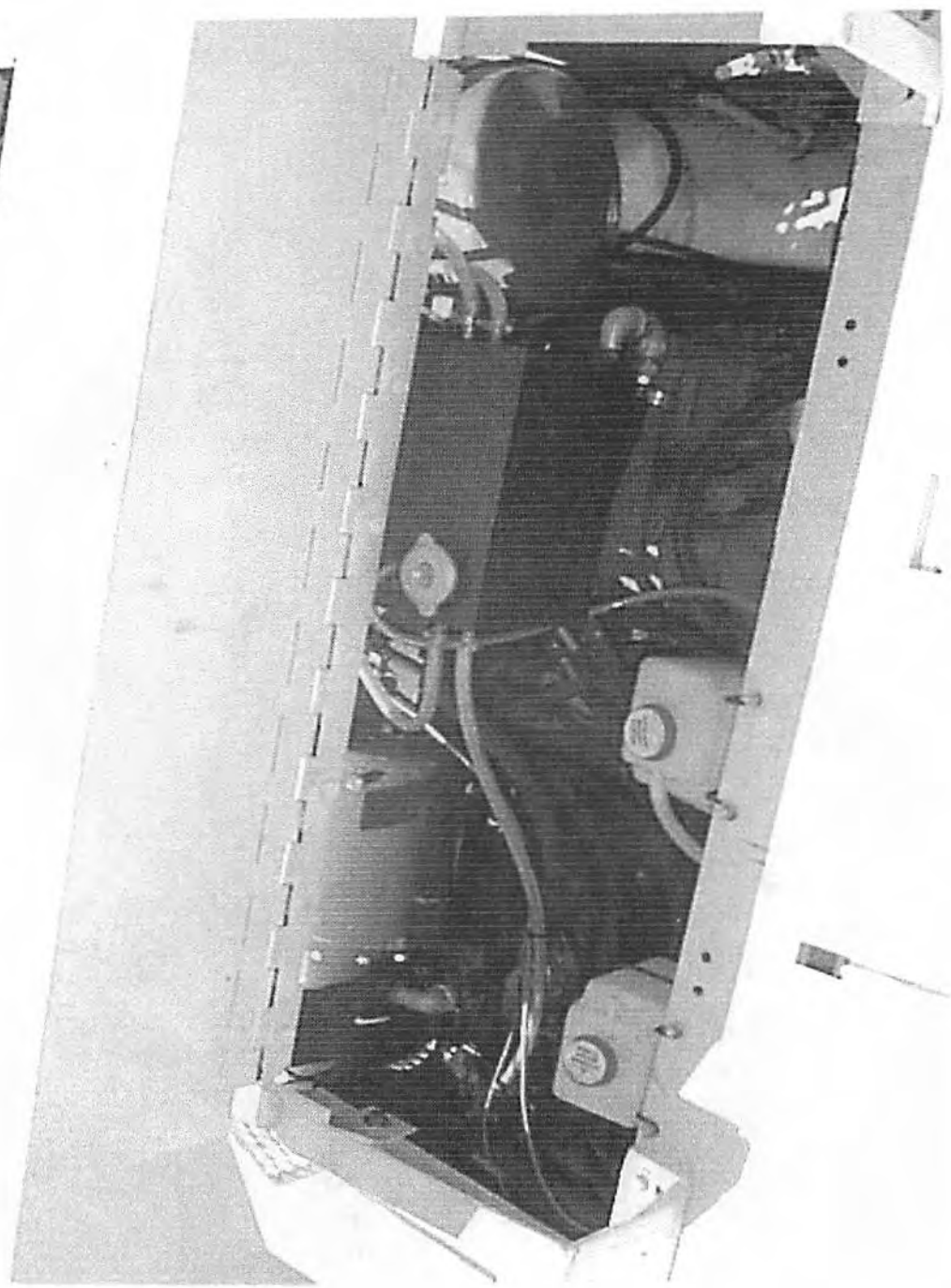




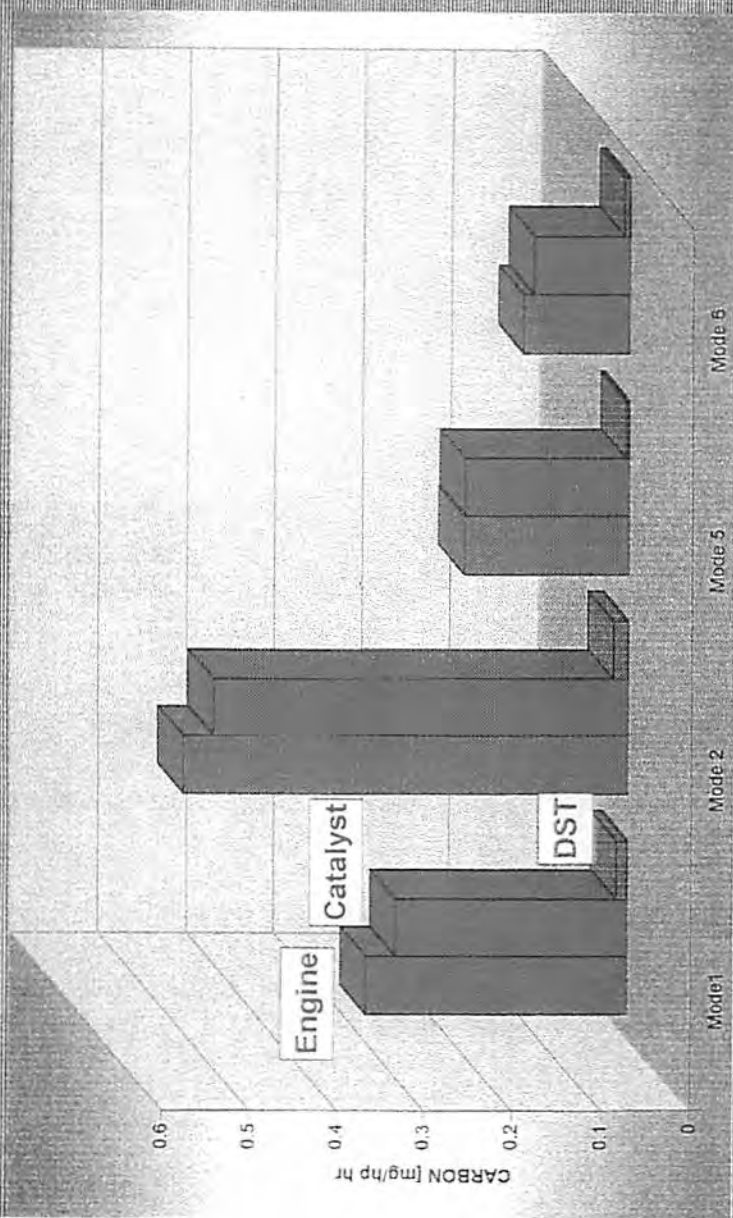




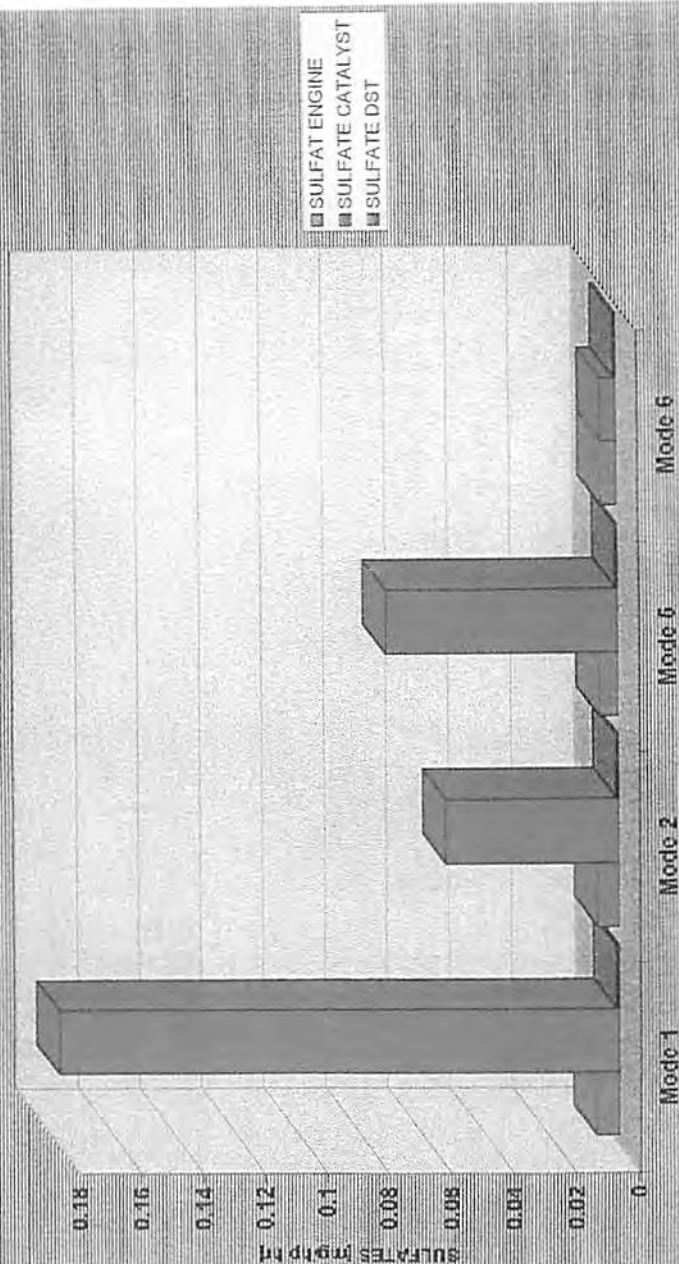




# CARBON SOOT

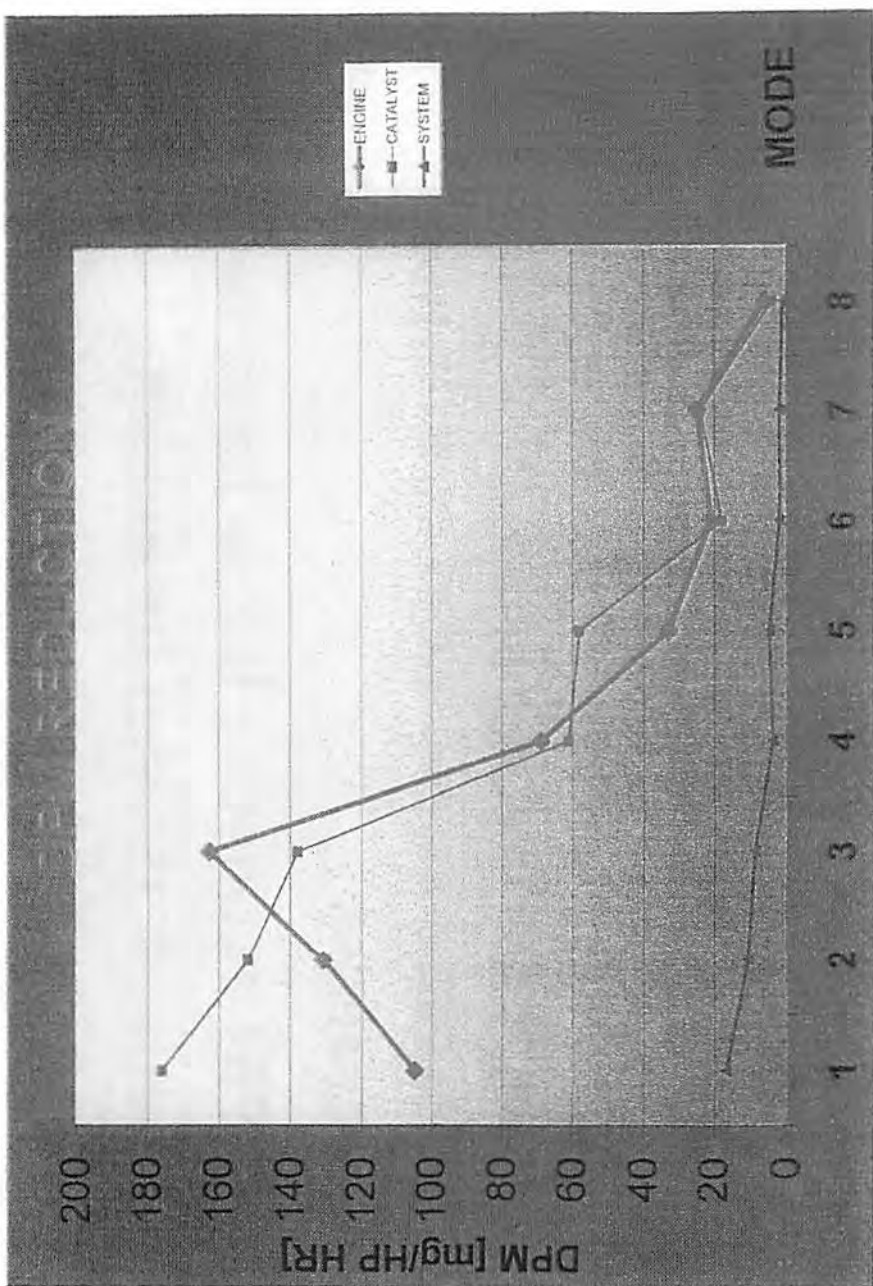


# SULFATES



## ***DPM EXPOSURE IN UNDERGROUND MINES***

- The number and size of diesel powered equipment continuously increases
- DPM exposure levels have been reduced, driven by health concerns and new regulations

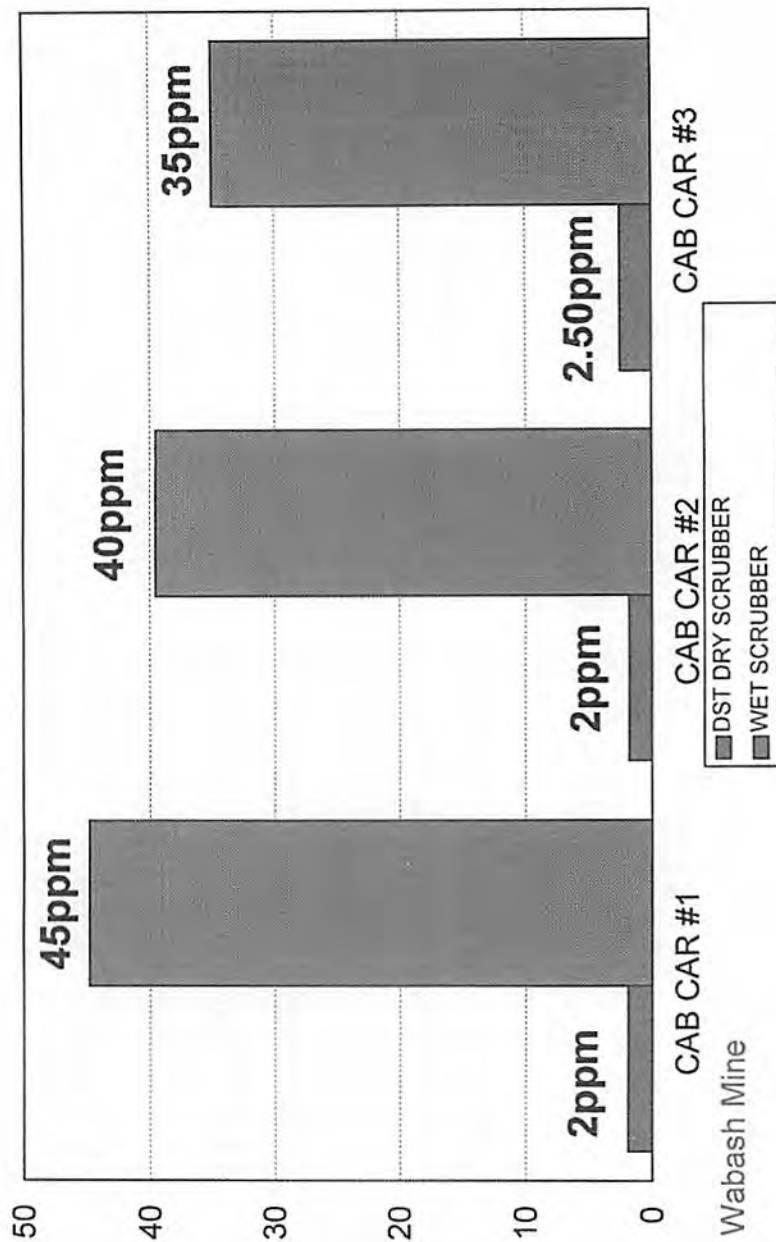


# **MWM-DEUTZ D916-6** **8-MODE EMISSION TEST**

| <b>Configuration</b>           | <b>HC</b>   | <b>CO</b>   | <b>NO<sub>x</sub></b> | <b>PM</b>   |
|--------------------------------|-------------|-------------|-----------------------|-------------|
| <b>Engine-Out<br/>Baseline</b> | 0.14        | 0.96        | 4.19                  | 0.635       |
| <b>With DST<br/>System</b>     | 0.03        | 0.20        | 4.05                  | 0.020       |
| <b>Percent<br/>Change</b>      | <b>-79%</b> | <b>-79%</b> | <b>-3%</b>            | <b>-97%</b> |

# CO (ppm)

8 Hr. Run Time



SOME EXHIBITORS AT THE 107<sup>TH</sup> ANNUAL MEETING





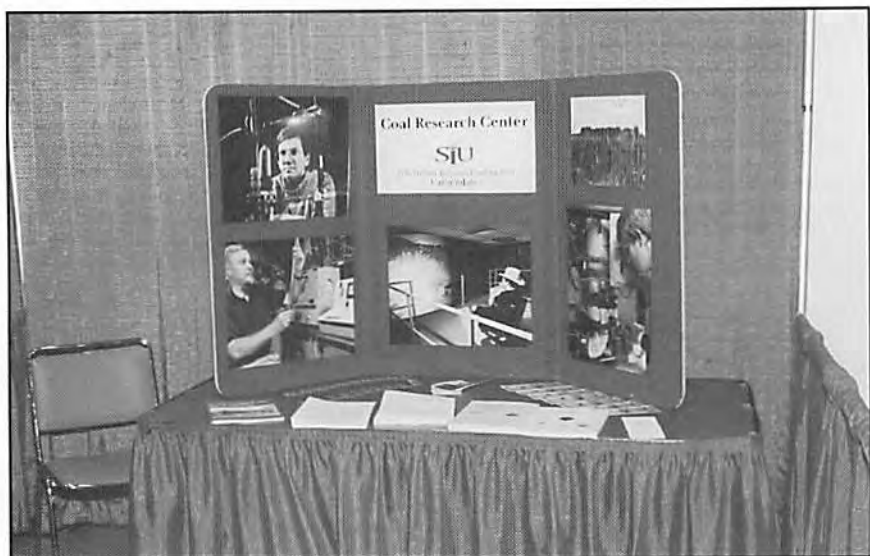












ILLINOIS MINING INSTITUTE  
1998-1999 ACTIVE MEMBERS

- AARON, STEVE, Supv. Of Environ. Services, Arch of Illinois, Inc., P. O. Box 308, Percy, Il 62272 618-497-2141
- ADAMS, DICK, Sales, Excell Mining Systems., 809 Skyline Dr. Marion, Il. 62959 618-993-2611
- ADAMS, JIM, Sales Rep., Minesafe Electronics, P. O. Box 281, Sturgis, Ky. 42459 502-333-5581
- AHRENS, MALCOLM B, Natural Res. Spec. OSMRE, 501 Belle, Alton, Il. 62002 618-463-6463 X 104
- ALDERMAN, DENNY, Safety Manager, Turris Coal Co. P. O. Box 21, Elkhart, Il. 62634, 217-947-2673
- ALEXANDER, TRACY, Sales Rep. Kerco, Inc. P. O. Drawer 665, Madisonville, Ky. 42431, 502-831-2889
- AMICK, MICHAEL R. Bus. Develop. Mgr. Fosroc, Inc., 150 Carley Court Georgetown, Ky. 40324 502-863-6800
- ANDERSON, A. DALE, Dir. Res. Aquistion & Dev. A. D. Anderson & Assoc. Box 2488 Mt. Vernon, Il. 62864, 618-242-7155
- ANDROVANDI, NICK, Mine Mgr. Old Ben Coal Company, P. O. Box 369 Coulterville, Il. 62237, 618-758-4424
- ANGLETON, JOSEPH, Pres. UMWA-District 12, 3695 6<sup>th</sup> St. Springfield, Il. 62703 217-529-8301
- ARNESON, N. ARNE, Pres. Arneson Timber Co. P. O. Box 6743 St. Louis, Mo. 63124, 314-692-9999
- ARNETT, GREG, Mgr. Eng. & Maint., Freeman United Coal Co. P. O. Box 261 Industry, Il. 61440, 309-254-3778
- ATTERBERRY, JIM, Gen. Mgr. Woodruff Supply Co. Inc. P. O. Box 626 Benton, Il. 618-439-9451
- AUCH, DARREL D. Vice Pres. Consol Inc. Ret. 1503 Lisa Ln. Marion, Il. 62959 618-997-8431
- AUGUSTINE, MICHAEL A., Dir. Project Develop, CDG Engineers, One Campbell Plaza, St. Louis, Mo 63139, 314-781-7770
- AUSTIN, THOMAS J. , Safety Dir., Freeman United Coal Mining Co. 1999 Wabash Ave. Suite 2, Springfield, Il. 62704, 217-698-3300
- BACH, KENNETH J. Sales, Mine Safety Appliances Co. 3224 Gentry Rd. Makanda, Il. 62958, 618-457-2596
- BACKS, GLENN, Plant Supervisor, Monterey Coal Co., RR 4, Box 235, Carlinville, Il. 62626, 217-854-3291
- BACQUET, RON, Dist. Sales Mgr. Jennmar Corporation, P. O. Box 501, Winchester, Ky. 40393-0501, 606-744-9600
- BAHORIC, JOHN, Adm. Mgr. Heavynet LLC, 150 Pleasant Hill Rd. Carbondale, Il. 62901, 618-435-5007
- BAHR, E. WAYNE Mgr. Coal Research & Dev. , Il. Dpt. Commerce & Comm. Affairs, 325 W. Adams St. Springfield, Il. 62704, 217-785-2017

- Honorary Member for Life
- + Life Member

- BAILOR, JAMES J., Maint. Foreman, Arch of Illinois Inc. P. O. Box 308,  
Percy, Il. 62272, 618/357-3316
- BALCH, RONALD, Pres. Midwest Reclamation Resources , Inc. 150 E.  
Pleasant Hill Rd., Box 6, Carbondale, Illinois 62901  
618/453-8395
- BALDI, JOE, Sales Mgr. Sumiton Supply, 511 N. Douglas, West Frankfort,  
Il. 62896, 618/932-2529
- BALLANCE, MATT, Project Engr. Burns & McDonnell, 17 Cassens Court,  
Fenton, Mo. 63026, 314/05-0077
- BANACH, NEDA, Admin. Asst. ILDNR, Office of Mines & Minerals,  
503 E. Main St., Benton, Il. 62812, 618/438-9111
- BANOVIC, EDWARD , Coal Mine Inspector, MSHA, P. O. Box 220  
Hillsboro, Il. 62049
- BARBER, PAUL B. Mgr. Of Preparation, Arch of Illinois, Inc. P. O. Box 308  
Percy, Il. 62272, 618/497-2141.
- BARBOUR, DEWAYNE, Branch Mgr., National Mine Service Co.  
P. O. Box 1766, Mt. Vernon, Il. 62864, 618/44-6066
- BARTEAU, JOHN M. , Vice Pres., Rudd Equipment Co.  
4679 Baumgartner Rd. St. Louis, Mo. 63129, 314-487-8925
- BAUER, FRED, Mgr. Materials, Old Ben Coal Co. P. O. Box 369  
Coulterville, Il. 62237-0369, 618/758-4506
- BAUER, ROBERT A., Head, Engr. Geol. Section, 615 East. Peabody Dr.  
Champaign, Il. 61820, 217/244-2394
- BEAL, LARRY, Sales Supv. Century Lubricants, P.O. Box 161, Marion,  
Il. 62959, 618/997-2302
- BECK, ROBERT E., Prof. Of Law, Southern Il University, Law School  
Carbondale, IL 62901 618/453-4045
- BECKER, TYRUS, Pres. , UMWA #2412, Peabody Coal Co. , 805 Eastside Dr  
Evansville, Il. 62242, 618/853-4045
- BEERBOWER, DAVID A. , Vice Pres. Safety, Peabody Holding Co.  
701 Market St. St. Louis, Mo. 63101
- BEERKIRCHER, MARK, Project Engr , Monterey Coal Co., RR 4, Box 235  
Carlinville, Il. 62626, 217/854-3291
- BELL, JERRY Sales Rep. Flanders Electric Of Illinois , P. O. Box 1106,  
1000 N. Court St. Marion, Il. 62959, 618/993-2681
- \* BELL, LANNY (Retired) Roberts & Schaefer Co. 5712 Brookbank  
Downers Grove, Il. 60516, 312/968-6433
- \* BENNETT, JOHN C. (Retired), Peabody Coal Co. 301 Greenhaven Dr.  
Belleville, Il. 62221
- BENETT, PHILIP E. , Mgr. Of Battery Haulage, Lake Shore Mining Equipt.  
Inc., P. O. Box 429, Millersburg, Ky. 40348
- BERG, ROBERTA. , Tech. Specialist, Coast to Coast Hydraulics, 2725A  
Norton Creed Dr. W. Chicago IL 60185, 630/587-9300
- BERRI, JR., ROBERT, Mgr. Berri Exploration Services, P. O. Box 19871,  
St. Louis, Mo. 63144-0271, 314/962-0324
- BERRY, ALLEN Supt. Coal Miners, Inc. 999 Barrett Cemetery Rd. Equality, Il.  
62934, 618/268-4011
- BETZ, FRED, Vice Pres., Baker-Bohnert/Service Group, P. O. Box 169003  
Louisville, Ky. 40256-9003, 502/634-3661

- BIEREI, GREGG, Mgr. Of Eng. & Environ. Affairs, Thunder Basin Coal Co.  
P. O. Box 406, Wright, Wyo. 82732-0406
- BLAIS, RUSSELL A. Vice President, Marketing, Naylor Pipe Co. 1230 E. 92<sup>nd</sup>  
Street, Chicago, Il. 60619, 773/721-9400
- BLAYLOCK, BOB Supv. Of Safey, Arch of Illinois Inc. P. O. Box 308  
Percy, Il. 62272 618/357-3316
- BLICKLE, KAREN, Reg. Sales Engr. Ameridrives-Marland Clutch, 2350 Ravinia  
Lane, Woodridge, Il. 60517, 630/435-6580
- BLOSS, DONALD D., Territory Mgr., G. W. Keppel Co., 11475 Page Service Dr.  
St. Louis, Mo. 63146, 314/872-84400
- BLUMENFELD, ANDREW Vice Pres. Market Research, Arch Coal Inc.,  
City Place One, Suite 350, St. Louis, Mo. 63141
- BORDER, WILL, Sales Engr. Joy Technologies, Inc., # 4 Industrial Park, Mt.  
Vernon, IL 62864, 618/246/5041
- BOUVET, TERRY, Supt. Peabody Coal Co., 1214 Marissa Rd. Marissa, Il. 62257  
618/295-2374
- BOWLES, JERRY, Salesman, Special Mine Services, Inc. P. O. Box 188  
West Frankfort, Il. 62896 618/932-2151
- \* BOWMAN, FRED K. Director (Ret), IL DNR, Office of Mines & Minerals  
2836 White Plains Court, Springfield, Il. 62704, 217/546-1351
- BOYCE, KEITH D. Engr. Techn. Il, Arch of Illinois, Inc. P. O. Box 308  
Percy, Il. 62272, 618/57-3316
- BOYETT, CHRIS Surveyer, Freeman United Coal Mining Co. P. O. Box 259  
Farmersville, Il. 62533, 217/627-2161
- BRANDLEIN, THOMAS F. Bus.Dev. Mgr. Roberts & Schaefer Co.  
120 S. Riverside Plaza, Chicago, Il. 60606 312/236-7292
- BRANDON, DOUG, Tricon Metals & Services, Inc. 447 Dean Street  
Westchester, Pa. 19382, 610/92-5366
- BRANDT, JOHN A. Pres. Lafayette Coal Co. 200 Frontage Rd. #200  
Burr Ridge, Il. 60521 708/86-1456
- BRANSON, RICHARD R. Sales Manager, Reaco Battery Service Corp.  
13756 Route 37 N. Johnston City, Il. 62951, 618/983-6221
- BRAXMEIER, THOMAS JR. Project Eng. Gunther-Nash Mining Const.  
Co. 2150 Kienlen Ave. St. Louis, Mo. 63121 314/261-4111
- BRAXMEIER, THOMAS SR. Secy/Treas. Gunther-Nash Mining Const.  
Co. 2150 Keinlen Ave. St. Louis, Mo. 63121 314/261-4111
- BRENDEL, JAMES B. Vice Pres. Gunther-Nash Mining Construction Co.  
2150 Kienlen Ave. St. Louis, Mo. 63121, 314/261-4111
- BRODBECK, BOB, National Parts Mgr. Lake Shore Mining Equipment, Inc.  
P. O. Box 429, Millersburg, Ky. 40348
- BROOM, RICH, Sales Rep. Power Techniques, Inc. P. O. Box 166 Alma, Il.  
62807, 618/547-9099
- BROWN, DUKE Foreman, Freeman United Coal Mining Co. P. O. Box 259  
Farmersville, Il. 62533-0259 217/627-2161
- BROWN, JIM Mine Engr. White County Coal Corp. P. O. Box 457  
Carmi, Il. 62821 618/382-4651
- BROWN, JIM Mine Tech. Turriss Coal Co. P. O. Box 168 Elkhart, Il. 62634  
217/563-7009

BROWN, RANDY D., Mgr. Midwest Operations, Fairmont Supply Co.,  
P.O. Box 1388, Mt. Vernon, IL., 62864, 618/244-5344

BRUCE, JOHN, Sales rep., CSE Corporation, 600 Seco Road, Monroeville,  
PA., 115146, 412/856-9200

BUBANOVICH, THOMAS, Consultant, Employee Development Institute  
1702 N. State, Marion, Il. 62959, 618-997-6781

BULLOCK, BILL, National Coal Museum, P. O. Box 369, West Frankfort  
Il. 62896, 618-932-2164

BULLOCK, RICHARD, Quenon Prof. In Mining Engineering, University  
Of Missouri-Rolla, 226 McNutt Hall, Rolla, Mo. 65409-0450  
573-341-6651

BURGER, CHRIS J. Engr., Patrick Engineering, 300 W. Edwards St.  
Springfield, Il. 62701, 217-525-7050

BURKE, JAMES E., Pres. Wescott Steel, Inc. 425 Andrews Rd. Trevoze,  
Pa. 19053, 215-364-3636

BURKE, KIM A. SR. Vice Pres. Anker Energy Corp. 2708 Cranberry Sq.  
Morgantown, WV. 26505 304-594-1616

BURKETT, KEN, Outside Sales, The Mine Supply Co. 1703 Shawnee,  
P. O. Box 2220, Mr. Vernon, Il. 62864 618-242-2087

BUTTRUM, ROBERT Sales & Service Rep. The Mine Supply Co.  
1703 Shawnee, P. O. Box 2220, Mt. Vernon, Il. 62864 618-242-2087

BYROM, ROY, Pres. Coal Industry Consultants, Inc. P. O. Box 4345  
Wheaton, Il. 60189-4345, 708-858-8673

CADY, PHIL. Sales, Ford Steel Co., P. O. Box 54, Maryland Heights, Mo.  
63043, 314-567-4680

CALDWELL, MIKE, Vice Pres. Eng., Freeman United Coal Mining Co.  
1999 Wabash Ave., Suite 200B, Springfield, Il. 62704-5364  
217-698-3300 X 27

CALVERT, BRUCE D. Relief Forman, Arch of Illinois, Inc. P. O. Box 308  
Percy, Il. 62272, 618-357-3316

CAMPBELL, PAT, State Mine Inspector, ILDNR, Office of Mines & Minerals  
503 E. Main St., Benton, Il. 62812, 618-439-9111

CARE, DAVID L., Supv. Of EE Dept., Freeman United Coal Co., 10883 Avery  
Rd. West Frankfort, Il. 62896, 618-279-7241

CARPENTER, RUSS, Mine Mgr., Old Ben Coal Co., P.O. Box 369, Coulterville,  
IL, 62237-0369 618/3064

CARR, BILL, Acct. Consultant, Kirby Risk Electrical Supply, 11381 Rend City  
Road, Benton, Il. 62812, 618-724-2415

CARRIL, LARRY, Gen. Sales Mgr. Cummins Gateway, Inc. 7210 Hall St.  
St. Louis, Mo. 63147, 314-389-5400

CARTER, CHARLES, Supt. Kellogg Dock, Consolidation Coal Co. 3500 S.  
Levee Road, Modoc, Il. 62261, 618-625-2041

CARTER, LEE, Prof. Engr. Professional Engr. P. O. Box 44242, Rio Rancho,  
NM. 87174-4242, 505-994-1485

CARTER, STEVE, Partner, Knight Hawk Coal. LLC. 12824 Ladue Rd.  
Creve Coeur, Mo. 63141, 314-576-6474

CARTWRIGHT, ROSE A., Mine Clerk, Arch of Illinois, Inc. P. O. Box 308  
Percy, Il. 62272, 618-357-3316

CASTELLANO, GENE, Sales Mgr. Arresh Environmental Equipt. Inc.  
P. O. Box 1760, Paducah, Ky. 42002-1760, 502-898-6821

CARTWRIGHT, ROSE A., Mine Clerk, Arch of Illinois, Inc., P.O. Box 308,  
Percy, IL., 62272, 618/3316

CASTELLANO, GENE, Sales Mgr., Arch Environmental Equip. Inc., P.O.  
Box 1760, Paducah, KY. 41002 502/898-6821

CASTLE, BRIAN R., Gen. Mgr., Jennmar/Scott Inc., 16720 State Rt. 0, Rolla,  
Mo. 65401, 573/8030

CAUTHEN, WILEY m., Florida Gas Transm. Co., P.O. Box 945100,  
Maitland, FL., 32794, 407/838-7077

CAVINDER, MARK, Vice Pres/Gen. Mgr., Old Ben Coal Co., P.O. Box 369  
Coulterville, IL., 62237, 618/758-1339

CHASE, DAVID H., Vice. Pres., Chase Pump Equip. Co., Inc., P.O> Box  
812, 603 S. Main St., Henderson, Ky., 42420, 502/826-8713

CHIZMAR, MIKE, Vice Pres. Contral Reg/. Long-Airdox Co., RR 3, Box  
13115, Cedar Bluff, Va., 24609 540/963-0841

CHOU, CHEN-LIN Senior Geologist II, State Geological Survey, 615 E.  
Peabody Dr. Champaign, Il. 61820, 217-244-2492

CHUGH, YOGINDER P. Prof. & Chairman, Southern Il. University, Dept. of  
Mining Engr. Carbondale, Il. 62901, 618-536-6637

CINCILLA, WILLIAM A. Sr. Project Manager, Golder Paste Technology, Ltd.  
44 Union Blvd. #300, Lakewood, Co. 80228, 303-980-0540

CLARK, CARSON, Sales Rep. McJunkin Corp. P. O. Box 85, Calvert City, Ky.  
42029, 502-395-7171

CLARK, DANNY R., Section Foreman, Arch of Illinois, Inc. P> O> Box 308  
Percy, Il. 62272, 618-357-3316

CLARK, RODNEY, Sales, McJunkin Corp. 139 Sisler St., Kingwood, WV.  
26537, 304-329-3468

CLARKE, ROBERT P. Operations Mgr. Earth Tech. 509 Olive St. Suite 1101  
St. Louis, Mo. 63101, 314-447-4984

CLINE, LYLE Program Coordinator, Southern Illinois University, Dept. Of  
Mining Engineering, Carbondale, Il. 62901-6603, 618-536-6637

CLINTON, JEFF Sales Mgr. Wallace Diesel Equipment, P. O. Box 68  
Raleigh, Il. 62977, 618-244-4446

COCHRAN, DONNA Inside Sales, Electric Controls Supply Co.  
2735 Mercantile Dr. St. Louis, Mo. 63144, 314-645-2420

COMPTON, JIM Sales Engr. T. J. Gundlach & Co. P. O. Box 385  
Belleville, Il. 62222, 618-233-7208

CONN, ROBERT W. Electrical/Instrumental Foreman, The American Coal Co.  
P. O. Box 727, Harrisburg, Il. 62946-0727, 618-268-6423

CONNER, ERIC Electrical Techn. Old Ben Coal Co. P. O. Box 369  
Coulterville, Il. 62237-0369, 618-738-1339

CONNER, LONNIE Supv. Coal Mine Inspector, MSHA, P. O. Box 220  
Hillsboro, Il. 62049

COOPER, HOLLY Lab Sales Rep. Peoria Disposal Co. Laboratories  
Peoria, Il. 61612, 309-688-0760

COSTELLO, ALLEN J. Geologist, Il. Mine Subsidence Insurance Fund,  
4 Executive Dr. Fairview Heights, Il. 62208 618-624-3350

- COTTER, JOHN L. Shift Mine Manage, Arch of Illinois, Inc. P. O. Box 308  
Percy, IL 62272, 618-357-3316
- COUSINS, MATTHEW Sales Engr. Midwest Reg. Long-Airdox Co.  
3206 W. DeYoung, Marion, IL 62959, 618-997-4335
- \*CRAGGS, JOE, Retired, Peabody Coal Co., R.R. 3, Box 47A, Taylorville,  
IL., 62568
- CRELLING, JOHN C., Prof., Southern IL. University, Dept. of Geology  
Carbondale, IL., 62901
- CUSHMAN, TOM, Vice Pres., Phillips Machine Service, Inc., P.O. Box  
1245, Beckley, WV, 25802, 304/255-0537
- DAIBER, VIC, Engr. Mgr., Peabody Coal Co., 615 E. Peabody Dr.,  
Champaign, IL. 61820, 271/333-5115
- \*DAMBERGER, HEINZ H., Head, Coal Section, I Geological Survey,  
615 E. Peabody Dr., Champaign, IL., 61820 377/333-5115
- DAME, DON, Dir. Human Rel. & Govt. Rel., Freeman United Coal Mining  
Co., 1999 Wabash Ave., Springfield, IL 62704, 217/698-3300
- DAME, JR., CHARLES D., Chief Safety Inspector, Freeman United Coal  
Co., 1999 Wabash Ave., Springfield, IL 62704 217/698-3300
- DANIELS, DAVE, Assoc. Partner, Hanson Engineering, Inc., 1525 S. 6<sup>th</sup> St.,  
Springfield, IL., 62703 217/788-2450
- DANKO, JOHN, (Retired), Peabody Coal Co., P.O> Box 272, Sparta, IL.  
62286
- DANKO, ROBERT, 532 Coventry, Troy, IL. 62294
- DANNER, STEPHEN K., Geogologist, IL. Mine Subsidence Insurance  
Fund, 4 Executive Dr., Fairfield Heights, IL 62208 618/624-3350
- DAUSMAN, BRUCE R., Mgr. Of Engr., Black Beauty Coal Co.,  
P.O. Box 312, Evansville, IN., 47702
- DE SALME, DAN, Service Mgr., Cummins Gateway, Inc., 7210 Hall St.,  
St. Louis, MO., 63147 324/389-5400
- DEMIR, ILHAM, Geologist, IL. State Geological Survey, 615 E. Peabody  
Dr., Champaign, IL 61820 217/244-0836
- DEMMING, DAVID, Business Devel. Mgr., Roberts & Schaefer Co.,  
120 S. Riverside Plaza, Ste. 400, Chicago, IL. 60606, 312-236-7292
- DENNISON, ROGER Pres. Turris Coal Co. P. O. Box 21, Elkhart, IL. 62634  
217-947-2673
- DENTON, THOMAS G. Chief Eng. Galatia Mine, The American Coal Co.  
312 West Church St. Benton, IL. 62812, 618-268-6563
- DILL, WILLIAM Chairman Mining & Ind. Tech. Rend Lake College  
RR #1 Ina, IL. 62846, 618-437-5321
- DIPASQUALE, CARL D. Tech. Mgr. Goodyear Tire & Rubber Co.  
1000 Lakae, St. Louis, Mo. 63367, 314-429-8751
- DOBBINS, DOUGLAS, Chief Engr. Old Ben Coal Co. P. O. Box 369  
Coulterville, IL. 62237-0369, 618-758-4407
- DONALDSON, DENNIS J. Energy Serv. Engr. Ameren CIPS  
1800 W. Main, Marion,, IL. 62959, 618-997-3311

DOTY, BOB, Sales & Purchasing, Marion Electric, 1607 Du Four Ave.,  
Marion, IL 62959, 618/932-2151

DOWNING, DOUG, Mgr. Idle Prop. West, Arch Reclamation Services Inc.,  
City Place One, St. Louis, MO 63141, 314/994-2700

DOWNS, DONNA, Sales, United Central Industrial Supply, 1800 Supply  
Rd., Carterville, IL 62918, 618/985-8316

DRAPEAU, RONALD B., Engr. Tech II, Arch of Illinois, Inc., P.O. Box  
308, Percy, IL 62272, 618/357-3316

DUGGER, LARRY, Pres., Woodruff Supply Co., Inc., P.O. Box 426,  
Madisonville, KY 42431, 502/821-3247

DULA, STEPHEN H., Gen Mgr. Freeman United Coal Mining Co., P.O.  
Box 180, DuQuoin, IL 62832, 618/54 2-2117

DUNCAN, SAMUEL W., Pres., Duncan Foundry & Machine Works, Inc.  
Box 433, Alton, IL 62002, 618/465-7724

DURHAM, BILL, Sales Rep., Advanced Drainage Systems, Inc., P.O. Box  
809, London, OH 43140, 800/733-9449

EDWARDS, CHUCK, Dist. Sales Mgr., CSE Corporation, 600 Seco Road,  
Monroeville, PA 15146, 412/856-9200

EHLINGER III, HENRY P. (Retired), IL. State Geological Survey, 1916  
Forest St., Eldorado, IL 62930

EILERTS, JR., MATTHEW G., Arch of Illinois, Inc., P.O. Box 308, Percy,  
IL 62272, 618/357-3316

ELLIS, BILL, Sales Mgr., J.H. Fletcher & Co., P.O. Box 2187, Huntington,  
WV 25711, 304/525-7811

ELLIS, GORDON B., Branch Mgr., Bearing Headquarters Co., 329 S. 9<sup>th</sup> St.  
Mt. Vernon, IL 62864 618/242-7494

ELLIS, JOHN C., Mgr. Mtrl. Handling, Henry A. Petter Supply Co., P.O.  
Box 2350, Paducah, KY 41001, 502/443-2441

ENGLISH, VICTOR, Sales Mgr., BICC Cables Co., 2016 Bamboo Dr.,  
Lexington, KY 40513, 606/223-4673

ENRIETTA, MARY KAY, IL. Eastern Community Colleges, 170 W.  
Center St., Girard, IL 62640, 217/626-3843

EVANS, DONNIE, Dist. Mgr., Lake Shore Mining Equipment, Inc. 1601 E.  
DeYoung St., Marion, IL 62959, 618/993-1170

EVOY, TERRY, Maint. Mgr., Turris Coal Co., P.O. Box 21, Elkhart, IL  
62634, 217/947-2951

FARLAINO, G. REGGIE, Sales Rep., Phillips Machine Service, Inc., P.O.  
Box 107, Greenville, KY 42345, 502/754-2791

FINDLEY, KEITH, Field Rep., Schroeder Industries, 1137 S. Englewood  
Ct., Evansville, IN 47714

FINDLEY, ROGER, Repair Mgr., Mt. Vernon Electric, Inc., P.O. Box 1548,  
Mt. Vernon, IL 62864, 618/244-1066

FINK, JACK C., Mgr. Mining Products, Plymouth Rubber Co., Inc., 120  
Bertley Ridge Dr., Coraopolis, PA 15108, 412/262-3099

FINNERTY, DAVID J., Mgr. Engr & Environ Affairs, Arch of IL, Inc.,  
P.O. Box 308, Percy, IL 62272, 618/497-2141

FISCHBECK, GROVER, Dist. Service Rep., J.H. Fletcher & Co., 1316  
State Route 130 N., Morganfield, KY 42437, 502/333-4166

FISCOR, STEVE, Exec. Editor, Coal Age Magazine, 29 N. Wacker Dr.,  
Chicago, IL 60606, 312/726-2802

FLEENER, JOHN K., Vice Pres & Gen Mgr, Mid-Continental Fuels, Inc.,  
P.O. Box 100, Johnston City, IL 62951, 618/983-5406

FLEMING, Robert, Survey Party Chief, Freeman United Coal Mining Co.,  
P.O.Box 259, Farmersville, IL 62533, 217/627-2161

†FLETCHER, ROBERT, J. H. Fletcher & Co., Box 2187, Hungington, WV,  
25722

†FLETCHER, WILLIAM, Dir., J.H. Fletcher & Co., 1630 Sheridan Rd.,  
Apt. 10N, Wilmette, IL 60091

FOLEY, DON, Repair Div. Mgr., Decatur Industrial Electric, P.O. Box 1188  
Decatur, IL, 62525, 618/244-1066

FOLKERTS, JIM, Reg. Sales Mgr. Joy Technologies, Inc. #4 Industrial Park  
Mt. Vernon, Il. 62864, 618-242-3650

FOLTA, MICHELLE, Inside Sales Mgr. Ludlow-Saylor, P. O. Box 430  
Warrenton, Mo. 63383, 314-456-8200

FORD, JOHN, Pres. Ford Steel Co. P. O. Box 54, Maryland Heights, Mo.  
63043, 314-567-4680

FORD, KEN, Maint. Dir. Coal Miners, Inc. 999 Barrett Cemetery Rd.  
Equality, Il. 62934, 618-275-4342

FOX, JAMES M. Engineer, Emeritus, Tabor Machine Co. 908 Taylor Ave.  
Mt. Vernon, Il. 62864, 618-242-1048

FOX, ROBERT H. Researcher, Southern Illinois University, 1004 S. Main  
Box 343, Coulterville, Il. 62237, 618-758-2414

FRANCESCON, MICHAEL A. Section Foreman, Arch of Illinois, Inc.  
P. O. Box 308, Percy, Il. 62272, 618-357-3316

FRANKLIN, DANNY, Mine Foreman, White County Coal Corp.  
P. O. Box 457, Carmi, Il. 62821, 618-382-4651

FRESE, TONY Branch Manager, Lake Shore Mining Equipment, Inc.  
1601 E. DeYoung St., Marion, Il. 62959, 618-993-1170

FRIDLEY, MARK, Mine Engr. White County Coal Corp. P. O. Box 457  
Carmi, Il. 62821, 618-382-4651

FROEHLE, MAUREEN, Vice Pres. Of Bus. Plann. & Strat. Freeman  
Energy Corp. 1999 Wabash Ave., Suite 200A, Springfield, Il.  
62704-5368, 217-698-3300

FULLER, CHARLIE, Branch Mgr. National Mine Service Co.  
1150 National Mine Dr. Madisonville, Ky. 42431

GAMSTER, SCOTT, Pres. Reaco Battery Service Corp. Route one, Box 48  
Johnston City, Il. 62951, 618-983-5441

GARDINER, BOB Surface Supt. Turris Coal Co. P. O. Box 21, Elkhart, Il.  
62634, 217-947-2618

GARRETT, DAN Engr. Central Region, White County Coal Corp. P. O. Box  
457, Carmi, Il. 62821 618-382-4651

GARRETT, MICKEY, Salesman, Century Lubricants Co. P. O. Box 161  
Marion, IL 62959 618-997-2302

GARRISON, MERLE RAY, Sales, Gooding Rubber Co. P. O. Box 487  
Benton, IL 62812, 618-435-8104

GUANA, MIKE Consolidation Coal Co. P. O. Box 566, Sesser, IL 62884  
618-625-2041

GEIBEL, JON CH4 Development Partners, LLC, P. O. Box 536,  
Harrisburg, IL 62946, 618-252-3733

GEILER, MARK Sales Rep. Power Techniques, Inc. P. O. Box 166  
Alma, IL 62807, 618-547-9099

GEORGE, TIM Asst. Service Mgr. J. H. Fletcher & Co. P. O. Box 2187  
Huntington, WV. 25722, 304-525-7811

GILES, WILLIAM E. , Chief Mech. Engr. Freeman united Coal Mining Co.  
P. O. Box 259, Farmersville, IL 62533, 217-627-2161

GILL, JAMES B., V.P. Operations, MAPCO Coal, Inc., P.O. Box 911,  
Henderson, KY 42420, 502/827-4996.

GILLES, STEVE, Product Mgr., U.S. Filter, Bixby-Zimmer Div., P.O. Box  
510, Galesburg, IL 61401, 812/983-4654

GILLESPIE, BOBBIE, Sales, SETCO Solid Tire & Rim, P.O. Box 809,  
Idabel, OK 74745, 800/634-2381

GIVENS, SUSIE, Pres & Owner, Givens International Drilling Supplies, Inc.,  
P.O. Box 53, Croydon, KY 42406, 502/533-6378

GLASSCOCK, DON, Pres., Ironhorse, Inc., P.O. Box 152, Baldwin, IL 62217  
618/785-2221

GODDARD, DONALD G., Pres., Mid-Continental Fuels, Inc., P.O. Box 100  
Johnston City, IL 62951 618/983-5406

GODFREY, JAMES H., Pres., Van-American Insurance CO., 167 E. Main St..  
Suite 210, Lexington, KY 405a07 606/225-101

GOLOSINSKI, TAD S., Prof-Mining Engr., University of Missouri-Rolla,  
226 McNutt Hall, Rolla, MO 65409 573/341-4754

GOODINSON, MALCOLM, Export Sales Mgr., Huwood Internationsl Team  
Valley Trading Estate, Gateshead Nell,LP England

GOODWIN, JONATHAN H., Senior Geologist, IL. State Geological Survey  
615 E. Peabody Dr., Champaign, IL 61820 217/333-5855

GOULD, JAY, Vice Pres., Gould's Electric, P.O. Box 100, Indore, WV  
25111 304/587-4825

GRADY, JR., DAVE, Field Rep., J&R Manufacturing Co., Rt. 2 Box 173F,  
Gluefield, VA 24605 540/322-5431

GRAY, RALPH J., Consultant, Coal,Coked Carbon, Ralph Gray Services,  
303 Drexel Dr., Monroeville PA 15146

GREGORY, WALT, Pres. & CEO, Freeman Energy Corporation, 1999 Wabash  
Ave., Ste 200A, Springfield IL 62704 217/698-3300

GRIESEIDIECK, CHRIS, Pres., American Pulverizer Co., 5540 W. Park,  
St. Louis, MO 63110 314-781-6100

GRIMMETT, MARK A., Vice Pres., NARCO, Inc., P.O. Box 549, Smithers,  
WV 25186, 304/442-5656

GRIMMETT, TIMOTHY J., Pres., NARCO, Inc., P.O. Box 549, Smithers WV, 25186 304/442-56

GROGAN, LESTER T., (Retired) 308 W. Adelaide, Christopher, IL 62822 618/724-4429

GULLIC, ROBERT C., General Mgr., Sahara Coal Co., Inc. 1660 Carrier Mills Road, Harrisburg, IL 62946 618/994-2311

GURLEY, JEFF, Safety Supv., Peabody Coal Co, 1214 Marissa Road, Marissa, IL 62257, 618/295-2374

GUTHMAN, RONALD L., Warehouse Tech. II, Arch of Illinois, Inc. P.O. Box 308, Percy, IL 62262, 618/357-3316

GWALTNEY, BILL, Vice Pres., Webb Oil Co., Inc., P.O. Box 112, McLeansboro, IL 62859, 618/643-2421

HAAGA, MATT, Bus. Unit Mgr., Peabody Coal Co., 1214 Marissa Rd., Marissa, IL 62257, 618/295-2374

HALL, BERT, Project Field Mgr., Land Erectors, Inc., 622 North Granger P.O. Box 657, Harrisburg, IL 62946, 618/298-2394

HAMILTON, DAVID, Salesman, Cambia Co Assoc. & Blind & Handicap 175 Industrial Park Rd., Ebensburg, PA 15931, 814/472-5077

HAMILTON, GLENN, Environ. Engr., Freeman United Coal Mining Co., P.O. Box 349, Du Quoin, IL 62832, 618/542-5875

HANCOCK, BUDDY, Central Div. Mgr., Commercial Testing & Engr. Co., P.O. Box 752, Henderson, KY 42420, 502/827-1187

HANKINS, RONALD W., Warehouse Tech. II, Arch of Illinois, Inc., P.O. Box 308, Percy, IL 62272, 618/357-3316

HARDMAN, DOUG, Gen. Mgr. Sales & Engr., J.H. Fletcher & Co., P.O. Box 2187, Huntington, WV 25722, 304/525-7811

HARPER, DARRELL N., Gen. Mgr. Project Engr., 3-H Mining Corp. P.O. Box 409, Irwin, PA 15642. 724/864-8900

\*HARRELL, M.V. (DOC), Vice Pres. (Retired), Freeman United Coal Mining Co., Route 2, Mt. Vernon, IL 62864, 618/242-7374

HARRIS, JAMES D., Salesman, Special Mine Services, Inc., P.O. Box 188 West Frankfort, IL 62896, 618/932-2151

HARRIS, RICK, Supt-Ohio No. 11 Mine, Consolidation Coal Co., P.O. Box 566, Sesser, IL 62884, 618/625-2041

HARTSTIRN, BOB, Supt. Burning Star # 44, Consolidation Coal Co., P.O. Box 566, Sesser, IL 62884, 618/625-2041

HARVEY, DONNA, Shop Office Mgr., Mt. Vernon Electric, Inc., P.O. Box 1548, Mt. Vernon, IL 62864, 618/244-1066

HASENSTAB, THOMAS J., Engr. II, Arch of Illinois, Inc., P.O. Box 308 Percy, IL 62272, 618/357-3316

HAWKEY, ROBERT, Pres., Hawkey & Kline Drilling, nc., P.O. Box 38AA St. Peter, IL 62880, 618/349-6113

HEIN, DARRELL L., Field Spec., IL Mine Subsidence Insurance Fund, # 4 Eaxecutive Dr., Suite 4, Fairview Heights, IL 62208, 618/624-3350

HELLER, CHRIS F., Surface Coord., Monterey Coal Co., 14300 Brushy Mound Rd., Carlinville, IL 62626, 217/854-3291

- HEMMERICH, WAYNE, Lane Erectors, Inc., P.O. Box 657, Harrisburg, IL 62946, 618/252-0551
- HENKEN, CARY, Sales Rep., Power Techniques Inc., P.O. Box 166 Alma, IL 62807, 618/547-9099
- HENKEN, REX, Sales Rep., Power Techniques, Inc., P.O. Box 166 Alma, IL 62807, 618/547-9099
- HENRY, TOM, Mgr. Maint., Old Ben Coal Co., P.O. Box 369, Coulterville, IL 62237, 618/758-1339
- HERNDON, MITCH, Sales Rep., Rudd Equipment Co., 4679 Baumgartner, St. Louis, MO 63129, 314/487-8925
- HERZOB, BEVERLY, Sr. Hydrogeologist, IL State Geological Survey, 615 E. Peabody Dr., Champaign, IL 61820, 217/244-2788
- HESS, JAMES, Mine Supt., Orient No. 6, Freeman United Coal Mining Co. 5885 N. Cherryville Lane, Waltonville, IL 62894, 618/279-7241
- HIGGINS, JOHN, Div. Mgr., Gauley Sales Co., RR 1, Box 155, Providence, KY 41450, 501/667-2001
- HILL, JOHN, Patriot Coal Co., 19070 Highway 10778 S., Henderson, KY 42420, 502/546-9430
- HIRD, TERRY, Supt., Marissa Mine, Peabody Coal Co., 1214 Marissa Rd., Marissa, IL 62257 618/587-1915
- HOEMAN, JACK, 12725 Big Bend Blvd., St. Louis, MO 63122, 314/909-4737
- HOFFARD, DONNIE R., Section Foreman, Arch of Illinois, Inc., P.O. Box 308 Percy, IL 62272, 618/357-3316
- HOFFMAN, MARKEL, Prep Plant Mgr., White County Coal Corp. P.O. Box 457 Carmi, IL 62821, 618/382-46751
- HOFFMAN, PATTY, Mgr AFASSCO First Aid Div., M & S Fire and Safety P.O. Box 4348, Evansville, IN 47724, 812/424-3863
- HOFFMAN, WES, Coord. Archveyer, Arch of Illinois, Inc., P.O. Box 308, Percy, IL 62272, 618/357-3316
- HOLDERFIELD, JOE, Branch Mgr., Fabick Machinery Co., P.O. Box 760 Marion, IL 62959, 618/997-1881
- HOLLOWAY, CLIFFORD, Public Service Admin., IL DNR Office of Mines & Minerals, 503 East Main St., Benton, IL 62812, 618/439-9111
- HOOD, DEIDRA, National Coal Museum, P.O. Box 369, West Frankfort, IL 62896 618/932-coal
- HOOKS, CHARLES, Agronomist, University of Illinois, 13040 Blackstump Rd. Percy, IL 62272, 618/965-9651
- HOOPER, RICK, Sales Rep., MEMSCO, P.O. Box 189, Dawson Springs, KY 42408, 501/797-3481
- \* HOPKINS, M.E., Director of Geology (Retired), Peabody Holding Co., 2896 Par Court, Fayetteville, AR 72703, 314/342-3400
- HORISZNY, AL, Terry Mgr., Chevron, Inc., 2530 Village Lane, Foristell, MO 63348, 314/673-7200
- HOWARD, JOHN L., Assoc. Dean, Mining Tech., Il Eastern Comm. Colleges, 170 W. Center St., Girard, IL 62640, 217/627-3843

HOWELL, JIM, Tech. Mgr., Minesafe Electronics, P.O. Box 281  
 Sturgis, KY 42459, 502/333-5581  
 HUDSON, LARRY, Supt. Industry Mine, Freeman United Coal Mining  
 Co., P.O. Box 261, Industry, IL 61440, 309/254-3778  
 HUGHES, DENZIL, Mine Mgr., The American Coal Co., P.O. Box  
 727, Harrisburg, IL 62946, 618/268-6584  
 HUGHES, WILLIAM W., Service Engr., Continental Conveyor &  
 Equip. Co., P.O. Box 2507, Mt. Vernon, IL 62864  
 HUNT, GUY, Engr., Dept., Turris Coal Co., P.O. Box 21, Elkhart,  
 IL 62634, 217/947-2951  
 HUNTER, ROBERT, Pres., Bob Hunter & Associates, P.O. Box 7  
 O'Fallon, MO 63366  
 HUNTSMAN, LES, Pres., Special Mine Services, Inc., P.O. Box  
 188, West Frankfort, IL 62896, 618/932-2151  
 HURST, ROBERT J. Pres., Geo-Con, Inc., R.R. 4, 305 Fifth Ave.,  
 Princeton, IN 47670  
 HUTCHCRAFT, DENNIS, DMH Services, Richwood Industries 1872  
 Melvin Rd., West Frankfort, IL 62896, 618/525-5437  
 IRBY, CHRIS, Regional Sales Rep., A&K Railroad Materials, 928  
 Niedringhaus Ave., Granite City, IL 62040, 800/252-2352  
 IWASYSZYN, TED, Vice Pres., Sales, Gate Centrifuge, Inc., P.O. Box  
 23298, Belleville, IL 62223, 618/845-3877  
 JACKSON, AARON D., Gen. Mgr. Camp Bus Unit, Peabody Coal Co.,  
 P.O. Box 328, Morganfield, KY 42437, 502/389-6507  
 JACKSON, DAVID, Salesman, Lochard Industrial Corp., 9037 Sutton  
 Place, Hamilton OH 45011, 513/942-4222  
 JACKSON, ROYCE, Sales, TRYUS Company, Box 177, DuQuoin, IL  
 62832, 618/542-8629  
 JACOBS, MARK, Sales Rep., Boone Supply Co., 100 Coal River Dr.  
 Box 429, Sylvester, WV 25193, 304/854-0761  
 JACOBS, TANYA, Vice Pres., Boone Supply Co., P.O. Box 429, Sylvester,  
 WV 25193, 304/0761  
 JACOBS, WILLIAM, Pres., Boone Supply Co., P.O. Box 429, Sylvester,  
 WV 25193, 304/854-0761  
 JACOBSON, RUSSELL J., Assoc. Geologist, IL State Geological Survey,  
 615 E. Peabody Dr., Champaign, IL 61820  
 JAHNIG, RON, Process Engr., Decanter Machine, Inc., 3622 Bristol Hwy.,  
 Johnson City, IN 37601, 615/282-8671  
 JAMES, JESSE, Radio Sales, Minesafe Electronics, Inc., P.O. Box 281,  
 Sturgis, KY 42459 304/568-5201  
 JANKOUSKY, BILL, Chief Safety Insp., Freeman United Coal Mining Co.,  
 P.O. Box 259, Farmersville, IL 62533, 217/627-2161  
 JANKOUSKY, CHARLES, (Retired) Freeman United Coal Mining Co.,  
 702 Sheridan Dr., Benton, IL 62812, 618/438-4391  
 JENKINS, JON C., Pres., J & D Management Group, Inc., P.O. Box 54691  
 Lexington, KY 40555, 606/299-3656

JOHNSON, CLARK, National Sales Mgr., Carroll Engineering Co., P.O. Box 860, Harlan, KY 40831

JOHNSON, D.J., Professor, Rend Lake College, RR# 1, Ina, IL 62846 681/437-5321

JOHNSON, SAM, Manager/Sales, Dooley Bros., Inc., 609 N. McLeansboro, Benton, IL 62812, 618/438-7831

JONES, CHARLIE, Engineer, White County Coal Corp., P.O. Box 457 Carmi, IL 62821, 618/382-4651

JONES, JACKIE W., Salesman, Kerco, Inc., P.O. Drawer 665, Madisonville, KY 42455, 502/676-3039

JONES, JERRY, Mine Tech., Turris Coal Co., P.O. Box 168, Elkhart, IL 62530, 217/628-3637

JOYCE, KEVIN, Vice Pres., Sales, Naylor Pipe Co., 1230 E 9<sup>th</sup> Street Chicago, IL 60619, 773/421-9400

JUSTICE, J. H. (JIM), Vice Pres., DuQuoin Iron & Supply Co., P.O. Box 181, DuQuoin, IL 62832, 800/535-5157

KAELIN, LARRY F., Pres., Marine Coal Sales Co., 645 W. Carmel Dr., #190, Carmel, IN 46032

KAN, STEVE, Research Assoc., University of Missouri-Rolla, 226 McNutt Hall, Rolla, MO., 65401, 573/341-4753

+ KARNES, RALPH E., Maint. Foreman, Consolidation Coal Co., 1311 Ash St., Hillsboro, IL 62049

KATTENBRAKER, STEVE, Supv. Coal Mine Inspectors, MSHA, P.O. Box 370, Benton, IL 62043

KATTERHENRY, BILL, Pres., Katterhenry & Associates, Inc., P.O. Box 60, Naperville, IL 60657, 708/357-4466

KEE, GEORGE B., Vice Pres., Special Mine Services, Inc., P.O. Box 188, Country Club Road, West Frankfort, IL 62896, 618/932-2151

KEE, VERNON, Sales Rep., Special Mine Services, Inc., P.O. Box 188, West Frankfort, IL 62896, 618/932-2151

KELL, THOMAS M., Supt., Crown II, Freeman United Coal Mining Co., P.O. Box 347, Virden, IL 62690, 217/965-5461

KELLER, DON, Kennametal, Inc., P.O. Box 231, Latrobe, PA 15650

KELLEY, JAY HILARY, Pres., Kelastaic Mine Beam Co., 307 Pennsylvania Ave., Greensburg, PA 15601

KELLEY, RAY, Reg. Mgr., Dyno Nobel Midwest, P.O. Box 349, Pittsfield IL 62363

KELLY, BILL, Gen. Mgr., Cyprus Amax Coal Co., 7566 Chapel Hill Ct., Newburgh IN 47630

KEMP, LYNN, Sales, M & S Fire & Safety, P.O. Box 4348, Evansville IN 47724, 812/424-3863

KENDORSKI, P.E., FRANKS, Consult Engr., Weir Int'l Mining Consultants 2340 River Rd, Suite 203, Des Plaines IL 60018, 847/305-7900

KENNEDY, JACK, V. Pres., Jack Kennedy Metal Prods & Bldgs., Inc., P.O. Box 138, Taylorville IL 62568, 217/287-7231

KENNEDY, WILLIAM Pres. , Jack Kennedy Metal Prods. & Bldgs. Inc.  
P. O. Box 138, Taylorville, Il. 62568, 217-287-7231

KERN, ALAN, Mine Engr. White County Coal Corp. P. O. Box 457  
Carmi, Il. 62821, 618-382-4651

KETLER, ALBERT, Pres. Rel Tec, 610 Beatty Rd. Monroeville, Pa.  
15146, 000-373-6700

KIEHNA, MELVIN , Turriss Coal Co. P. O. Box 21, Elkhart, Illinois  
62634

KING, MIKE, Vice Pres. Electric Controls Supply Co. 2735 Mercantile Dr.  
St. Louis, Mo. 63144, 314-645-2420

KIRKPATRICK, BILLY Sales Eng. Joy Technologies, Inc. RR 6, Box 343  
Mt. Vernon, Il. 62864, 618-242-3650

KITCHEN, MARK General Mine Manager, White County Coal Corp.  
P. o. Box 457, Carmi, Il. 62821, 618-382-4651

KITTINGER, JAY Mine Foreman, White County Coal Corp. P. O. Box 457  
Carmi, Il. 62821, 618-382-4651

KLEIN, GREG, Gen. Mgr. G. W. Van Keppel Co. 11475 Page Service Dr.  
St. Louis, Mo. 63146, 314-872-8440

KLOCKE, NEIL, Outside Sales, Electric Controls Supply Co.  
2735 Mercantile Dr., St. Louis, Mo. 63144, 314-645-2420

KOHLER, SCOTT, Marketing, JTC Environmental/Pennzoil, P.O. Box 178  
East Alton IL 62014

KOPEC, JOHN, Pres., K & E Technical, Inc., P.O. Box 165, West Frankfort  
IL 62896, 618/932-2245

KORTE, JAMES, Western Sales Mgr., T. J. Gundlach & Co., Inc., P.O. Box 385  
Belleville IL 62222, 618/233-7210

KOVACK, MIKE, Area Mgr., Triune, Inc., 5967 Airline Road, Henderson,  
KY 42420, 618/235-7928

KOVARIK, MIKE, Sales, Gooding Rubber Co., P.O. Box 487, Benton,  
IL 62812, 618/435-8104

KRITZBERGER, GENE, Product Mgr., Voith Transmissions, Inc., 25  
Winship Road, Yokr PA 17402, 717/767-3200

KRUG, JOHN, Counter, Inside Sales, Kirby Risk Electrical Supply, 11381  
Rend City Rd., Benton IL 61812, 618/724-2445

KUNKEL, JOHN, Mgr. Of Adminis. & Finance, Old Ben Coal Co., P. O.  
Box 369, Coulterville IL 62237, 618/738-1339

LADSON, CARL, Maint., Turriss Coal Co., P.O. Box 168, Elkhart IN 62634,  
271/792-3429

LAFFFEY, MIKE, Sales Rep., Laffey Equipment Co., P.O. Box 16285  
St. Louis MO 63105, 314/427-7414

LAMBERT, KEITH, Dist. Sales Mgr., Carroll Engineering Co., P.O.  
Box 149, Morganfield KY 42437, 502/389-3800

LANZEROTTE, JOHN, Production Supt., Monterey Coal Co., RR# 4,  
Box 235, Carlinville IL 62626, 217/854-3291

LARSON, JOHN C., Sales Rep., Michigan Industrial Lumber, P.O. Box  
612, Whiting IN 46394, 219/659-4255

- LASWELL, RON, Pres., Catlin Coal Co., Inc., 6641 State Road 46  
Terre Haute IN 47802, 217/662-8896
- LATTINA, ALAN, Reg. Sales & Service Mgr., Centrifugal &  
Mechanical Industries, 201 President St., St. Louis MO 63118  
314/776-2848
- LAVERTY, TERRY J., Maint. Advisor, Monterey Coal Co., 14300  
Brushy Mound Rd., Carlinville IL 62626, 217/854-3291
- LAYMON, JEFFREY S., Shift Mind Mgr., Monterey Coal Co., 14300  
Brushy Mound Rd., Carlinville IL 62626, 217/854-3291
- + LEDVINA, C. T. (CHRIS), 4523 Red Oak Lane, Lawn Grove IL  
60047, 847/727-0022
- LEHMAN, BOB, Purchasing Agent, Arclar Coal Co., P.O. Box 444  
Harrisburg IL 62946, 618/252-1680
- LEMMONS, SHARON K., Claims Mgr., Lynch Coal Operators Reciprocal  
Assn., P.O. Box 715, Terre Haute IN 47805, 812/232-5011
- LICKENBROCK, DALE, Safety Supt., Peabody Coal Co., 1214 Marissa Rd.,  
Marissa IL 62257, 618/295-2374
- LIEVING, BOB, Sales Mgr., Richwood Industries, P.O. Box 68, Port  
Byron IL 61275, 304/525-5436
- LINDSAY, GEORGE C., (Retired) 7024 Melody Lane, Fort Wayne IN  
46804
- + LINDSAY, JAMES R., Mgr. Land, The American Coal Co., P.O. Box  
727, Harrisburg IL 62946, 618/268-6584
- LITTEKEN, GUY, Erosion Spec., A.S.P. Enterprises, Inc., 275 Northwest  
Blvd., Fenton MO 63026, 314/343-4357
- LOCHARD, STEVE Pres., Lochard Industrial, P.O. Box 4182 St. Louis  
MO 63117
- LOGAN, STEVE, Sales, United Central Industrial Supply Co., 1800  
Supply Road, Carterville IL 62918, 618/985-8316
- LOGAN, TINA, Purchasing Agent, Arch of Illinois, Inc., P.O. Box  
380, Percy IL 62272, 618/497-2141
- LONG, PHIL, Mgr. Safety, Old Ben Coal Co., P.O. Box 369, Coulterville  
IL 62237, 618/738-1339
- LONG, T. R., Vice Pres., Midwest Reg., Long-Airdox Co., 3206 West  
De Young, Marion IL 62959, 618/997-4335
- LOUNSBURY, RICHARD E., Environ. Advisor (Retired), Monterey Coal Co.,  
P.O. Box 675, Carlinville IL 62626, 217/854-3717
- LOVITZ, JERRY, Continuous Haulage Product, Stamler Corp., 218 Woods  
Ave., Oak Hill WV 25901, 618/997-4335
- LOWDERMILK, SCOTT, Vice Pres., Marketing & Sales, Forced Potato,  
640 Bizzell Dr., Lexington KY 40510, 606/252-4531
- LUBBERT, RANDALL, Dragline Training Cood., SIU-Coal Extraction &  
Utilization Researach Center, MC6894, Carbondale IL 62901  
618/453-7329
- \* LUCAS, WALTER S., V. Pres. (Retired), Sahara Coal Co., P.O. Box 816  
Harrisburg IL 62946, 618/252-1327

LUMM, DON, Mineral Assessor, Sr., Kentucky Revenue Cabinet, 938  
Fairhaven Dr., Lexington KY 40515, 502/564-8334

LUOP, John F., Sr. Project Mgr., Golder Associates, 44 Union Blvd.  
#300, Lakewood CO 80228

LYMAN, ROBERT M., Geologist, Reserve Services, 1500 E. Grand Ave.  
Laramie WY 82070

MACK, THOMAS E., Account Manager, DBT America, Inc., 2045 W. Pike  
St., Houston PA 15342, 724/743-1200

MALONEY, PAULA, Public Inform. Spec., SIU-Coal Extraction & Utilization  
Research Center, MC4623, Carbondale IL 62901 618/536-5521

MANIS, WILLIAM, Survey Helper, Freeman United Coal Mining Co., P.O.  
Box 259, Farmersville IL 62533, 217/627-2161

MANN, KEVIN, Electronic Documentary Prog., Joy Mining Machinery,  
120 Liberty St., Franklin PA 16323, 724/873-4251

MANN, MIKE, Sales Mgr., Brake Supply Co. Inc., P.O. Box 447  
Evansville IN 47703, 812/429-9466

MARCUM, RONNIE, Vice Pres., Western/Non Mining, Consolidation Coal  
Co., P.O. Box 566, Sesser IL 62884, 618/625-2041

MARTIN, DALE, Vice Pres. SSI, 5595 Highway 34N, Raleigh, IL 62977  
618-268-4850

MARTIN, DARIN Land Reclam. Specialist, IDNR, Office of Mines &  
Minerals, 503 E. Main Street, Benton, IL 62812-2522, 618-439-9111

MARTIN, JAMES Gen. Mine Foreman, Webster County Coal Co.  
2668 State Rd. 120 East, Providence, Ky 42450, 502-667-2205

MARTIN, JAMES W. Sr. Mining Engr. Freeman United Coal Mining Co.  
1999 Wabash Ave. Ste 200B, Springfield, IL 62704, 618-698-3300

MATUSKA, DAN Div. Mgr. Century Lubricants, P. O. Box 161, Marion,  
IL 62959, 618-997-2302

MATYI, STEPHEN R. Section Foreman, Arch of Illinois, Inc. P. O. Box 308  
Percy, IL 62272, 618-357-3316

McBRIDE, DON, Div. Mgr. ILDNR, Office of Mines & Minerals, 503 E. Main St.  
Benton, IL 62812, 618-439-9111

McCOMMONS, STEVE, Asst. Supt.-Rend Lake Mine, Consolidation Coal Co.  
P. O. Box 566, Sesser, IL 62884, 618-625-2041

McCOY, LARRY Director of Sales, National Mine Service Co. P. O. Box 310  
Indiana, Pa. 15701-0310, 724-349-7100

McDONALD, TERRY Maint. Mgr. Cyprus AMAX Coal Co. P. O. Box 144  
Keensburg, IL 62852, 618-298-2394-1333

McGAHA, RAY, Sr. Vice Pres. Continental Conveyor & Equip. Co. Inc.  
P. O. Box 400, Winfield, AL 35594, 205-487-6492

McGOVERN, JEFF Sales Rep. Power Techniques, Inc. P. O. Box 166  
Alma, IL 62807, 618-547-9099

McINTYRE, BILL Pres. Brautigam, 820 Henderson, Washington, Pa. 15301  
412-228-7444

McKEEVER, JIM, General Mgr. Roland Machinery Co. Springfield, IL 62702  
217-789-7711

- \*McREAKEN, C. DAYTON (Retired), Zeigler Coal Co. 701 E 4<sup>th</sup> St.  
West Frankfort, Il. 62896, 618-932-3378
- McSPARIN, DONNA Executive Sales Coordinadtor, T. J. Gundlach & Co, Inc.  
P. O. Box 385, Belleville, Il. 62222, 618-233-7208
- MEIGHEN, MIKE Operations Manager, White Country Coal Corp.  
P. O. Box 457, Carmi, Il. 62821, 618-382-4651
- MELCHOR, M. JOSEPH Pres. Gunther-Nash Mining Construction Co.  
2150 Keinlen Ave. St. Louis, Mo. 63121, 314-261-4111
- MELVIN, BURTON Sales, Special Mine Services, P. O. Box 188  
West Frankfort, Il. 62896, 618-932-2151
- MERCER, STEVE, Vice Pres. R. M. Wilson Co. P. O. Box 1046  
Beckley, WV 25802, 304-255-5160
- MERRIFIELD, NEAL H. Vice Pres. Operations, Freeman United  
Coal Mining Co. 1999 Wabash Ave. Ste 200B Springfield, Il.  
62704-5364, 217-698-3300
- MILLARD, TIM, Sales, Central Illinois Steel Co. P. O. Box 78  
Carlinville, Il. 62626, 217-854-3251
- MILLBURG, LARRY, Gen. Mine Mgr. Freeman United Coal Mining Co.  
Farmersville, Il. 62533, 217-627-2161
- MILLER, JOHN J. (IKE) Mgr. Sales/Service, Roberts & Schaefer Co.  
120 S. Riverside Plaza, Suite 400, Chicago, Il. 60606, 312-236-7292
- MILLER, MEGAN, Product Mgr., Foxroc, Inc., 150 Carley Ct.  
Georgetown KY 40324, 502/863-6800
- MILLS, JOHN M., Mgr. Of CIP, Freeman United Coal Mining Co., 1999  
Wabash Ave. Ste 200B, Springfield IL 62704, 618/698-2200
- MINER JR., JAMES A., Pres., Kerco, Inc., P.O. Drawer 665, Madisonville  
KY 42431, 502/821-2889
- MIRACLE, KENNY, Sales Rep., Sandvik Rock Tools, 226 Brookside Dr.  
London KY 40741, 606/864-3231
- MISSEL, LOUIS W., Vice Pres & Gen. Mgr., Joy Mining Machinery,  
#3 Fountain Indus Park, Mt. Vernon IL 62864, 618/242-8509
- MITCHELL, GENE, Mining & Industrial Tech., Rend Lake College, RR# 1  
Ina IL 62849, 618/437-5321
- MITCHELL, WILLIAM, Gen Mgr. St. Louis Div., Roland Machinery Co.,  
4670 Crossroads Ind. Dr., Bridgeton MO 63044, 314/291-1330
- MONARCH, DENNIS D., Division Mgr., Gooding Rubber Co., P.O.  
Box 487, Benton IL 62812, 618/435-8104
- MOON, DENNY, Asst. Branch Mgr., Lake Shore Mining Equipment, Inc.,  
1601 E. DeYoung St., Marion IL 62959, 618/993-1170
- MOORE, JOHN S., Coal Demonstration & Marketing, IL Dept. of  
Commerce & Comm. Affairs, 325 W. Adams, Room 300,  
Springfield IL 62704, 217/782-6370
- MOORE, MARVIN R., Mine Engr., Old Ben Coal Co., P.O. Box 396  
Coulterville IL 62237, 618/758-4417
- MOORE, TERRY, Customer Service Rep., Joy Technologies, Inc., #4  
Industrial Park, Mt. Vernon IL 62864, 618/532-2396

- +MORGAN, GEORGE H., Morgan & Associates, 401 Tyler Ave.,  
Evansville IN 47715, 812/4767-4065
- MORGAN, MARK S., J. H. Fletcher & Co., 411 E. Geiger St. Morganfield  
KY 42437, 502/389-1626
- MORGENSTERN, ROGER, Land Recl. Spec., IL DNR, Office of Mines  
& Minerals, 503 E. Main St., Benton IL 62812, 618/439-9111
- MORMINO, MARK E., Mine Engr., Old Ben Coal Co., P.O. Box 396  
Coulterville IL 62237, 618/758-4409
- \*MORONI, E. T. (GENE), (Retired), Old Ben Coal Co., P.O. Box 477  
Herrin IL 62948, 618/942-5048
- MORRIS, BRIAN A., Asst. Vice Pres.-Coal, IL Central Railroad, 455 N.  
Cityfront Plaza Dr., Chicago IL 60611, 312/755-7888
- MORRISON, SCOTT D., Pres. & CEO, Commercial Testing & Engr. Co.,  
1919 S. Highland Ave., 210B, Lombard IL 60148, 630/953-9350
- MORRISON, TONY, Vice Pres., Ford Steel Co., P.O. Box 54 Maryland  
Heights MO 63043, 314/567-4680
- \*MORSE, RONALD E., Regional Coord., IL EPA, 2309 W. Main, Marion  
IL 62959, 618/993-7200
- MORTON, R. C., Fuels & Mining Contract Mgr., Cinergy Services, Inc.,  
1000 E. Main, Plainfield IN 46168
- MOTTERSHAW, RICHARD, Director, IL DNR, Office of Mines & Minerals  
P.O.Box 10137, Springfield IL 62791, 217/782-23831
- \*MULLINS, W. H., Consultant, Freeman United Coal Mining Co., 1019  
Election Dr., Benton IL 62812, 618/439-3864
- MURPHEY, LLOYD, Sales Mgr., Lumme Sales Co., 1059 Jennings Station  
Road, St. Louis MO 63137, 314/867-8725
- MURPHEY, MARY-ELLEN, Owner, Lumme Sales Co., 1050 Jennings Station  
Road, St. Louis MO 63137, 314/867-8725
- MURPHY, AARON, Plant Mgr., Eagle Enterprises, Inc., P.O. Box 283,  
McLeansboro IL 62859, 618/743-2588
- MURPHY, CHARLES B., Public Service Admin., IL DNR, Office of Mines &  
Minerals, 503 E. Main St., Benton IL 62812, 618/439-9111
- MURRAY, ROBERT E., Director, The American Coal Co., 29525 Chagrin  
Blvd. St.111, Pepper Pike OH 44122, 216/765-1240
- MUSKO, JR., MICHAEL J., Sales, Fosroc, Inc., 2701 Old Creal Springs Rd.  
Marion IL 62959, 618/997-3970
- NALLY, GARY, 3<sup>rd</sup> Maint. Foreman, White County Coal Corp., P.O. Box 457  
Carmi IL 62821, 618/382-4651
- NANCE, ROGER B., Geologist, 104 Halia Crest, Mt. Vernon IL 62864  
618/244-4016
- NAWROT, J.R., Assoc. Scientist, Southern IL University, Coop. Wildlife Res. Lab  
Carbondale IL 62901, 618/536-7766
- NEMECEK, MONA L., Petroleum Geologist, IN DNR-Div. Oil & Gas, 402 W.  
Washington St., Rm 293, Indianapolis IN 46204, 317/235-0045
- NEUHAUS, LYNN, Shift Mine Manager, Monterey Coal Co., 14300 Brushy  
Mound Rd., Carlinville IL 62626, 217/854-3291

NEWMAN, FREDERICK G., Consulting Geologist, 14625 Route 4,  
 Gillespie IL 62033, 217/839-3297  
 NIEBRUEGGE, PAUL E., Sales Engr., Hopcroft Electric, Inc., 606  
 Glen Crossing Rd., Glen Carbon IL 62034, 618/288-7302  
 NIELSEN, CHRIS, Instructor, Mining Tech., Rend Lake College,  
 RR #1, Ina IL 62846, 618/437-5321  
 NOAH, LARRY G., Owner, Raben Tire Co., 702 S. Commercial,  
 Harrisburg IL 62946, 618/252-8638  
 NOEL, JR., BILL, Independent, 13650 Liberty School Rd., Marion,  
 IL 62959, 618/982-2077  
 NOLEN, JR., JACK, Asst. Support Mgr. Long-Airdox Co., 3206 W.  
 DeYoung, Marion IL 62959, 618/997-4335  
 NORTH, DANIEL, Coal Section, IL State Geological Survey, 615 E. Peabody  
 Dr., Champaign IL 61820, 217/244-461  
 O'KEEFE, MIKE, Arch of Illinois, Inc., P.O. Box 308, Percy, IL  
 62272  
 O'LEARY, WILLIAM., Land Reclamation Specialist, IL DNR, Office  
 Of Mines & Minerals, 503 E. Main St., Benton IL 62812,  
 618/439-9111  
 O'TOOLE, HAROLD, Sales Engr., Camber Corp., 602 McKnight  
 Park Dr., Pittsburg PA 15237, 412/367-8626  
 OAKLEY, KEN, Sales, Fairmont Supply Co., P.O. Box 1388, Mt. Vernon  
 IL 62864, 618/244-5344  
 ODLE, JERRY, State Mine Inspector, IL DNR, Office of Mines &  
 Minerals, 503 E. Main St., Benton IL 62812, 618/439-9111  
 OPOLKA, BRUCE, Warehouse Mgr., Peabody Coal Co., 1214  
 Marissa Rd., Marissa IL 62257, 618/587-1925  
 ORLANDI, WILLIAM J., Pres., Carbon Coal Co., 1525-35<sup>th</sup> Ave.  
 Vero Beach FL 32960, 561/569-2167  
 OTT, PHILIP, Supt., Crown III, Freeman United Coal C., P.O. Box 259,  
 Farmersville IL 62533, 217/627-2161  
 OWENS, DAVID, Surveyor, IL Mine Subsidence Insurance Fund,  
 4 Executive Dr., St. 43, Fairview Heights IL 62208, 618/624-3350  
 PACE, E. MINOR, (Retired), Inland Steel Coal Co., 700 Lake Park Dr.,  
 Mt Vernon IL 62864, 618/242-3144  
 PANNELL, DON, District Sales Mgr., CSE Corp., 33-C Harper Industrial  
 Park, Beckley, WV, 25801, 304/255-0541  
 PAPPAS, STEVE, Acct. Mgr., Rockwell Automation, 3787 S. Rider  
 Trail, Earth City MO 63045, 314-8805  
 PARKE, E. WAYNE, Black Beauty Coal Co., 5415 S. Winthrop Ct.,  
 Evansville IN 47715  
 PARKER, ANDY, Huwood Internation Ltd., 446 Thomas School Rd.,  
 Greenburg PA 15601, 724/834-2434  
 PARKER, ARCHIE, Mine Mgr., Freeman United Coal Mining Co.,  
 P.O. Box 347, Virden IL 62690, 217/965-5461  
 PARKS, RAY, Pres., J.H. Fletcher & Co., P.O. Box 2187, Huntington WV  
 25711, 304/525-7811

PASTOR, DENNIS, Product Sales Rep., R.R.# Box 392, Pana IL 62557, 217/562-3435

PATEL, RAVJI M., Sr Vice Pres & Gen Mgr., Roberts & Schaefer Co., 120 S. Riverside Plaze, Chacago IL 60606 312/236-7292

PATON-ASH, RORY, Pres., Strata Products (USA) Inc., 3939 Roswell Rd., Marietta GA 30062, 770/321-2500

PATTERSON, BILL, Mine Mgr., Old Ben Coal Co., P.O. Box 397, Coulterville IL 62337, 618/758-4400

PATTERSON, R. KEITH, Mgr of Engr., Jeffrey Div/ Global Processing Systems, Inc., 398 Willis Rd., Woodruff SAC, 29388, 864/4767-7652

PATTERSON, TOM, Inspector Supv., ILDNR, Office of Mines and Minerals, 503 E. Main St., Benton IL 62812, 618/439-9111

PAYNE, LELAND, Mine Safety & Health Spec., MSHA, 2300 Old Decker Rd, # 200, Vincennes IN 47591, 502/9628

PEASE, TOMMY, Maint Mgr., Peabody Coal Co., P.O. Box 120, Morganfield KY 42437, 502/389-6673

PENSONEAU, TAYLOR, Vice Pres., IL Coal Association, 212 S. Second, Springfield IL 62701, 217/528-2092

PESAVENTO, DON, Sales, A.L. Lee Corporation., P.O. Box 2370, Mt. Vernon IL 62864, 618/997-4335

PETERSON, JIM, CEO/Civil Engr., Cross Country Land Surveying & Engrs., 212 U.S. Rt 51 South, DuQuoin IL 62832, 618/542-2874

PETKAS, JOHN, Regional Mgr., Illinois Power Co., P.O. Box 218, Sparta IL, 62286, 618/443-9200

PETREA, JOHN, Sales Rep., Fabick Machinery Co., P.O. Box 760, Marion IL 62959, 618/997-1881

PETREY, CARL G., Shift Mine Mgr., Arch of Illinois, Inc., P.O. Box 308 Percy IL 62272, 618/357-3316

PETTER, ROBERT P., Pres., Henry A. Petter Supply Co., Box 2350, Paducah KY 42012, 502/443-2441

PHIFER, STEVEN C., Environ. Engr., Freeman United Coal Mining Co., P.O. Box 259, Farmersville IL 62533, 217/627-2161

PHILO, GARY, Coal Demonstration & Marketing, IL Dept of Commerce & Comm Affairs, 325 W. Adams, Room 300, Springfield IL 62704-217/782-2780

PILEGGI, JOSEPH J., Dir of Purchasing, Freeman United Coal Mining Co., 1999 Wabash Ave, Suite 203, Springfield IL 62704, 217/793-7433

POLLACK, TOM, Owner & Pres., Associated Supply Co., P.O. Box 86 West Frankfort IL 62896, 618/932-3114

POLLY, RAY, Pres., Van--American Insurance Co., 167 E. Main St, Suite 210, Lexington KY 40507, 606/225-1010

POND, ROBERT A., Vice Pres., Frontier-Kemper Constructors, Inc., P.O. Box 6548, Evansville IN 47712, 812/426-2741

POPOVICH, JAY, Vice Pres., MICON Products Intl., Inc., # 25 Allegheny Sq., Glassport PA 15045, 412/664-7788

PORTER, DICK, Division Pres., Austin Powder Co., P.O. Box 609, Maryville IL 62062, 618/344-3111

- PORTER, FRED, Mining Mgr., Sun Oil, 2400 N. Shore Dr., Clear Lake IA 50428, 515/357-3475
- POTTS, DANNY, Accounting Mgr., Brush Creek Coal Co., Inc., 4270 N. America Rd., Calatia IL 62935, 618/252-8633
- PREDMORE, R. ALAN, Territory Mgr., Chevron U.S.A., Inc., 30 Point Lane, Arcadia IN 46030, 317/984-5198
- PRESLER, DONALD, Mfgs. Rep. (Retired), Don Presler & Assoc., 4501 Urbana Road, Millstadt IL 62260, 618/476-1319
- PRICE, ROBERT, Chief Mine Mgr., Peabody Coal Co., 1214 Marissa Rd., Marissa IL 62257, 618/295-2374
- PRIDE, ROBERT, Mining Engr Sales, Jennmar Corp., 660 West Center St., Madisonville KY 42431
- PROVINE, JIM, Sales Mgr., Martin Marietta Aggregates, 123 Augusta Place, St C, Paducah KY 42001, 502/545-3351
- PRYOR, CHARLES, Mgr., Minesafe Electronics, P.O. Box 281 Sturgis KY 42459, 502/333-5581
- PTASNIK, LEE, Pres., Mine & Process Service, Inc., P.O. Box 484 Kewanee IL 61443, 309/852-6529
- PUCKETT, RANDY, Vice Pres Sales, National Mine Service Co., P.O. Box 1766, Mt Vernon IL 62864, 618/439-6345
- RABEN, TOM, Owner/ Pres., Raben Tire Co., 2100 N. York Ave., Evansville IN 47711, 812/424-9600
- RALEY, JAMIE, Purchasing, White County Coal Corp., P.O. Box 457, Carmi IL 62821, 618/382-4651
- RALSTON, DAVID S., Agronomist, Soil Tech, Inc., 5144 W. Timberwood Dr., Newburgh IN 47630
- RAMER, RALPH W., Pres., Screenco, Inc., 3003 Brainard Rd., Pepperpike OH 44124, 800/323-0606
- RAZOR, CHESTER, Training Specialist, Ed., Field Services, 2300 Old Decker Road, Vincennes IN, 47591
- REA, RICHARD P., Mgr. Fuel Acquisition and Supply, Tenn. Valley Authority, 1101 Market St., Chattanooga TN 37402, 615/751-2651
- READY, DALE, Owner, Ready Drilling Co., 11029 E. 225<sup>th</sup> Ave., Mason IL 62443, 618/238-4306
- REED, CHARLES E., Vice Pres., Kerco, Inc., P.O. Drawer 665, Madisonville KY 42431, 502/821-2889
- REEVES, JEFF, KY Sales & Service, Kennametal, Inc., P.O. Box 231, Labrobe PA 25650
- REIDELBERGER, BYFORD, Surface Mgr., Old Ben Coal Co., P.O. Box 396, Coulterville IL 62237, 618/758-4400
- \* REILLY, MICHAEL K., Chairman (Retired), Zeigler Coal Holding Co., 104 Burr Rudge Club Dr., Burr Ridge IL 60521, 618/394-2401
- REIMER, BOB, Sales Rep., Fabick Machinery Co., Box 760, Marion IL 62959, 618/997-1881
- REIMER, KEVIN, Pres., CH4 Development Partners, LLC, Baox 536, Harrisburg IL 62946, 618/252-3733

- RENGERS, PAT, Mgr. Distributed Prods., Schroeder Industries, Box 72,  
Nichol Ave., McKees Rocks PA 15136, 412/771-4810
- RENTZ, ROLLA, Mgr. Contract Admin., Zeigler Coal Holding Co.,  
50 Jerome Lane, Fairview Heights, IL 62208, 618/394-2560
- RESNIK, WILLIAM L., Sales Rep.-Marion Div., Excel Mining Systems  
809 Skyline Dr., Marion IL 62959, 618/993-2611
- \* RICE, FRED, (Retired), Peabody Coal Co., 202 Miller St., Beaver Dam KY  
42320
- RIDDLE, HARRY, Section Foreman, Arch of Illinois, Inc., P.O. Box 308  
Percy IL 62272, 618/357-3316
- RILEY, ROY, Pres., J & R Manufacturing Co., R.2, Box 173F, Bluefield,  
VA 24605, 703/322-5431
- RIPP, BRYAN, Project Engr., GME Consultants, Inc., 14000 21<sup>st</sup> Ave. North,  
Minneapolis MN 55447, 847/991-8010
- RITCHEY, JAMES, Safety Inspector, Freeman United Coal Mining Co.,  
P.O. Box 347, Virden IL 62690, 217/965-5461
- \* ROBERTS, E. H. (BUSTER), Manager of Mines (Retired), Inland Steel  
Coal Co., 6 Lincoln Drive, Mt. Vernon IL 62864, 618/242-2054
- ROBERTSON, JOE A., Surveyor, IL Mine Subsidence Insurance Fund,  
4 Executive Dr., Suite 4, Fairview Heights IL 62208, 618/624-3350
- ROBINETTE, KEN, Pres., Decanter Machine Inc., 3622 Bristol Highway,  
Johnson City TN 37601, 615/282-8671
- ROGERS, JOE C., Purchasing Agent, Brushy Creek Coal Co., Inc., 4270  
America Road, Galatia IL 62935, 618/252-8633
- ROHDE, C. M. (CHUCK), (Retired), P.O. Box 127, Orange Beach FL 36561,  
334/974-2094
- ROHRBAUGH, TERRY, Sales, MEMSCO, P.O. Box 189, Dawson Springs  
KY 42408, 502/797-3481
- RONALD, GARY Surface Mgr. Freeman United Coal Mining Co.  
P. O. Box 347, Virden, IL 62690, 618-965-5461
- ROPER, ROGER D. Gen. Mine Mgr. Old Ben Coal Co. P. O. Box 369  
Coulterville, IL 62237, 618-758-1339
- ROSS, DAVID, Chief Engr. Webster County Coal Co. 2668 S.R. 120E  
Providence, Ky. 42450, 502-667-2205
- ROTTGERING, JOHN Supervisor, Henry A. Peter Supply Co. 117 S. First,  
P. O. Box 2350, Paducah, Ky. 42001, 502-443-2441
- ROWE, DAVID, Vice Pres. NPN Environmental Engrs. 927 Horan Drive  
St. Louis, Mo. 63026, 314-343-1300
- RULIS, MICHAEL, National Adcct. Mgr. Ill. Central Railroad, 1551 N. Ill. St.  
Carbondale, IL 62901, 618-485-5796
- RUSSELL, CHARLES B. General Manager, Arch of Illinois, Inc. P. O. Box 308  
Percy, IL 62272, 618-497-2141X27
- RYAN, WILLIAM, EPS IV, IL EPA, 2309 W. Main St. Marion, IL 62959  
618-993-7200
- RYDER, BILL, Purchasing, White County Coal Corp. P. O. Box 457  
Carmi, IL 62821, 618-382-4651

- SAILLIEZ, GASTON, Sales Supervisor, Fansteel VR/Wesson Co.,  
100 W. St. Louis Street, West Frankfort IL 62896
- SAMPLES, MICKEY, Gen. Mine Foreman-Rend Lake, Consolidation  
Coal Co., P.O. Box 566, Sesser IL 62884, 618/625-2041
- SANDERS, BILL, State Mine Inspector, IL DNR, Office of Mines  
& Minerals, RR 3 Box 373, Pinckneyville IL 62274  
618/439-9111
- SANTOPIETRO, MARK, Chemist, Jack Kennedy Metal & Bridge  
Products, Inc., P.O. Box 138, Taylorville IL 62568  
217/287-7231
- SARGENT, DARRIN, Sales Rep., National Mine Service Co., P.O.  
Box 1766, Mt. Vernon IL 62864, 618/244-6066
- SAUNDERS, ALAN, Mine Engr., White County Coal Corp., P.O.  
Box 457, Carmi IL 62821, 618/382-4651
- SAUNDERS, BENNY R., Mine Foreman, Arch of Illinois Inc., P.O.  
Box 308, Peracy IL 62272, 618/357-3316
- SCHIFF, BART, Safety Director, Arclar Coal Co., P.O. Box 444,  
Harrisburg IL 62946, 618/273-9500
- SCHMIDT, JOHN, Supt., Turriss Coal Co., P.O. Box 21, Elkhart IL  
62634, 217/947-2631
- \* SCHONTHAL, JOSEPH, Pres. (Retired), J. Schonthal & Assoc.,  
Inc., 1220 Rudolph, Apt. 2N, Northbrook IL 60062,  
618/480-7359
- SCHOONOVER, CRAIG, Mining & Environ Engr., Freeman United  
Coal Co., P.O. Box 261, Industry IL 61440, 309/254-3778
- SCHRADER, MARK, Tech. Rep., PDC Laboratories, Inc., P.O. Box  
9071, Peoria IL 61612, 309/688-0760
- SCHROEDER, JOE, Sales Engr., Industrial Process Equip., 2800  
Locust, St. Louis MO 63103, 314/534-3100
- SCHUH, JEFFREY S., Vice Pres. Engr. Oper., Patrick Engineering, Inc.,  
4985 Varsity Drive, Lisale IL 60532, 708/858-7050
- SCHULTZ, HOWARD, General Mgr., Monterey Coal Co., 14500  
Brushy Mound Rd., Carlinville IL 62626, 217/854-3291
- SCHULTZ, WALLY, Warehouse Mgr., Prep. Engr., Turriss Coal Co.,  
P.O. Box 21, Elkhart IL 62634, 217/947-2697
- SCOTT, FRED, Parts Mgr., Jeffrey Mining Products, L.P., 635 IL  
Highway 1, Norris City IL 62869
- SCOTT, JR., RALPH, Sales Engr., MICON Products Intl., # 25  
Allegheny Sq., Glassport PA 15045, 412/664-7788
- SEEVERS, WAYNE, Mine Engr., Old Ben Coal Co., P.O. Box 369,  
Coulterville IL 62337, 618/937-1220
- SEBASTIAO, A. BUDDY, Pres., Centrifugal & Mechanical Industries,  
201 President St., St. Louis MO 63118, 314/776-2848
- SETTLE, ED, Mgr-Engineering, Consolidation Coal Co., P.O. Box 566,  
Sesser IL 62884, 618/625-2041
- SHANKS, ROBERT W., Vice Pres., Operations, Arch Coal, Inc., City  
Place One, Suite 300, St. Louis MO 63141, 314/994-2909

- SHAULIS, JERRY, Sales Mgr., Gauley Sales Co., P.O. Drawer C,  
Hico WV 25854, 304/568-5201
- SHILTS, WILLIAM W. Chife, IL State Geological Survey, 615 E. Peabody  
Dr., Champaign IL 61820, 217/333-5113
- + SHIMKUS, ERVIN L., Sales Mgr., Peabody Coal Co., 609 Christopher  
Lane, New Baden IL 62265
- \* SHOCKLEY, RICHARD R., Director, IL Clean Coal Institute, P. O.  
Box 8, Carterville IL 62918, 618/985-350
- SHORT, PATRICK, Mine Longwall Coord, Rend Lake, Consolidation  
Coal Co., P.O. Box 566, Sesser IL 62884, 618/625-2041
- SHORT, STEVE, Vice Pres., Sugar Camp Coal, LLC, P.O. Box 231,  
Evansville IN 47702, 618/275-4426
- SHULTZABARGER, TIM, Acct. Rep., DuPont Chemicals, 7221 Rucker  
Rd., # 1, Henderson KY 42420, 502/836-8208
- SAHUMATE JR., MACK H., Sr. VP/ Engr & Plan. (Retired), Zeigler  
Coal Co., 6425 Longmeadow, Lincolnwood IL 60646, 708/677-6198
- SIEMSGLUSZ, MARY E., Project Mgr., Marston & Marston, Inc.,  
13515 Barrett Prky. Dr., St. Louis MO 63021, 314/984-8800
- SILVERMAN, MARC S., Mgr. Geologic Services, Peabody Development Co.,  
301 N. Memorial Dr., St. Louis MO 63102, 314/342-7652
- SIMMONS, STEVE, Act. Mgr., Special Mine Services, Inc., P.O. Box 188,  
West Frankfort IL 62896, 618/932-2151
- \* SIMON, JACK A., Retired Chief Emeritus, IL State Geological Survey,  
101 W. Windsor Rd., Apt 4204, Urbana IL 61801, 217/367-3462
- SIMPSON, BRIAN, Indus. Sales Rep., Busler Enterprises, 401 Diamond Ave.,  
Evansville IN 47711, 812/429-0668
- SINGH, MADAN M., Pres., Engineers International, Inc., 116 N. Roosevelt  
Ave., Ste. 136, Chandler AZ 85226, 602/705-4322
- SLATE, STEVE D., Sales Manager, J & R Manufacturing Co., R. 2 Box 173F  
Bluefield VA 24605, 703/322-5431
- SLEDGE, CAROL, Office Mgr., Joy Technologies, Inc., # 4 Industrial Park,  
Mt. Vernon IL 62864, 618/246-5031
- SLIFKA, CHUCK, Pres., Coast to Coast Hydraulics, 2725A Norton Creek Dr.,  
West Chicago IL 60185, 630/587-9300
- SLOAN, WALTER E. (Retired), 1885 Linneman Rd., Cincinnati OH 45238
- SMITH, CECIL, Mgr. Preparation, Black Beauty Coal Co., P.O. Box 346  
Benton IL 62812, 618/439-6792
- SMITH, GREGORY C., Vice Pres., Geology, Stagg Engineering Services,  
Inc., P.O. Box 7028, Cross Lanes WV 25356, 304/776-6660
- SMITH, JOHN, Mine Rescue Supt., IL DNR Office of Mines & Minerals,  
503 E. Main St., Benton IL 62812, 618/439-9111
- SMITH, PAUL D., Maint. Foreman, Arch of Illinois, Inc., P.O. Box 308,  
Percy IL 62272, 618/357-3316
- SMITH, SHANNON K., Sales, S & S Urethan, P.O. Box 266, Farina IL  
62838, 800/237-6336
- SMITH, SONNY, Pres., S & S Urethan, P.O. Box 266, Farina IL 62838,  
618/245-6476

SMOCK, PAUL, Gen. Supt., Brushy Creek Coal Co., Inc., 4270 N. America Rd., Galatia IL 62935, 618/252-8633

SNEED, DWIGHT L., Consultant, 112 Archview Dr., Belleville IL 62221 618/632-1901

SNYDER, DUKE, Dist. Mgr., Midwestern Machine & Hydraulics, Inc., 10489 State Route 127 N., Nashville IL 62263, 618/327-3095

SOLLAMI, PHILLIP, Pres., Sollami Co., P.O. Box 627, Herrin IL 62948 618/988-11521

SPEARS, BEN, Human Resources Mgr., White County Coal Corp., P.O. Box 457, Carmi IL 62821, 618/382-4651

SPENCER, R. DALE, Section Foreman, Arch of Illinois, Inc., P.O. Box 308, Percy IL 62272, 618/357-3316

SPIHLMANN, MAURIC, Supt., Monterey Coal Co., 7415 Woodlane Road, Germantown IL 62245, 618/523-8138

SPINA, KEITH Vice Pres of Pur & After Market, Stamler Corp., P.O. Box 308 Millersburg KY 40348

SPIVEY, JOSEPH S., Pres., IL Coal Association, 212 S. 2<sup>nd</sup> St., Springfield IL 62701, 217/528-2092

SPOTTE, WALTER V., Pres., Lincoln Hydraulics, Inc., 20 Museum Rd., Washington PA 15301, 412/222-2700

SPRESSER, ROGER, State Mine Inspector, IL DNR, Office of Mines & Minerals, 47 Illini Drive, Taylorville IL 62568

STAGG, ALAN K., Pres. Principal Geol., Stagg Engineering Service, Inc., P.O. Box 7028, Cross Lanes WV 25356, 304/776-6660

STANLEY, STEPHEN D., Surface Mgr., Freeman United Coal Mining Co., P.O. Box 259, Farmersville IL 62533, 217/627-2161

STATLER, DAN, Reg. Sales Mgr., Kennametal, Inc., P.O. Box 231, Latrobe PA 15650, 724/539-5890

STEEB, RAYMOND H., Pres., National Mine/Industrial Composites, Inc., 373 Carol Ave., Bridgeville PA 15017, 412/221-2662

STEELE, DEREK JOHN, Principal, Dames & Moore, 7717 Stonehenge Dr. Cincinnati OH 45242, 513/651-3440

STEELE, TOMMY JOE, Safety Director, White County Coal Corp., P.O. Box 457, Carmi IL 62821, 618/382-4651

STEINKE, MICHAEL P., Peabody Holding Co., 301 N. Memorial Dr., St. Louis MO 62208

STEWART, DON, Sales Engr., Mine & Process Service, Inc., P.O. Box 484 Kewanee IL 61442, 309/852-6529

STEWART, J. R. (BOB), Sales, Better Belt Wiper Service, Inc., P.O. Box 485 Royalton IL 62983, 618/984-2074

STEWART, LESLIE, Public Relations, The National Coal Museum, P.O. Box 369, West Frankfort IL 62896, 618/937-2625

STEWART, MICHAEL, Sales Mgr., K & E Technical, Inc., Box 165, West Frankfort IL 62896, 618/932-2245

STICKLER, GERALD H., Reg. Sales Mgr., Ocenco, Inc., 10225 82<sup>nd</sup> Ave., Kenosha WI 53142, 414/947-9000

STINE, BOB, Coal Market Liaison, UMWA Dist. 12, 3695 S. 6<sup>th</sup> St.,  
 Springfield IL 62703, 217/529-8301  
 STOCKER, ROBERT, Pres., Fire Safety, Inc., P.O. Box 45, Wood  
 River IL 62095, 618/254-2323  
 STOCKWELL, TAMMI, Tech. Support Rep., PDC Laboratories, Inc.,  
 P.O. Box 9071, Peoria IL 61612, 309/688-0760  
 STOUT, KEITH, Regional Rep., Forke Brothers, The Auctioneers,  
 321 Dog Days Farm, Marion KY 42064, 502/965-9596  
 STRAIN, WILLARD, Pres., Roe Machine Co., Inc., P.O. Box 531  
 West Frankfort IL 62896, 618/937-2509  
 STRUCKWISCH, ROLAND, Roving Foreman, Freeman United  
 Coal Mining Co., P. O. Box 261, Industry IL 61440  
 309/254-3778  
 SUMMARY, GREGORY, Leading Warehouse Tech., Arch of  
 Illinois, Inc., P.O. Box 308, 62272, 618/357-3316  
 SUMMERS, MARY J., Secretary, IL DNR, Office of Mines &  
 Minerals, 503 E. Main St., Benton IL 62812, 618/439-9111  
 SUTHERLAND, JEFF, Mgr. Consulting Services, Lochard Industries  
 Corp., 9037 Sutton Place, Hamilton OH 45011  
 TABOR, GREG, Branch Mgr., United Central Industrial Supply Co.,  
 1800 Supply Road, Cartersville IL 62918, 618/985-8316  
 TABOR, HOLLIS, Pres., Norris Screen, 403 S. Wickham Ave.,  
 Princeton WV 24740, 304/431-7240  
 TABOR, JAT, Safe Director, Coal Miners, Inc., 999 Barrett Cemetery  
 Rd., Equality IL 62934, 618/4342  
 TASSA, JOHN, Marketing Mgr., DuPont Chemicals, R.2 Box 217,  
 Martinsburg, WV 25401 304/274-5377  
 TATE, TERRY, Mgar., S & S Urethane, Inc., P.O. Box 266, Farina  
 IL 62838 618/254-6476  
 TATE, William, Pres., National Mine Service, Inc., P.O. Box 310, Indiana  
 PA 15701  
 TAYLOR, JIM B., Special Account Admin., Continental Conveyer &  
 Equip. Co., Inc., Box 400, Winfield AI 35594, 205/487-6492  
 TAYLOR, MARK S., Dist. Mgr., Carroll Engineering Co., P.O. Box  
 149, 424 E. Waverly St., Morganfield KY 42437 502/389-3800  
 TAYLOR, RANDY, Mine Foreman, White County Coal Corp., P.O. Box 457  
 Carmi IL 62821, 618/382-4651  
 TEISA, EMIL J., 6738 North Road, Coffeen IL 62017, 217/534-2275  
 THEYS, TERRY, Mine Mgr., Cyprus AMAX Coal Co., P.O. Box 144  
 Keensburg IL 62852, 618/298-2394  
 THIGPEN, JIM, Pres. Thigpen Equipment Sales, P.O. Box 13921  
 Mexico Beach FL 32410, 334/887-8392  
 THOMAS, CHRIS, Branch Mgr. Henderson, Commercial Testing  
 And Engr. Co., P.O. Box 752, Henderson KY, 42419  
 THOMAS, GREG, Sales Rep., Power Techniques, Inc., P.O. Box 166,  
 Alma IL, 62807, 618/547-9099

THOMAS, MIKE, Regional Mgr., Goodyear Tire & Rubber Co., P.O. Box 87746, Chicago IL 60680, 708/640/5090

THOMSON, MICHAEL, Sales Mgr/East Div., Fosroc, Inc., 150 Carley Court, Georgetown KY 40314 502/863-6800

TIEN, JERRY, Assoc. Prof., University of Missouri-Rolla, 226 McNutt Hall, Rolla MO 65401, 573/341-4753

TILSON, CHARLES B. Jr., Consultant, 1920 SE 32<sup>nd</sup> Terr. Cape Coral FL 33904-4429, 813/945-3171

TISDALE, PAUL, Dist. Training Specialist, MSHA District 8, 2300 Old Decker Rd., Ste. 200, Vincennes IN 45791-6112 618/443-3031

TOWE, JERRY, Purchasing, Sugar Camp Coal, 999 Barrett Cemetery Rd. Equality, IL 62934, 618-275-4382

TOWERS, RICK, Pres. Towers Mine Tool, Inc. Box 133, Christopher, IL 62822, 618-724-4967

TOWERS, TOM Consultant, Towers Mine Tool, Inc. P. O. Box 133, Christopher, IL 62822, 618-724-4967

TOWNSEND, RICHARD, Administration Mgr. Mapco Coal Inc. P. O. Box 911, Henderson, Ky. 42420, 502-827-4996

TREWORGY, COLIN, Geologist, IL State Geological Survey, 615 E. Peabody Dr., Champaign IL 61820, 217/244-2422

TRISKA, ROLAND A., Sales Mgr. Simpson Materials Co., P.O. Box 68 Vallley Park, MO 63088 314/225-4944

TRUE, RANDY, Sales Rep., United Central Industrial Supply Co., 1800 Supply Rd., Carterville, IL 62918 618/985-8316

TRUEBLOOD, TED, Pres. Trueblood Oil Company/Chevron, P.O. Box 18 Farmersburg IN 47850 812/696-51151

TUCKER, RICHARD SR., Staff Communications Tech. Monterey Coal Co. 14300 Brushy Mound Rd., Carlinville IL 62626

TURNER, BEN R., Engr. Mgr., Peabody Coal Co. P.O. Box 147, Graham Ky 42344, 502/338-5701

TURNER, JAMES E. III, Sales, Kennametal, Inc., 305 S. Logan, West Frankfort IL 62896, 618/932-3379

TURREL, JOHN D., Pres. Hydrocarbon Survey, Inc., 10325 E. Boyd Rd. Mt. Vernon IL 62864 618/2242-6549

UNDERWOOD, KIM, Supt. Land Reel. Div. IL DNR, Office of Mines & Minerals, 300 W. Jefferson, Springfield IL 62701 217/782-4970

VALETT, GENE L., Project Mgr., MK-Ferguson, 7295 Highway 94 S. St. Charles MO 63304 314/441-8086

VALLAR, JOHN, Chief Electrician, Peabody Coal Co., 214 Marissa Rd. Marissa IL 62257 618/295-2374

VAN CLEVE, MIKE, Chief Maint. Foreman, White County Coal Corp. P.O. Box 457, Carmi IL 62821 618/384-4651

VAN DERVEER, DICK, Exec. Vice Pres., Ocenco, Inc., 10225 82<sup>nd</sup> Ave., Kenosha, WI 53142-7737, 414/947-9000

VAN HOOK, STEVE, Hydro Geologist, Patrick Engineering Inc., 300 W. Edwards St., Springfield IL 62704, 217/525-7050

- VAN TUYL, KEVIN, Erosion Control Spec. A.S.P. Enterprises, Inc. 275 Northwest Blvd., Fenton, MO 63026 314/4357
- VANCIL, J.B. 9SAM0, Deputy Director, ILDNR, Office of Mines and Minerals, 503 E. Main, Benton IL 62812 618/439-9111
- VANCIL, JACK, Surface Mgr. ABArushy Creek Coal Co., 4270 N. America Rd., Galatia IL 62935 618/2522-8633
- WAGNER, DUANE, Sales, Mt. Vernon Electric Co., P.O. Box 1548 Mt. Vernon IL 62864 618/244-1066
- WALDEN, FRED.E. , Land Recl. Spec. ILDNR, Office of Mines & Minerals 524 S. Second St., Springfield, IL 62701-1787, 217/782-4970
- WALL, RONALD B., Chief Engr., Freeman United Coal Mining Co., 1999 Wabash Ave., Stea. 200B, Springfield, IL 62704 618/932-2164
- WAMPLER, BILL, Pres. Clinch River Corp. R. R. 3, Box 1070, Cedar Bluff, VA 24609-9803
- WATKINS, JERRY, Purchasing Mgr. White County Coal Corp. P. O. Box 457, Carmi, IL 62821, 618/382-4651
- WATSON, BOBBY, Maintenance Chief, Webster County Coal Co. 2668 State Rt. 120 East, Providence, Ky. 42450, 502/667-2205
- WAYLAND, MARJORIE, Engineering Spec. Peabody Developing Co. 301 N. Memorial Dr. Suite 310, St. Louis, Mo. 63102-2401, 314/342-7693
- WEADOCK, G. W. (MICK), District Sales Mgr., Svedala, 840 Wellington Ave. #406, Elk Grove Village, IL 60007 847/437-8015
- + WEARLY, WILLIAM L. Chairman of Board, Ingersoll-Rand Co. P. O. Box 1776, Woodcliff Lake, N.J. 07675
- WEAVER, GEORGE P. Relief Foreman, Arch of Illinois, Inc. P. O. Box 308 Percy, IL 62272, 618/357-3316
- WEBB, DAVID L. Dir. Of Operational Planning, Freeman United Coal Mining Co. 1999 Wabash Ave. Suite 200-B, Springfield, IL 62704-5364,
- WEGMAN, BRUCE E. Longwall Foreman, Monterey Coal Co, 507 N. Pin Oak Trenton, IL 62293, 612/224-7223
- WEHMEYER, FRANK H. Section Foreman, Arch of Illinois, Inc, P. O. Box 308 Percy, IL 62272, 618/357-3316
- + WEIR, JOHN P. (Retired), Paul Weir Company 2730 W. Lake Ridge Shrs, Reno, Nv. 89509-5736, 702/875-0755
- WELLINGER, THOMAS, TMW & Associates, Inc. 2129 Barrett Sta. Rd. #245 St. Louis, Mo. 63131-1606
- WETZEL, JOE, Supt. Rend Lake Mine, Consolidation Coal Co. P. O. Box 566 Sesser, IL 62884. 618/625-2071
- WHEELER, DAN Environ Protection Spec. ILDNR, Office of Mines & Minerals 524 S. Second St., Springfield, IL 62701-1787, 618/782-4970
- WHEELER, JIM, Buyer, Turris Coal Co. P. O. Box 21, Elkhart, IL 62634 217/947-2694
- WHITE, GARY, Publisher, Miner News, P. O. Box 5694, Boise, Id. 83705 208/375-3680
- WHITE, GRADY A. Sr. Engr. Peabody Coal Co. , 521N. Borders T, Marissa, IL 62257

WHITE, JOHN R., Pres. Hydro-Power, Inc., P.O. Box 2181, Terre Haute IN 47802 812/232-0156

WHITLEY, GERALD H., Shift Mine Mgr, Arch of Illinois, Inc. P.O. Box 308, Percy IL 62272 618/357-3316

WHITSELL, BILL, Salesman, Givens International Drilling Supplies, Inc. P.O. Box 53, Corydon KY 42406

WHYTE, JAMES 9JIM0, Sales & Service Engr. Centrifugla & Mechanical Ind., 3680 Raleigh Rd., Eldorado IL 62930 618/273-5105

WIFORD, LARRY, Branch Mgr., The Mine Supply Co., 1703 Shawnee P.O. Box 2220, Mt. Vernon, IL 62864, 618/242-2087

WILBURN, RICHARD L. II, Div. Mgr. Standard Laboratories, Inc. 8413 Peabody Rd., Freeburg, IL 62243, 618/539-5836

WILDEN, RICH Sales Mgr. North American Mine Exchange, RD #8-114 Rolling Meadows, Greensburg, Pa. 15601, 734/837-3155

WILDERMUTH, PAM Inside Sales, U. S. Filters, Bixby-Zimmer, P. O. Box 510 Galesburg, IL 61401, 305/343-4381

WILHAM, LARRY, Repairman, Turris Coal Co. P. O. Box 168, Elkhart, IL 62634, 217/792-5725

WILL, W. E. (Retired), Peabody Coal Co. 309 Ridgemont, Collinsville, IL 62234

WILLIAMS, BENJAMIN, Section Foreman, Arch of Illinois, Inc. P. O. Box 308 Percy, IL 62272, 618/357-3316

WILLIAMS, J. SCOTT Consultant, IL DNR, Office of Mines & Minerals, P.O. Box 127 West Frankfort, IL 62896-0127, 618/937-4663

WILLIAMS, MICHAEL G. Sales, Tricon Metals & Services, Inc. 1338 Country Rd. 800E, Carmi, IL 62821, 606/265-3510

WILLIAMS, ROBERT L. JR. Regional Manager, Roberts & Schaefer Co. 120 S. Riverside Pl, Chicago, IL 60606, 312/236-7292

WILLIAMSON, TOM Sales Engr. Fostoc, Inc. 612 Wimbledon Place, Madison-Ville, KY 42431, 502/821-7900

WILSON, JOHN, Chairman, Mining Engr., University of Missouri-Rolla, 226 McNutt Hall, Rolla, MO 65401 573/341-4753

WILSON, STEVE Mine Sales, Rabin Tire Co. 790 S. Commercial St. Harrisburg, IL 62946, 618/252-8638

WILZBACHER, DENNIS, Vice Pres., Vigo Coal Co., 1649 Highway 41 N., Evansville, IN 47711

WINTER, DALE M., Gen. Mine Foreman, Arch of Illinois, Inc., RR 1, Box 242, Pinckneyville IL 62274, 618/357-3316

WOOD, CRAIG, Financial Analyst, Stagg Engineering Services, Inc., P.O. Box 7028, Cross Lanes WV 25357, 304/776-6660

WOODS, DAVE, Pres., Twin Mills Timber & Tie Co., Inc., 3268 State Highway 37, P.O. Box, West Frankfort IL 62896, 618/932-3662

WOODSIDE, RICHARD, Land Reclaim. Spec., IL DNR, Office of Mines and Minerals, 503 E. Main St., Benton IL 62812, 618/439-9111

WOOLBRIGHT, CHARLES, (Retired), Joy Technologies, Inc., 1831 Mercer Lane, Centralia IL 62801, 618/9475

WORSEY, PAUL N., Assoc. Prof., University of Missouri-Rolla, 226 McNutt Hall, Rolla, MO 65401 573/341-4753

YANCIK, JAMES R., Prep. Engineer, Group Manufacturing, P.O. Box 308  
Waltonville IL 62894

YARKOSKY, ROBERT R. SR., Project Mgr., Marston & Marston, Inc., 13515  
Barrett Parkway Dr., Ste. 2, St. Louis MO 62331 314/984-8800

YATES, LARRY, Vice Pres Materials Mgr., Peabody Holding Co., 301 N  
Memorial Drive, St. Louis MO 63102, 314/342-7883

YINGLING, GORDON, Compliance Coord., Black Beauty Coal Co., P.O.  
Box 312, Evansville IN 47702

YOCUM, KEVIN L., Senior Counsel, Arch Coal Inc., 9 Oakleigh Dr.,  
Collinsville IL 62334, 314/994-2735

YOUNG, BOB, Vice Pres., Webb Oil Co., Inc., P.O. Box 112, McLeansboro,  
IL 62859, 618/643-3424

ZIELMAN, MIKE, Sales Mgr., ILL-MO Products Co., P.O. Box 788,  
Jacksonville IL 62651, 217/245-2183

ZURCHER, RON, John Zurcher Assoc., 2535 Dover Lane-Camelot Pl.,  
St. Joseph MI 49083, 616/429-5435

ZWAHLEN, JAMES A., Purch. Coord., Monterey Coal Co., RR4, 235,  
Carlinville IL 62626, 217/854-3291

ZYWICKI, ROBERT A., Exec. Vice Pres., A-Z Industries, Inc., 3651  
Commercial Ave., Northbrook IL 60062, 847/291-9009

The Sincere

# THANKS

of the Officers and Members of the

Illinois Mining Institute

go to

## THE 1999 ADVERTISING COMMITTEE

Fred Bauer and Jim Zwahlen, Co-Chairmen

FRED BAUER  
Old Ben Coal Co.

JOHN J. (IKE) MILLER  
Roberts & Schaefer Co.

LANNY BELL  
Roberts & Schaefer Co.

KEN OAKLEY  
Fairmont Supply Co..

DON DECKER  
Consolidated Coal Co.

BRUCE OPOLKA  
Peabody Coal Co.

G. REGGIE FARLAINO  
Phillips Machine Service, Inc.

JOSEPH PILEGGI  
Freeman United Coal Mining Co.

JAMES H. (JIM) JUSTICE  
Du Quoin Iron & Supply Co.

DWIGHT SNEED  
Independent.

TINA LOGAN  
Arch of Illinois, Inc.

JIM WHEELER  
Turris Coal Co.

JAMES ZWAHLEN  
Monterey Coal Co.

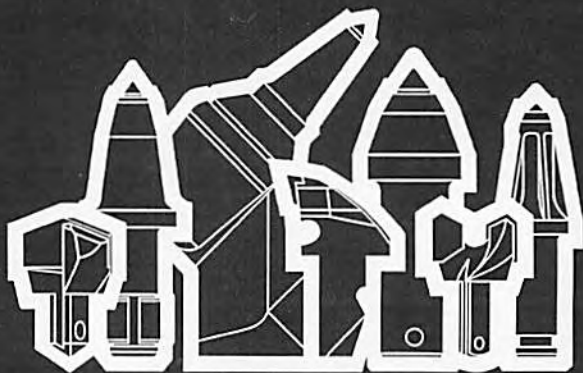
**1999 EXHIBITORS**  
**107<sup>TH</sup> ANNUAL MEETING**

A.L. Lee Corporation  
Carlson Software  
Carroll Engineering  
Centrifugal Mechanical  
Century  
CIMA Electric  
Cobra Tire  
Commercial Testing and Engineering  
Continental Conveyor and Equipment Company  
Directions Unlimited  
Draeger  
Eagle Seal  
Excel Mining Systems  
Fairbanks Scale  
Fairmont Supply  
Foam Concepts  
Fosroc Inc.  
Gauley Sales Company  
Grainger  
Heavy Net  
IDNR Mines and Minerals  
Illinois State Geological Survey  
Innovative Screen  
Jennmar Corporation  
J. H. Fletcher  
Joy Mining Machinery  
JYC Environmental/Pennzoil  
Kennmetal Inc.  
Kerco, Inc.  
Kirby Risk Electrical Supply  
Marston and Marston  
McJunkin  
Mine and Process Service, Inc.  
Mine Safe Electronics  
Mine Supply Company  
MAJID  
M and S Fire Safety  
MSHA  
National Mine Service

OCDM  
Office of Surface Mining  
Oldenburg  
Patrick Engineering  
Pemco  
Philips Machinery Service, Inc.  
Raben Tire/Goodyear  
Reaco Battery Service Company  
R. M. Wilson  
Roberts and Schaefer Company  
Roe Machine Company, Inc.  
Saminco  
Sandvik  
Setco  
SIU-Coal Research Center  
Standard Laboratories  
Trueblood Oil  
United Central Supply  
Voith Transmissions  
Webb Oil



**Kennametal Inc.**  
**Mining and Construction Division**  
**Latrobe, PA 15650**



**800/458-3608**

[www.kennametal.com](http://www.kennametal.com)

# The Best...Never Rest



## **PYRO-CHEM** MINE SEALANT

The leading supplier of premixed  
mine sealants to the U.S. mining industry

- **Pyro-Chem TC**

- The original premixed sprayable sealant.
- Comes in E-Z open, user friendly, oval pail.
- Cost effective and easy to use.

- **Pro-Seal HT**

- Less weight, same volume, per pail.
- Light color reflects light well.
- Apply by hand using trowel or rubber glove.

Products for the American Coal Miner...

The world's most productive.

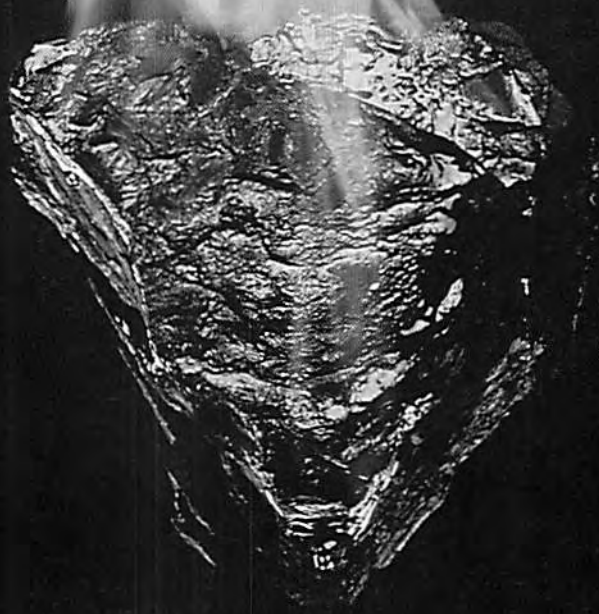
**PYRO-CHEM** CORP.

**1-800-530-0724**

Phone (740) 377-2244 Fax (740) 377-2283

P.O. Box 884, South Point Ohio 45680

# **FREEMAN UNITED COAL MINING COMPANY**



In Central Illinois see

**ALTORFER**

**Sales • Rentals • Leases**

Altorfer, Inc. provides 46 counties in Central Illinois with the complete line of Caterpillar products and with Parts and Service support that will keep you more productive more days per year. Altorfer features new and used equipment, flexible financing, equipment demonstrations at our site or yours.

**FAST TURNAROUND TIME  
FLAT RATE PRICING**

**Four Convenient Locations**

**Springfield**  
I-55 and Toronto Rd.  
Springfield, IL 62705  
(217) 529-5541

**Urbana**  
1519 West Kenyon Rd.  
Urbana, IL 61801  
(217) 359-1671

**Peoria**  
1 Capitol Dr.  
E. Peoria, IL 61614  
(309) 694-1234

**Rock Falls**  
West Route 30  
Rock Falls, IL 61071  
(815) 625-8774



**CAT**<sup>®</sup>



## STAGG ENGINEERING SERVICES, INC.

QUALITY  
INTEGRITY  
EXPERIENCE

*Since 1975*

*Providing professional services to the  
international mining community*

### SERVICE AREAS

- Geology
- Appraisal
- Acquisitions & Divestitures
- Property Management
- Litigation Support &
- Expert Testimony
- Engineering
- Permitting
- Environmental
- Computer Drafting & Design
- Mineral Economics &
- Market Research

**MinePlan™**

*The faster, simpler solution*

SESI's exciting spreadsheet-based mine planning and costing software is customized to your needs.

- Develops mine plans
- Forecasts coal quality
- Projects mining costs
- Provides economic analysis
- For use on PC or notebook

(304) 776-6660

5457 Big Tyler Road • Charleston, West Virginia • 25313  
WEB ADDRESS: WWW.SESIUSA.COM

Fax (304) 776-7867

## THE G. W. VAN KEPPEL COMPANY

ST. LOUIS, MO

314 872-8840  
FAX 314 993-6402

### **REPRESENTING:**

TEREX

KAWASAKI WHEEL LOADERS

SAMSUNG HYDRAULIC EXCAVATORS

CEDARAPIDS CRUSHERS AND SCREENING PLANTS

GRADALL HYDRAULIC EXCAVATORS

RAMMER HYDRAULIC HAMMERS

PEERLESS CONVEYOR SYSTEMS

EAGLE IRON WORKS

# Stainless Steel and Polyurethane Screens

For sizing and washing . . .

Coal

Crushed Stone

Coke

Sand

Agricultural products

Minerals



403 South Wickham Avenue  
Princeton, WV 24740  
Phone: 304-431-7240  
Fax: 304-487-2470

# **RABEN**

## **TIRE COMPANY, INC.**

**"KEEPING THE COAL INDUSTRY"  
OF AMERICA'S HEARTLAND ROLLING**



**LET US RETREAD  
YOUR FOAM-FILLED TIRES**

Complete Line Of  
Off-The-Road and  
Underground Tires

**GOOD YEAR**  
**MICHELIN®**

- 24-Hour On-Call Service
- Experienced Sales & Service Force
- State-of-the-Art Trucks & Equipment
- Complete Tire Recordkeeping System
- Bandag Retreading & Tire Foam Fill

**MATTOON**  
1300 BROADWAY  
217-235-0505

• **HARRISBURG**  
709 S. COMMERCIAL  
618-252-8638

• **MARION**  
NEW RT 13W  
618-997-6381

• **MARISSA**  
9 E. MARISSA ST.  
618-295-3263

**EVANSVILLE, IN • VINCENNES, IN • NEWBURGH, IN • HENDERSON, KY  
OWENSBORO, KY • CENTRAL CITY, KY • HOPKINSVILLE, KY**

## MINI-TRAC

# A. L. LEE

CORPORATION

The Latest in  
MATERIAL HANDLING &  
CLEAN UP EQUIPMENT

QUALITY MINING EQUIPMENT SINCE 1967



### FEATURES

- \* FOUR WHEEL DRIVE
- \* HYDRAULIC PTO
- \* ARTICULATES AND OSCILLATES
- \* VARIETY OF ENGINES & SIZES
- \* 27 HP TO 79 HP

### FEATURES (Cont.).

- \* AS NARROW AS 48 "
- \* AS LOW AS 36 "
- \* BALL BEARING CENTER SECTION WITH THREE YEAR WARRANTY
- \* GVW 6,000 LBS. TO 20,000 LBS.



**A. L. LEE**

**A. L. LEE**  
CORPORATION

**WEST VIRGINIA**  
P.O. Box 99, Lester, WV 25865  
Phone No. 304/934-5361  
Fax No. 304/934-5388

**ILLINOIS**  
P.O. Box 2370, Mt. Vernon, IL 62864  
Phone No. 618/242-6065  
Fax No. 618/242-6036

**MPS MINE AND  
PROCESS SERVICE INC.**

P. O. BOX 484 / KEWANEE, ILLINOIS 61443 / 309-852-8529

**SERVING THE ILLINOIS COAL BASIN SINCE 1982.**

**PRODUCTS AND SERVICE TO KEEP MINES  
PRODUCTIVE AND SAFE.**

**BELT CONVEYOR SYSTEM CARRYBACK AND SPILLAGE  
SOLUTIONS WITH BELT CLEANERS AND TRANSFER POINT  
PRODUCTS**

**SILO, HOPPER AND BUNKER FLOW STOPPAGE SOLUTIONS  
WITH CLEANOUTS, AIR CANNONS AND VIBRATORS**

**UNDERGROUND ALIGNMENT SOLUTIONS WITH  
MSHA PERMISSIBLE LASERS**

**DRY AND LIQUID LEVEL CONTROL  
SOLUTIONS WITH POINT AND  
CONTINUOUS LEVEL MONITORING**

**SALES ENGINEER SERVING THE ILLINOIS BASIN:**

**MR. DONNIE STEWART**

**WEST FRANKFORT, IL**

**618 932-3530**

**The  
Durtbusters™**



## **SEDGMAN**

**Sedgman offers solutions to coal processing and bulk material handling problems utilizing innovative processing technology.**

**SALES • RENTALS • PARTS • SERVICE**

**FOR ALL YOUR MINING AND COAL PREPARATION  
EQUIPMENT NEEDS**

The logo features the letters 'CMC' in a large, bold, white serif font, centered within a solid black rectangular background.

**CONSTRUCTION MACHINERY CORP.**

**A Brambles Company**

**Owensboro, Kentucky 42304**

**US WATS 800-626-8406**

**Allis-Chalmers Crushing & Screening Equipment  
Kawasaki Loaders    Dart Trucks    Allison Transmissions**

# New Millennium. Same Commitment.



## **Our commitment behind the equipment is worthy of oohs and aaahs.**

Millennia may come and go, but the Rudd commitment will never change. For nearly 50 years, we've been doing business the same way — giving our construction, mining, aggregate, logging, energy, and solid waste customers

the world's best equipment and the most comprehensive product support. Talk to your Rudd representative today. And find out what the oohs and aaahs are about.



Louisville, KY  
(502) 456-4050

Corbin, KY  
(606) 528-9440

Prestonsburg, KY  
(606) 886-1276

Pittsburgh, PA  
(412) 741-1731

Clearfield, PA  
(814) 765-8500

Evansville, IN  
(812) 867-6661

Indianapolis, IN  
(317) 247-9125

Fort Wayne, IN  
(219) 482-3681

Nitro, WV  
(304) 755-7788

St. Louis, MO  
(314) 487-8925



**Products  
for the  
mining and  
tunneling  
industry**

**Local Sales  
Representatives**

Mike Musko

Marion, IL

(618) 997-3970

Tom Williamson

Madisonville, KY

(270) 821-7900

*The mining industry's preferred partner:*

Mining Division  
Georgetown, KY  
800-626-2948  
FAX 270-863-1374  
ISO 9002 Certified

 A BURMAH CASTROL COMPANY



## Electric Motor Repair



- AC/DC motor repair
- Dynamic balancing
- Metallizing
- Dynamometer testing with digital readout
- Core loss testing
- Surge testing
- Water jacket testing
- Pump repair
- Complete machine shop
- Vacuum pressure impregnation
- Epoxylite V.P.I. and resin
- Epoxylite incapsulation - available
- Meets I.E.E.-429 short term water immersion test
- Wear coatings
- EMD Locomotive Traction Motors

270-835-7534

USA 1-800-628-1856

*For Emergency Service*

270-835-2373 270-835-2108

**Ashby Electric Co., Inc.**

149 E. Madison St., P.O. Box 55  
Sebree, KY 42455



Offering A Complete Line  
Of Mining Supplies

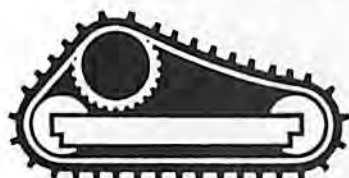
### **Flygt Submersible Pump & Repair Center**

- Peabody ABC Ventilation Tubing-Rigid and Flexible, Brattice Cloth, and Ventilation Fans
- Wilden Pumps and Parts
- Steel Pipe and Fittings
- Hughes (McSweeney) Twist Lock Drill Steel
- Williams Hand Tools
- Dayco Industrial and Hydraulic Hose and Fittings
- Trident Hydraulic Adapters
- Dixon Hose Fittings
- Victaulic Couplings and Groove Fittings
- Leschen Wire Rope and Slings
- Hartzell Ventilation Fans
- Electrical Wire, Cable and Electrical Tape
- Campbell and Crosby Chain and Fittings
- Mining Boots and Clothing
- Valves and Fittings
- Eaton and Harrington Hoists
- Collins Miners' Axes
- Ames Shovels
- Varel Mfg. Mining and Oil Field Bits
- Enerpac Hydraulic Tools

**“WE WANT TO SERVE YOU”**

**618-242-2087**

**1703 Shawnee, Mt. Vernon, IL 62864**



Track-type tractors 60-850 HP  
Scrapers-Loaders-  
Trucks-Backhoes  
and more. Quality  
Cat equipment  
for overburden  
removal, haul road

maintenance, loading & on-site transportation.

Engines for pumps, electrical generators from  
70-6000 HP and from 36-4910 Kilowatts.

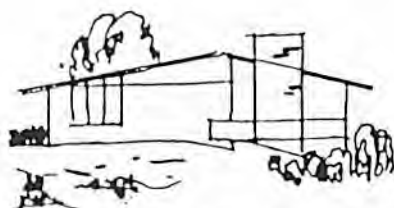
Sales • Service • Rentals



YOUR **CATERPILLAR** DEALER

Fabick Machinery Co. • Marion, IL • 618-997-1881

Caterpillar, Cat and  are trademark of Caterpillar Inc.



# ALLEN LUMBER COMPANY

Wholesale and Retail  
Sesser, Illinois 62884  
Phone (618) 625-6235

## **PATRICK ENGINEERING INC.**

### **COMPLETE ENGINEERING SUPPORT FOR THE MINING INDUSTRY**

**CIVIL • STRUCTURAL • GEOTECHNICAL  
SURVEYING • ENVIRONMENTAL • HYDROGEOLOGY  
ARCHITECTURAL • ELECTRICAL • MECHANICAL**

Springfield, IL  
(217) 525-7050

Lisle, IL  
(630) 795-7200

email:  
cburger@patrickengineering.com

web:  
www.patrickengineering.com



### **Weir International Mining Consultants** Providing engineering, geological, operational and training services to the mining, mineral and energy industries worldwide including:

- Mining, Civil & Geotechnical Engineering
- Geology & Geologic Mine Modelling
- Coal Preparation/Mineral Processing
- Feasibility Studies
- Market and Financial Analysis
- Operational Assessments
- Due Diligence Investigation
- Property Services
- Health, Safety & Training
- Litigation Support/Expert Witness
- Workforce Development Training

Chicago  
847 • 297 • 3500

Denver  
303 • 985 • 7687

E-Mail: WEIRINTL@aol.com

# Chase Pump & Equipment Co. Inc.

P. O. BOX 812  
HENDERSON, KY 42430  
(502) 826-8713  
FAX: 826-7820



FMC JOHN BEAN DIV.

WARMAN INTERNATIONAL

AMERICAN TURBINE

ARMSTRONG

CORNELL

KERR PUMPS

CRANE PUMPS & SYSTEMS

PROSSER

BARNES

WEINMAN

HAZLETON PUMPS

GORMAN-RUPP

MARLOW

WARREN RUPP

HALE PUMPS

R. S. CORCORAN CO.

RAMPARTS DIV. OF

GORMAN RUPP

ABS

GRUNDFOS

BERKELEY PUMPS

MARCH MFG.

MEGATOR CORP.

STA-RITE INDUST.

G & H PRODUCTS

MTH

LIQUID METRONICS

WAYNE PUMPS

MADDEN

CORKEN INT.

C. H. & E.

BAIRD MFG.

WEDGE-WIRE

BIXBY-ZIMMER

MILLER WIRE WORKS

Hi-Pressure Piston and Plunger Pumps - Electric Diaphragm Pumps

Vertical and End Suction Slurry Pumps for Mining, Industry and Municipal Applications - Lined Slurry Valves

Line Shaft and Submersible Vertical Turbines

Complete Line of In-Line and End Suction Pumps

Municipal, Industrial, Food and Refrigerant Pumps

Bonderizing - Specialty Pumps - Vertical and Horizontal

Mesa - Explosive Proof Electric Submersibles

Submersible - Sewage Cutter Pumps and Self Primers,

Crown Units

Split Case - End Suction - Vertical Wet Pit Pumps and Systems

Slurry Pumps & Mine Dewatering - Vertical Sump Units

Rotary Gear Pumps

Self Primers - Industrial and Trash Pumps

Air Driven Dble Diaphragm Pumps

Portable and Stationary Fire Pump Units

Stainless Steel and Special Metal Construction Pumps

Elastomer Lined Chemical and Low PH Pumps for Industry

and Mining - Air Operated Diaphragm Pumps

Submersible Dewatering and Mine Approved Pumps

Stainless Steel Submersible Turbines and In-Line Boosters

Heavy Duty End Suction Pumps

Magnetic Driven Sealless Pumps

Pumps for Sump Dewatering - Oil Recover - Stainless

Industrial Pumps, Submersible Sump & Submersible

Turbines Pumps

Sanitary Rotary Lobe Pumps - Gear Pumps: Sanitary Fittings,

Pipe, and Valves

Hi-Pressure Boiler Feed Peripheral Turbine Pumps

Chemical Metering Pumps and Systems

Small Submersible and Dewatering Pumps

Chemical Feed Pumps and Systems

Gas Compressors and Sliding Vane Pumps

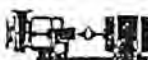
Self Priming Centrifugal, Trash, and Diaphragm Pumps

Relief Valves - Regulators - Production Tools

Profile Wire Products and Dryer Baskets

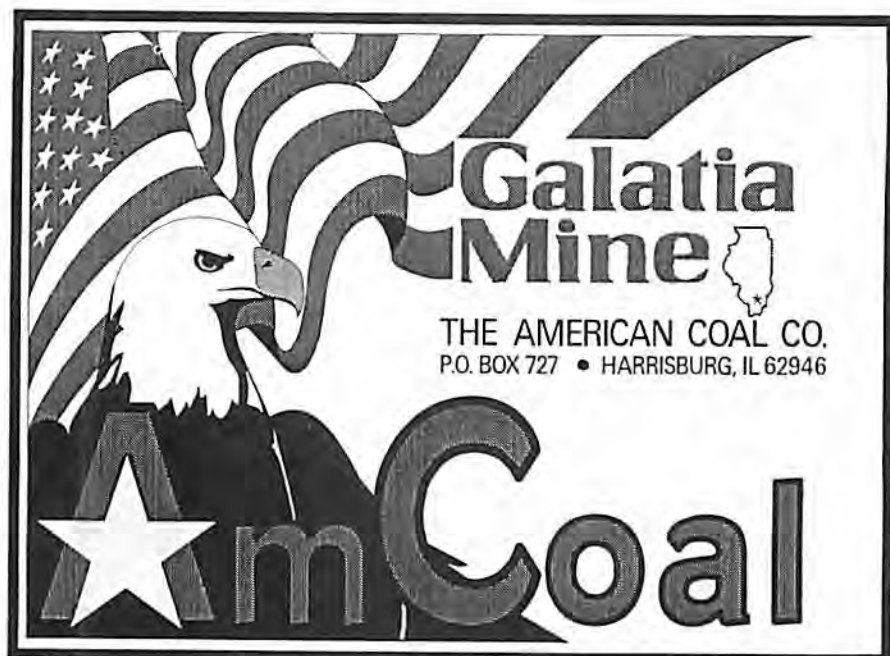
Screens and Dryer Baskets

Woven Wire Cloth - Punch Plate - Rubber Screens - Etc.



*"Shop Facilities for Pump Repair"*

*"Let us be your Pump Specialist"*



## **GAULEY SALES COMPANY**

**45 YEARS OF DEDICATED SERVICE TO THE MINING INDUSTRY**

*Corporate Office and Warehouse*

*P. O. Box 70 • Hico, WV 25854*

*Phone: 304-658-5201 Fax: 304-658-4503*

*P. O. Box 960*

*Logan, WV 25601*

*Phone: 304-752-2066*

*Fax: 304-752-5920*

*P. O. Box 1766*

*Coebum, VA 24230*

*Phone: 540-395-2090*

*Fax: 540-395-7004*

*P. O. Box 155*

*Providence, KY 42450*

*Phone: 270-667-2001*

*Fax: 270-667-2004*

*P. O. Box 1600*

*Robinson Creek, KY 41560*

*Phone: 606-639-4335*

*Fax: 606-639-9733*

*P. O. Box 822*

*Washington, PA 15301*

*Phone: 724-228-8870*

*Fax: 724-228-3633*

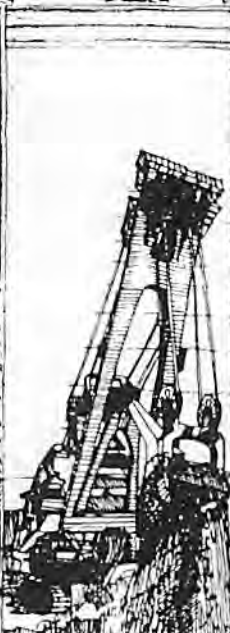


# ILLINOIS MINING INSTITUTE

## We're Equipped

Producing coal safely is why we stress the importance of operating the equipment correctly. At underground or surface mines, Consol employees are trained to know the best use of mining equipment is its safe use.

Consolidation Coal Co.  
Illinois/West Kentucky Operations  
Sesser, IL 62884  
(618) 625-2041



# MEN AT WORK!

(Yours & Ours)

Gooding people work hard to keep your people supplied with the mining products and services they need for max productivity.

Now, one call to Gooding is all it takes to put you in touch with the complete line of rugged Dayco® mining products.

Hose assemblies—couplings



featuring the unique Dayco

Stecko® coupling system—and the newest addition to the Dayco coupling line, Bite-The-Wire. Dayco



coupling machines and power transmission products, too.

And you can depend on Gooding design, installation

and service experts to help solve your mine equipment problems.

So, for top quality products and skilled, responsive service, call Gooding—today!



Gooding Rubber Company

1200 S. Blakely St.  
Benton, IL 62812  
618-435-8104

411 E. Plainfield Rd.  
LaGrange, IL 60525  
312-354-2270

Dayco, mining products as tough as the men and machines that do the job

## DAYCO

**Service ... our first consideration for more than 50 years.**

# Advanced equipment designed for total system productivity

## The Miner's Choice

- |                                                                                                                    |                                                                                                                      |                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
|  Large Drives                     |  Belt Winders                       |  Idler Styles              |
|  D.C. Drives                      |  Belt Storage Units                 |  Idler Roll Types          |
|  Tripper<br>Booster<br>Drives     |  Center<br>Loading Tail<br>Sections |  Intermediate<br>Structure |
|  Low-Coal<br>Drives             |  Clean-up<br>Conveyors            |  High Angle<br>Conveyors |
|  Constant<br>Tension<br>Winches |  Slider Beds                      |  Overland<br>Conveyors   |

For more information  
about Continental  
Conveyor & Equipment  
Company and Continental  
products, contact your  
Continental representative  
or call Continental at  
**(205) 487-6492.**

**ISO 9001**

Certificate No. 002586



**CONTINENTAL CONVEYOR  
& EQUIPMENT COMPANY**

P.O. Box 400 • Winfield, AL 35594 • 205/487-6492  
FAX: 205/487-4233

A NESCO COMPANY



**The World Leader in Conveyors  
and Conveyor Technology**

# ASCO

## Associated Supply Company

A Division of T. A. Pollack Co., Inc.

932-3114  
200 So. Taft Street  
West Frankfort, IL 62896

FAX 618-932-3115

• *JMD — Complete Line of Ventilation Systems*

## **IBT. MT. VERNON**

IBT, Inc.

601 South 10th Street • Mt. Vernon, IL 62864

Phone (618) 244-5353 • Fax (618) 244-5697

*Serving industry for over 49 years with quality products and service... and a "Commitment to Excellence"*

- **Bearings — Oil Seals — Lubricants**
- **Power Transmission Equipment**
- **Electric Motors and Gear Motors**
- **A.C. and D.C. Variable Speed Drives**
- **Complete Conveying Systems**
- **GOODYEAR Conveyor Belting & Hose**

**OTHER BRANCH SERVICE CENTERS LOCATED IN ARKANSAS, COLORADO, IOWA,  
KANSAS, LOUISIANA, MISSOURI, NEBRASKA, OKLAHOMA AND TEXAS**

**VISIT US ON THE INTERNET AT [WWW.IBTINC.COM](http://WWW.IBTINC.COM)**

ILLINOIS MINING INSTITUTE

*Wearalloy*

St. Louis, Missouri



**MANGALLOY**

Elko, Nevada

Since 1945

- Wearalloy AR 360, AR 400 and AR 500 BHN plates
- Wearalloy Nickel Chrome Plate
- Wearalloy 400 BHN Bars
- Mangalloy 11-14% manganese plates and bars
- Super-Clad chromium carbide plate
- Tungsten-Clad —tungsten carbide pellets in weld matrix

FABRICATION SERVICES AVAILABLE

- Truck bed and bucket liners
- Chute, feeder and crusher liners
- Weld or bolt-on cutting edges

St. Louis, MO

800-325-4012

Elko, NV

800-939-3673

E-mail – [fordsteel@worldnet.att.net](mailto:fordsteel@worldnet.att.net)

**Mossner**

*The Reproduction People • Largest in the midwest*

137 North Wabash  
Chicago, Illinois 60602

*The one source for all  
your reproduction  
needs*

Telephone:  
(312) **372-8600**

Blueprints  
Digital Blueprints  
Offset Printing  
High Speed Xerox  
Microfilm & Photomechanical  
Services, Drafting Supplies,  
Mounting and CADD Services

**Alfred Mossner Company**  
Dependable service for more than 70 years

## Midwestern Machine & Hydraulics, Inc.

Now Employee Owned

Mark S. Morgan – Shop Manager

Plant location: 10489 State Rte 127 North, Nashville, IL 62263

PH 618-327-3095 — Fax 618-327-4211

*Serving Mining, Industrial, Railroads,  
Construction and Agricultural*



**MINING LUBRICANTS**

- Solcenics for Longwall Shields
- Powergear Ultra Performance Gear Oil
- Synthetic Lubricants
- Specialty Greases
- Multipurpose Greases
- Hydraulic Oils
- Engine Oils
- Automotive Transmission and Gear Oils
- Oil Analysis - "CENT"
- On-Site Engineering Services

Bulk Deliveries and Onboard Pumping Available

HIGH-PERFORMANCE LUBRICANTS FOR MINING

**FUCHS**

**CENTURY LUBRICANTS CO.**

P.O. Box 161 • 501 N. Carbon • Marion, IL 62959  
Phone: (618) 997-2302 • Fax: (618) 997-2119

## EXCEL MINING SYSTEMS

When you demand the best in roof support -

|                          |                                                                                                                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Resin Bolts              | #5, #6, #7. Including #6 and #7 SRD Gr75                                                                                                                                                                              |
| Conventional Bolts       | full range of Frazer & Jones expansion shells including the 1" B1H.                                                                                                                                                   |
| Resin-Tension            | HyTec requires a reduced annulus for improved resin anchorage. Double Lok available in Gr60 and SRD Gr75.                                                                                                             |
| Torque-Tension           | Tension Rebar available with Tab or Dome Nut. 5/8, ¾, and 7/8                                                                                                                                                         |
| Cable Bolts              | Galvanized or Bright, flexibility allows it to perform despite lateral strata movement. <u>Exclusive manufacturer of properly galvanized cable bolts</u> for use when required stand times are greater than one year. |
| Rock Bolts               | SAF Bolt and Friction Bolt. SAF Bolt's generous collar overcomes previous difficulties of point loading on the ring.                                                                                                  |
| Roof Channel & Roof Mats | including Monster Mats, and Mini Monster Mats.                                                                                                                                                                        |
| Overcasts                | Creteplank enables you to erect overcasts quickly with the lightweight "Tongue and Groove of Steel"                                                                                                                   |
| Convergence Strip        | Fibro Crush Block reduces breakage of block stoppings.                                                                                                                                                                |
| Rigid Truss              | U-Bolt Truss allows fast installation and has a compact, low profile design                                                                                                                                           |
| Cable Truss              | unique no-spin installation system                                                                                                                                                                                    |
| Plates                   | complete range including 9 x 9, 6 x 16 Embossed, 4 x 9 Channel Plate, and 3" Plate Inserts                                                                                                                            |

538 N Main St, PO Box 242  
Cadiz, OH 43907  
800-520-6621  
740-942-9258 Fax  
excelmining.com

**EXCEL**  
SUPPORTING THE MINING INDUSTRY

# ***RICHWOOD***

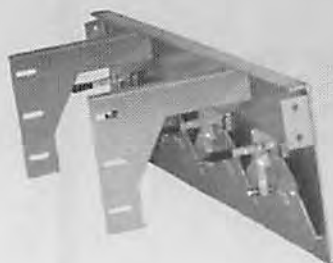
If you want conveyor  
products that you  
can rely on, trust  
Richwood to deliver.



*Impact Systems*

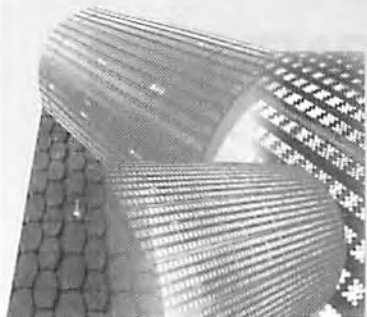
**R**ichwood can help you solve your material handling problems. We have provided reliable solutions to the industry for over twenty years. You have our guarantee of quality and satisfaction. We are proud to be Made In The USA.

*Skirting Systems  
& Components*



*Belt Cleaning Systems*

*Ceramic & Rubber  
Pulley Lagging Systems*



**R  
e  
l  
y  
o  
n  
R  
I  
C  
H  
W  
O  
O  
D**

**1-800-237-6951**

P.O. Box 1298 Huntington, WV 25714

Fax: 304-525-8018 E-Mail: [Richwoodi@aol.com](mailto:Richwoodi@aol.com)

# SEAMLESS SERVICE

*Meeting all customer needs, 100 percent of the time...  
that's Seamless Service.  
It's a goal we hope to achieve.*

And for over 75 years now,  
America's major industries  
have depended on us  
to consistently deliver on time  
and often on short notice  
more than 205,000 different items  
from over 1000 name brand  
industrial product manufacturers.



P. O. Box 1388, Mt. Vernon, IL 62864 (618) 244-5344

EXCELLENCE IN DISTRIBUTION™

*There's no stopping us.*

# LOOK TO SOLLAMI FOR:

TECHNOLOGY IN ACTION



## Conical Tools ...

Are your bits using 100% virgin tungsten carbide?

**Ours are!**



## Replacement Parts ...

Are your interior hexes and squares fully machined?

**Ours are!**



**Roof Bits ...**  
Are your bits 100% quality inspected before delivery?  
**Ours are!**

## TRY THE NEW PATENTED

## SOLLAMI RIB ROOF BIT

The Ribbed blade offers:

- A Self-Centering Blade
- Reduced Breakage
- Truer Hole
- More Column Strength



# CALL US TODAY!

# SOLLAMI

TECHNOLOGY IN ACTION

P.O. Box 627, Herrin, Illinois 62948 • Phone: 618-988-1521 Fax: 618-942-5367 • 800-992-1521 in U.S. and Canada



# GOODYEAR HOSE PRODUCTS

Rubber and plastic construction  
from 3/16" - 42"  
for every market requirement

- Air & Multipurpose
- Hydraulic
- Chemical
- Food
- Petroleum (dock)
- Gasoline Dispensing
- Tank Truck
- Rotary
- Steam
- Spray
- Vacuum
- Material Handling (blast)
- Water S & D
- Custom Built

**GOODYEAR**

**DuQuoin Iron & Supply Co.**  
**1-800-535-5157**  
**618-542-5477**

Goodyear Authorized Distributor



**Serving The Industry  
Since 1937**

**Roof Bolters  
Degas Drills  
Mobile Roof Supports  
Scaling Vehicles  
Down Hole Drills  
Powder Loaders  
Face Drills**



**Grover Fischbeck  
Midwest District Sales Manager  
Phone: 502-333-3233  
E-Mail: [grover@dynasty.net](mailto:grover@dynasty.net)**

**J. H. Fletcher & Co.  
Box 2187  
Huntington, WV 25722  
Phone: 304-525-7811 Fax: 304-525-4025  
E-Mail [jhf@jhffletcher.com](mailto:jhf@jhffletcher.com)  
Website [www.jhfletcher.com](http://www.jhfletcher.com)**

# Rite Crete Concrete Products

Division of Woodruff Supply Co., Inc.  
CEMENT PRODUCTS FOR THE COAL INDUSTRY . . .

## Manufactures of

- 50 lb. bag **Rite Wall** — Same as Fiberbond, Block-Bond, Quick Wall, B-Bond, Strong Seal, Bur 1 Bond. A fiberglass reinforced surface bonding mortar to construct and seal stopping walls and overcast. A dense impact resistant sealant with high compressive and flexural strengths. MSHA Acceptance # IC 99.
- 50 lb. bag **Plaster Wall** — *A special engineered mixtures of plaster & fiberglass that reduces skin irritation. Same high Compressive strengths as the cementitious products.* MSHA Acceptance # IC 99/1.
- 4 Cubic ft. bag **Rite Crete Mine Seal** — A special blend of mineral wool and cement. Provides permanent resilient and protects against the hazards of sloughing and crumbling. Same as Unisul Mine Seal. May be used in Unisul Spray machine. MSHA Acceptance # IC 99/3.
- 40 lb. bag **Rite Crete Mine Seal Lite** — Special Lite weight mixture of cement an vermiculite, used to seal any mine strata to prevent air loss. Same as Mandoseal, Zonelite and Strong Lite. MSHA Acceptance # IC 99/4. (available either Plaster or Cement)
- 50 lb. plastic bucket **Redi Mix Mine Sealant** — *A special redi mix Fiberglass reinforced sealant to repair and construct stopping walls. The only redi mix Fiberglass reinforced sealant.* MSHA Acceptance # IC 99/2. (same as Michael Walters Stop-It or Celitite Mine Sealant)
- 45 lb. bag **Rite Crete Gunitite Mix** — Fiberglass reinforced for sealing ribs and roof.
- Rite Crete Fiberglass Reinforced Crib Blocks** — *Special engineered Blocks that will not shrink and that make permanent cribs and roof support.*

## Pre-Packaged

Concrete Mix  
Mortar Mix

## Bagged

Traction Sand  
Portland Cement  
Mortar  
Sandblasting Sand

**Jim Atterberry, Sales Representative of Illinois**

WE CAN FURNISH ALL YOUR CEMENT NEEDS . . .

PLANT AT  
**Madisonville, KY**  
**502-825-1392**  
**502-821-3247**

Warehouse At  
**Benton, IL**  
**618-439-9451**



**IPECO**

**YOUR ST. LOUIS PUMP HOUSE  
534-3100**

**Pumps for any application:**

WORTHINGTON • INGERSOLL-RAND  
SUNDFLO • ECO • WILDEN • TUTHILL  
BARNES • GALIGHER-ASH • FMC  
ROPER • GRUNDFOS

**INDUSTRIAL PROCESS EQUIPMENT COMPANY**  
2800 LOCUST ST. • ST. LOUIS, MISSOURI 63103 • 314-534-3100



**MINE SAFE**

*Electronics*

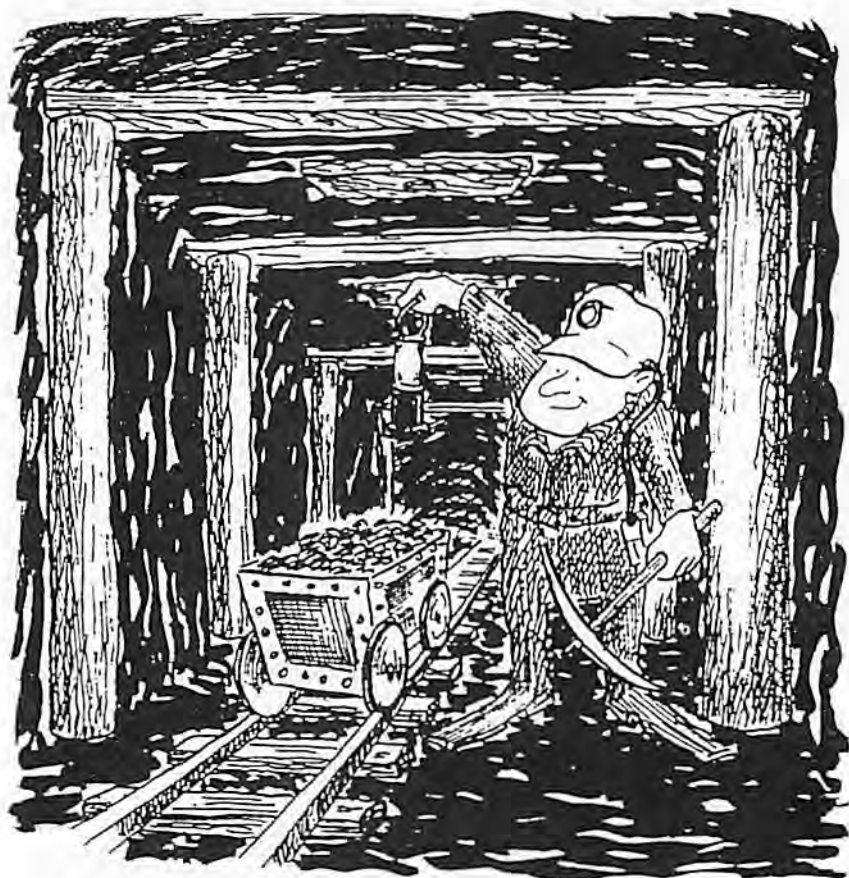
**Sturgis, Kentucky**

**(270) 333-5581 1-800-523-1579**

**"Communicator" MINE COMMUNICATIONS  
EQUIPMENT MANUFACTURER**

**COMMUNICATOR IV-RADIO & MINE PHONE INTERFACE**

ILLINOIS MINING INSTITUTE



ARNESON TIMBER CO.

PROPS      TIES  
LUMBER    ROOF BOARDS  
PENTA TREATED  
PRODUCTS

STEELVILLE, MO. 65565 5737755911

# HENRY A. PETTER SUPPLY CO.



ALEMITE DIV.  
AMERICAN AIR FILTER CO.

AMES  
AMPSCO METAL INC.  
ARMEX  
ARMSTRONG MACHINE  
WORKS

ARMSTRONG TOOL  
ARO CORPORATION  
AUTOMATIC SWITCH CO.  
BETCO CHEMICALS

BINKS MFG. CO.  
BLACK & DECKER MFG. CO.  
BROWN & SHARPE MFG. CO.  
BUSSMANN MFG.  
CANON COPIERS  
CARLISLE AND FINCH  
CLEMCO

CLEVELAND TWIST DRILL CO.  
COOPER GROUP

CAMPBELL  
CRESCENT  
LUFKIN  
NICHOLSON  
H.K. PORTER  
WELLER

WISS

CROUSE-HINDS CO.

DEVCON

DEVILBISS CO.

DIXON VALVE AND COUPLING

DRESSER IVI DIV

DRESSER MFG. CO.

DUFF-NORTON CO.

EATON

CUTLER-HAMMER  
DURANT

EMERSON ELECTRIC CO.

CHROMOLOX

LOUISVILLE LADDER

RIDGE TOOL

VAN GORP

ENERPAC

ENPO PUMPS

EVEREADY BATTERY CORP.

EVERTITE COUPLING CO.

EXIDE

FACET PUROLATOR

FARBOIL PAINTS

FELPRO

FLEXIBLE METAL HOSE

FMC-LINK BELT DIV.

GARLOCK, INC.

GATORADE

GEORGIA PACIFIC

GLOVES

GO-JO INDUSTRIES

GOODYEAR TIRE & RUBBER

GREENFIELD TAP AND DIE

GREENLEE TOOL CO.

HARVEY HUBBELL CO.

HOLO-KROME

HOMELITE

HONDA PUMP

HYTROL CONVEYOR CO.

IMPERIAL-EASTMAN

ITT-BELL AND GOSSETT

JABSCO

MARLOW

JACUZZI BROS

KEYSTONE

KIDDE

KILLARK ELECTRIC MFG. CO.

KIMBERLY-CLARK

LINCOLN

LOCTITE

LUNKENHEIMER CO.

LYON METAL PRODUCTS

McDERMOTT

MEDICINES

MILWAUKEE ELECTRIC

MINNESOTA MINING & MFG.

ELECTRICAL PRODUCTS DIV.

OCCUPATIONAL HEALTH &

SAFETY DIV.

ADHESIVE COATING &

SEALER

MEDICAL DIV.

INDUSTRIAL TAPE &

SPECIALTY DIV.

NIBCO

NORTON ABRASIVES

NORTH SAFETY PRODUCTS

OFFICE FURNITURE

OFFICE PAPERS

OFFICE SUPPLIES

OSBORN MFG. CO.

PERMATEX

POWELL VALVE

RAPISTAN

RAY-O-VAC

ROCKWELL VALVES, CLAMPS

RUBBERMAID

INDUSTRIAL/COMMERCIAL

RUST-OLEUM CORP

SCHRADER-BELLOWS

SPRAYON

SQUARE D COMPANY

SOWINCHER

STANLEY TOOL

STEARNS BRAKE

STEELCASE FURNITURE

SYLVANIA LAMPS

TEMPLETON, KENLY AND CO.

THOMAS AND BETTS

TORNADO FLOOR EQUIPMENT

VICTAULIC CORP.

HENRY VOGT MACHINE CO.

WALL ROPE

WARREN RUPP

WARREN TOOL

WERNER LADDER

WILLAMETTE PAPER

J.H. WILLIAMS

WISCONSIN TISSUE MILLS

DANIEL WOODHEAD

XOMOX CORP

YALE HOIST

HENRY A. PETTER SUPPLY CO.

P. O. Box 2350

Paducah, KY 42002-2350

Phone: 800-626-3940

Fax: (502) 443-3235



Mt. Vernon Branch

P O Box 707

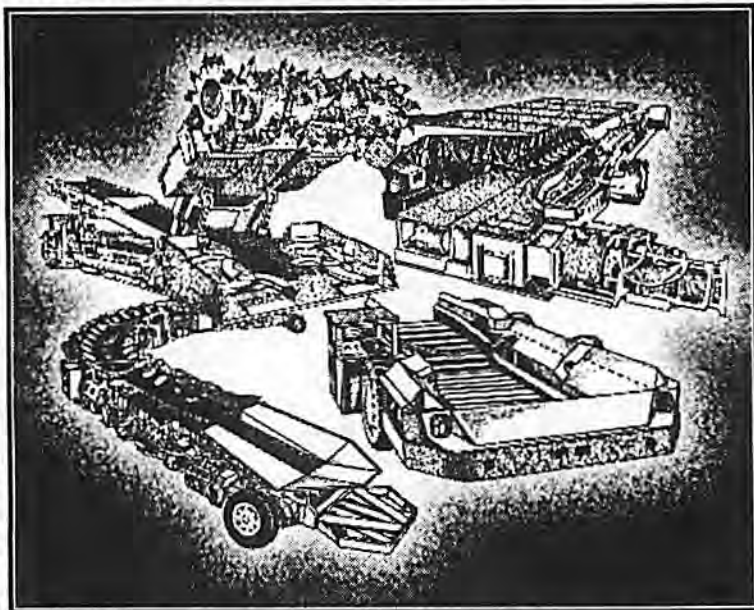
Mt. Vernon, IL 62864

Phone: (618) 242-6987

Fax: (618) 242-9051

▪ LONGWALL SYSTEMS ▪ CHAIN HAULAGE ▪ MULTIBOLTER ▪

FLEXIBLE CONVEYOR TRAINS ▪ SHEARERS



MINERS ▪ ROOF SUPPORTS ▪ SHUTTLE CARS

▪ ARMORED FACE CONVEYORS ▪ ARTICULATED HAULERS ▪

Joy Mining Machinery is a leader in the development, manufacturing, distribution and servicing of underground mining equipment for the extraction of coal and other bedded materials at the lowest possible cost per ton.

Our Midwest Region maintains a sales office, service center and warehouse at Mt. Vernon, IL.

Also, a sales office is located at Eagle Pass, TX and warehouses are located in Henderson, KY and Brookwood, AL. With these facilities, Joy is able to provide equipment of superior quality, along with supplying parts, components and rebuild services to our customers allowing them success as low cost producers in the underground mining industry.

For additional information contact:

### **JOY MIDWEST REGION**

Mt. Vernon Facility  
Phone: 618-242-3650  
Fax: 618-242-8509



**JOY MINING MACHINERY**  
A Harnischfeger Industries Company



**Frontier-Kemper Constructors, Inc.**

**Heavy Civil & Mining Construction**

**Shaft Sinking  
Raise Boring  
Tunneling  
Mine Development**

**P.O. Box 6690  
Evansville, Indiana 47719-0690  
812-426-2741  
[information@frontier-kemper.com](mailto:information@frontier-kemper.com)**

# ILLINOIS MINING INSTITUTE



JH SERVICE COMPANY, INC.

(A RON-MAR ENTERPRISES, INC. COMPANY)



MINE CABLE SERVICE, INC.

## PRODUCT LISTING

### Cable Repair

- Cable Reconditioning
- Cable Terminations - Potheads
- Coupler Installations
- Cable Re-spooling
- Emergency Field Work (Certified) Surface/Underground
- Bore Hole/Sub-Station Work
- Siemens-Repair Specialist

### Wire & Cable Mining & Industrial

- MPF-GC - SHD-GC - SHD + CGC
- G-GC - G - W - Bare Copper
- Power Cable - So Cord
- Welding Cable - TC Control
- Jumper Cable - Electronic
- Building Wire - Instrumental
- Hi-Temp - Flexible Cables

### Trolley Material

- Phoenix - Hardware & Accessories
- Mine-Mill Transit Systems
- Trolley Wire
- Railbonds/Crossbonds

### Couplers - Connectors - Plugs

- High/Low Voltage Couplers/Connectors
- JH Pump Connectors/Posi Clamps
- XP-Plugs/Connectors

### Splicing Materials & Hardware Items

- Tape/Insulating Products
- Cable Splice Kits
- Hi-Voltage Termination Kits
- Heat/Wrap Kits
- Connectors - Parallel/Butt
- Crimping Tools - Mechanical/Hydraulic

### Electrical/Related Items

- Hi-Voltage Gloves
- Glove/Blanket Testing
- Cable Guard - M-SHA Accepted
- C.S.I. Machine Lighting
- Hi-Voltage Testers (15-30 KVA)
- Insulation Testers - 2500 V

### Rubber Products

- Hydraulic Hose Repair

### Machine/Fabricating M.C.S.

- Complete Fabrication Work
- Small Machine Work
- Cable Sleds - Metal
- Cable Jigs/Pullers

## SERVICE LOCATIONS:

Bellaire, OH - 1-800-526-3547  
Coeburn, VA - 1-800-435-5553  
Fairmont, WV - 1-800-624-0635

Elberfeld, IN - 1-800-317-4906  
West Frankfort, IL - 1-800-231-2143

**SERVICE / QUALITY / INTEGRITY**

**OLD BEN COAL COMPANY  
ZEIGLER #11 MINE  
CENTRAL CLEANING PLANT**



Zeigler #11 Mine  
13101 Zeigler 11 Road  
PO Box 369  
Coulterville, IL 62237  
618-758-4400

Central Cleaning Plant  
12626 Sarah Road  
PO Box 369  
Coulterville, IL 62237  
618-758-4503

## Put an end to costly concrete stoppings.



## Jack Kennedy standard steel stopping system is effective, efficient, economical.

Jack Kennedy steel stoppings for controlling ventilation air in underground mines are a proven economical alternative to laborious, time-consuming concrete blocks.

One-foot-wide telescoping steel panels, quickly installed under pressure, yield to ground heave and pillar expansion to maintain a tight, sure seal. Use them for permanent stoppings or re-use again and again as temporary installations. Man doors are available.

Send today for free catalog showing our full line of products for the mining industry.



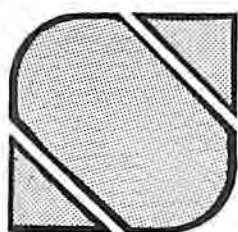
**Jack Kennedy  
Metal Products & Buildings, Inc.**

P. O. Box 138 Taylorville, Illinois 62568

Phone (217) 287-7231 • FAX (217) 287-7232

KEEP THINGS MOVING,  
count on SEMCOR and Scandura for

- USFLEX Rubber Belting and
- Goldline PVC Belting



**SEMCOR**

5432 HIGHLAND PARK DRIVE  
ST. LOUIS, MO. 63110  
PHONE (314) 371-4777

*Compliments of*



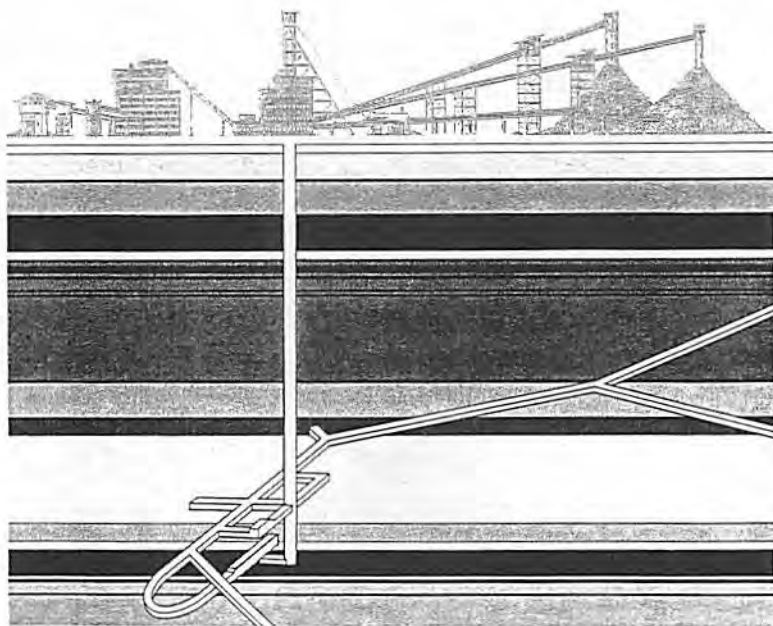
INSIDE KY 502-821-2889  
OUTSIDE KY 800-735-3726

P.O. DRAWER 665  
548 SOUTH MAIN ST.  
MADISONVILLE, KY 42431

ILLINOIS MINING INSTITUTE



**GUNTHER-NASH  
MINING CONST. CO.**



**MINING INDUSTRY CONSTRUCTION**

**UNDERGROUND—SHAFTS, SLOPES, TUNNELS, DEVELOPMENT**

**SURFACE—MATERIAL HANDLING SYSTEMS, STEEL ERECTION,  
PLANT MAINTENANCE**

## ***Outfitting Miners With Safety & Rescue Products For Over 50 Years***



**M**organtown-National Supply offers a full range of specialized products to meet your mine safety and rescue requirements. Emergency rescue equipment is stocked on a standby basis, ready for immediate delivery if an emergency occurs.

We are the exclusive U.S. distributor of the Biomarine BioPak self-contained breathing apparatus for mine rescue operations. The BioPak 240 provides a four hour positive-pressure supply of clean air.

We also stock fire-fighting equipment, gas monitors, personal safety products and first aid supplies.

These and other safety-related products are on-hand and ready-to-go in all 10 Morgantown-National Supply service centers across the U.S.



**MORGANTOWN - NATIONAL  
SUPPLY, INC.**

17266 North IL Hwy. 37

Mount Vernon, IL 62864

(618) 244-6066 • (800) 695-6672

FAX: (618) 244-7983

# WOODRUFF SUPPLY CO. INC.

**Benton, Illinois**  
**(618) 439-9451**

Aeroquip Hose & Fittings  
Band-It Strapping Material  
Bow Saws & Blades  
J.B. Braswell U-Joints  
Brown Plastic Brattice  
Chain Hoist  
Chalk #888  
Clevis Grab Hooks & Slip Hooks, Etc.  
Connecting Wire & Shot Fire Cable  
Crosby Rope Clip's, Etc.  
Discharge, Suction & Rock Dust Hose  
Distilled Water  
Dixon Valve & Couplings  
Drinking Water  
Dust Bags, Powder & Tools Bags  
Electric Chain Saws  
Electrical Cable Cutters  
Electrical Connectors  
General Electric Ballast  
Gustin Bacon Mechanical Pipe Fittings  
Hose Conduit & Trolley Wire Guard  
Lighting — Mine Machine Headlight  
Mechanic Wire  
Metal Drain Pipe  
Mine Rewire Cable  
Mine Spray Hose  
Mine Vent Tubing  
Mining Machine Parts, Inc.  
Naphtha  
Panduit Electrical Connectors  
Plastic Drain Tile  
Plastic and Jute Brattice

**Madisonville, Kentucky**  
**(502) 821-3247**

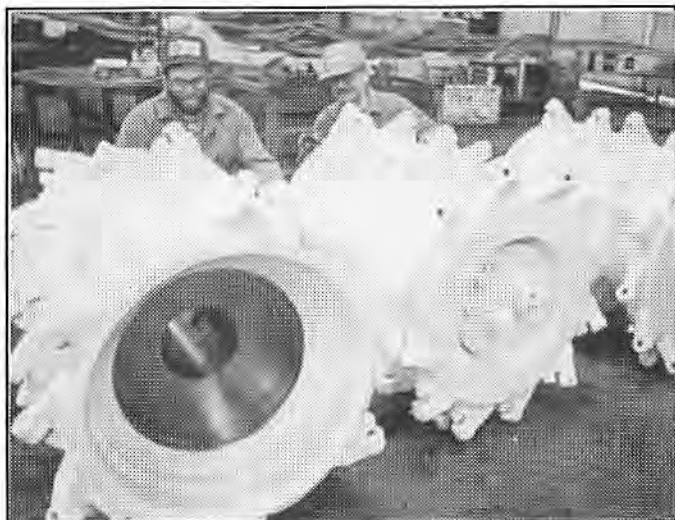
Plastic Pipe & Fittings  
Plymouth Tapes  
PTC Link Belt Roller Chain, Shuttle Car  
Feeder Breaker, Owens & Stamler  
PVC Pipe Fittings  
Red Oxide Paint  
Rome Mining Cable  
Rope Dogs —  $\frac{3}{8}$ "- $\frac{3}{4}$ "  
Safety Cans — 5 gal.  
Security Light — Quartz & Mercury  
Shawmut Fuses  
Skirt Board Rubber  
"SO" Cable  
Stainless Worm Clamps  
Steel Pipe — Grooved & Threaded  
Steel Shelving & Bins  
Templeton Kenly Mechanical & Hydr. Jacks  
Track Bolts & Spikes  
Trolley Splices & Wire Hangers, Etc.  
Turnbuckles  
Union Carbide Batteries & Brake Fluid  
Union Shuttle Car & Feeder Chain  
Water Dummy Filler Guns  
Wayne Sump Pumps  
SK Wellman Clutch Disc  
West Virginia Armature Company  
Westinghouse Light Bulbs  
Whitney Blake Telephone Cable  
Wire Rope  
Wire Tie  
Wood Fiber  
ZEP Hand Cleaner

*Jim Atterberry, Sales Representative of Illinois*

MANUFACTURERS OF:

Shuttle Car, Feeder Breaker Flights  
Rite Crete Products — Mine Sealant Products

# Tons of Steel Tons of Coal



At Phillips tons of steel can sometimes mean tons of coal. Our number one goal is to get you back in coal production as soon as possible. By stocking core cutter drums, gear cases and more we can react fast to your emergency needs. This commitment to service is just what you've come to expect from Phillips. It's what you'll find everytime you turn to us.

**Phillips**  
**MACHINE SERVICE**

Harper Industrial Park / P.O. Box 1245 / Beckley, WV 25802  
**(304) 255-0537**

# TOWERS MINE TOOL, INC.

P.O. Box 133

Christopher, Illinois 62822

618/724-4967

Fax: 618/724-9288

**AFTER HOURS OR EMERGENCY SERVICE CALL  
618/724-2838 or 618/724-2904**

## ***Quality & Service Guaranteed***

Internal Dust Collecting Rods "Drill Steel" Manufacturers  
Serving the Coal Industry For Twenty Years.

Drill Your Roof With the "Golden Rods".

Seven Days & Nights A Week Delivery When Requested.

We Re-Build & Re-Work Drill Steel That We Sell At A  
Very Reduced Price "Good As New". Our Cost Cutting  
To You Saves 50 to 60%. Our Other Items Include

The Following:

Drill Chucks —All Types

Scaling or Pry Bars All Types "Heat Treated"

New Dust Hog Roof Bits

Roof Bolt Wrenches —Two Types

Hex Combination or 1 1/8" Square

***Give us a call for any special built drill steel  
all kinds and types. (No welds of any type or kinds  
in our drill steel) All hot forged weld free drill steel.***

Rick Towers, President

Tom Towers, Consultant

# **KR Kirby Risk Electrical Supply**

*Responsive Service . . . Quality Products*

**Your source for Advance, Airmaster, Aitken,  
Allen-Bradley, Amprobe, Appleton, B-Line, Baldor,  
Blackburn, Burndy, Bussmann, Carol Cable,  
Chromalox, Ericson, Federal Signal, General Elec-  
tric, Greenlee, Hubbell, Ideal, Klein, 3M, Panduit,  
Ray-o-vac, Red Lion, Rees, Reliance Motors,  
Robroy, Simpson, Sola, Sylvania, Thomas and  
Betts,  
Yale Hoists,  
and numerous other quality brands.**

**Kirby Risk Electrical Supply**

**11381 Rend City Road**

**Benton IL 62812**

**Phone: (618) 724-2415**

**(800) 642-2471**

**Fax: (618) 724-4550**

**E-mail: benton@kirbyrisk.com**

**Other Illinois locations in Centralia, Danville, Effingham, Macomb,  
Normal, Olney, and Peoria**

# **NAYLOR...** *The Pipe You Can Count On For Total Service*



Whatever your piping needs, you can depend on Naylor to meet both your standard and special requirements.

For general service such as water supply, de-watering, compressed air and ventilating, Naylor can provide spiralweld pipe of basic carbon steel in either the lockseam or butt weld construction.

For abrasive service such as dredging, sand and gravel conveying and tailings, product or slurry lines, Naylor can supply spiral butt weld pipe in special analysis, abrasion-resistant steel.

In addition to pipe ranging in sizes from 4" to 72" in diameter and thicknesses from 14 gauge to  $\frac{1}{2}$ " wall, Naylor offers a complete line of fittings, fabrications and connections including the one-piece positive type Wedgelock coupling. Special coatings and linings to meet your particular requirements round out Naylor's total service.



## **NAYLOR PIPE COMPANY**

1230 East 92nd Street

Chicago, Illinois 60619-7997

Phone: (773) 721-9400 • FAX (773) 721-9494

# **INCREASE DRAGLINE PRODUCTIVITY**



**Coal Research Center**

Southern Illinois University

Carbondale, Illinois 62901  
(618) 536-5521



Field Office (800) 547-4751

FAX (270) 258-9204

Main Office (800) 332-3308

FAX (304) 274-4184

**TIM SHULTZABARGER**

*Account Representative*

**DU PONT SPECIALTY CHEMICALS**

Potomac River Works

RR 2, Box 217

Martinsburg, WV 25401

Home (270) 826-8201

Car (270) 831-3494

## **Farrar Pump & Machinery Co.**

1701 S. big Bend Blvd.  
St. Louis, Missouri 63117

Phone 1-800-752-1050

**GORMAN-RUPP**

**ARO**

**"EVERYTHING IN PUMPS"**

**Rollet Bros.**



**Trucking Co.  
Incorporated**

GENERAL HAULING

227 Hwy M  
PO Box 31  
PERRYVILLE, MO 63775

**DAVID F. ROLLET**

**(573) 547-2573  
FAX: (573) 547-2574**

**COMMERCIAL TESTING & ENGINEERING CO.**

EXECUTIVE OFFICES: 1919 S. HIGHLAND AVE., SUITE 210-B, LOMBARD, IL 60148



- ▲ COAL SAMPLING AND ANALYSIS
- ▲ COAL WASHABILITY REPORTS
- ▲ PREPARATION PLANT PERFORMANCE TESTS
- ▲ COAL CARBONIZATION ASSAYS
- ▲ ENVIRONMENTAL TESTING

OVER 50 BRANCH LABORATORIES THROUGHOUT  
THE UNITED STATES

IN ILLINOIS, INDIANA, MISSOURI AND KENTUCKY

South Holland, IL  
(708) 331-2900

Henderson, KY  
(270) 827-1187

St. Louis, MO  
(502) 827-1187

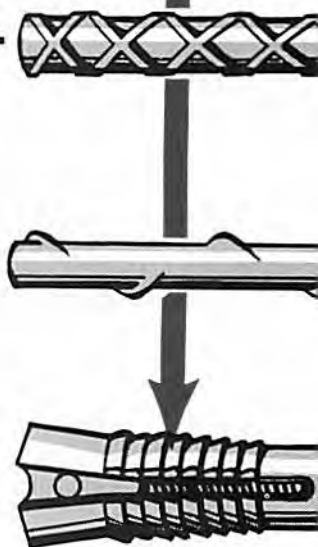
**BOLT IT BETTER WITH**

# ennmar

**Most innovative roof control products in the industry**

## **Keystone Patented INSTa'L Mix Bolt System**

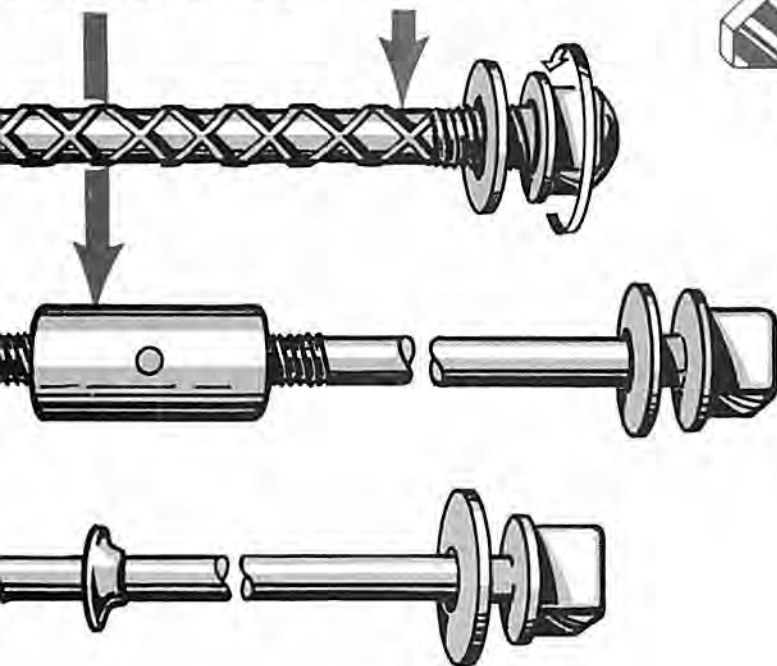
- Furnished in three styles for varying seam heights and torque tension applications.
- Uses mechanical shell and resin for greater anchorage.
- Complete installation in eight seconds or less.
- Single spin cycle in one direction.
- Shear pin in expansion plug delays expansion of shell until resin mixes.
- Increased anchorage capacity; torque bleed-off



- The ultimate tension resin system for all seam heights.
- No bolt bending.
- Proven shear pin system in patented coupler.
- System permits prebolting of overcasts for 50% savings.
- With mine roof channels or mats in combination with other devices, savings of 25% to 140%.
- Proven usage in longwall head gate and tailgate entries as supplemental or primary support.
- Prevents roof sag and lateral roof movement.
- Furnished exclusively with new improved J-Bar for better mixing, stronger threads and greater anchorage capacity.

### Keystone Torque Tension Rebar

- Ideal for high coal.
- Thread on bottom of rebar.
- Dome nut or shear pin nut available.
- Nut tightened from bottom.
- Simple—inexpensive.



*Look to Jennmar for the complete  
roof control package,  
including resin.*



**Jennmar Corp.,**

A Frank Calandra Industry  
258 Kappa Drive, Pittsburgh, PA 15238  
Phone: 412 963-9071 Telex: 559979 JEN PGH  
FAX: 412 963-9767

**Sales Offices and Plants:** Pittsburgh, PA 412 963-9071;  
Cresson, PA 814 886-4121; Reedsville, WV 304 864-3601;  
Winchester, KY 606 744-9600; Tazewell, VA 540 964-2107;  
Clearfield, UT 801 775-0176



# Filter Self-Rescuers Are Obsolete

ocenco M-20 SCSR puts lifesaving oxygen at arm's reach.



OCENCO M-20 approvals:  
United States: MSHA/NIOSH TC-13F-269  
Republic of South Africa: GME 14/6/14/5  
Australia: MDA BA 2804  
Others pending



## M-20 Self-Contained Self-Rescuer

- Self-contained, operates independent of mine air
- Compressed oxygen, automatic activation
- Quick and simple to don
- Low initial cost, low maintenance cost
- Inexpensively refurbished
- Fifteen year service life
- Thousands in use worldwide

Contact us for an on-site demonstration of the M-20  
and our long duration EBA 6.5 SCSR.



**ocenco**  
INCORPORATED

Safety through Innovation

LakeView Corporate Park  
10225 82nd Avenue  
Kenosha, WI 53142-7737  
Phone (414) 947-9000  
Fax (414) 947-9020

# HOPCROFT ELECTRIC, INC.

618-288-7302

606 Glen Crossing Road  
Glen Carbon, Illinois 62034

FAX 618-288-7307

*Serving the mining industry for over 60 years*



**RICK NEWMAN**  
Branch Manager

Green & Maple Streets  
P.O. Box 341  
Greenville, KY 42345  
Tel (270) 338-3971  
(800) 462-2377  
Fax (270) 338-5617  
Res (270) 338-6096

Member Steel Service Center Institute

**Plate: A-36, T-1 (A-514), Corten, AR360, AR400, AR500, Floor Plate**

|                                                              |                                                    |                                                             |
|--------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------|
| <b>SHEETS, BEAMS, ANGLES<br/>CHANNELS FLATS &amp; ROUNDS</b> | <b>Expanded Metal and<br/>Bar Grating — Tubing</b> | <b>COLD DRAWN ROUNDS &amp;<br/>SQUARES 1018, 1045, 4140</b> |
| Pipe — New & Used<br>1/8-IN TO 48-IN.                        | Used & Surplus Material<br>of All Types            | Shearing, Sawing,<br>or Flame Cutting                       |

**CRANE SERVICES PROVIDED**

**CALL TOLL FREE 800/462-2377**

# OVER 5,803,200 HOURS OF COAL PREP ENGINEERING EXPERTISE.

R O B E R T S & S C H A E F E R

For more than 90 years,  
Roberts & Schaefer  
has been the leader for  
quality engineering  
solutions in all phases  
of coal preparation,  
material handling,  
concept design,  
total systems and  
process engineering,  
detailed engineering,  
construction  
management, start-up  
and commissioning.



From small, specialized  
projects, to total turnkey  
operations, we have the  
expertise you need. With  
an international reputation  
for responsive, hands-on  
problem solving, you can be  
sure we'll work with you to  
engineer a solution that fits  
your project requirements.

*To learn more about  
Roberts & Schaefer,  
call us today.*



**Roberts & Schaefer Company**

Corporate Office  
120 S. Riverside Plaza  
Chicago, IL 60606  
312-236-7292 phone  
312-726-2872 fax  
bobw@eni.com e-mail

H O W   T H E   W O R L D   P R O C E S S E S   I T S   R E S O U R C E S

# CMI



Centrifugal  
& Mechanical  
Industries

For more than 60 years, CMI has offered the most innovative centrifugal process equipment available to the operating members of the Illinois Mining Institute. On this, your 108th anniversary, we at CMI pledge our continuing support to the Illinois Mining Institute, and our promise to continue to develop the most cost effective solutions to the dewatering needs of the Coal Industry. From...

Innovative  
Design,  
To...



Unsurpassed  
Service &  
Support...



Superior  
Manufacturing,  
To...



... All of the things that you have come to expect from your leading O.E.M. We look forward to serving the needs of the Illinois Mining Institute for many years to come.

***Be sure to ask about free on-site testing with the CMI TBS!***

**CENTRIFUGAL & MECHANICAL INDUSTRIES**

**201 President St., St. Louis, MO. 63118**

**Phone: (314) 776-2848**

**Fax: (314) 776-2918**

***Visit us at [www.CMI-Centrifuges.com](http://www.CMI-Centrifuges.com)***



## FLANDERS ELECTRIC OF ILLINOIS

1000 North Court St.

Marion, IL 62959

(618) 993-2681

FAX (618) 993-6081

### MOTOR REPAIR

- 24 HOUR EMERGENCY SERVICE
- COMPLETE MACHINE SHOP
- VACUUM-PRESSURE-IMPREGNATION SYSTEM
- AUTHORIZED WELDER REPAIR CENTER
- SUBMERSIBLE PUMP REPAIR
- 500 HP DYNAMOMETER
- ELECTRICAL ENGINEERS ON STAFF
- 2 SHIFT OPERATIONS
- INHOUSE AC & DC DRIVE REPAIR
- CONTROLLED TEMPERATURE BURN-OUT AND BAKE OVENS
- 17,000 LB. DYNAMIC BALANCER
- IEEE 429 IMMERSION TESTED REWINDS
- UNITY PLUS REWINDS

### EQUIPMENT SALES

**MAGNETEK**  
CENTURY  
LOUIS ALLIS  
INDIANA GENERAL D.C.  
UNIVERSAL

**BENSHAW**  
SOLID STATE STARTERS

**SAFTRONICS**  
SOLID STATE STARTERS

\*Distributed by Flanders of Indiana

**SQUARE D**  
MOTOR CONTROLS  
AC DRIVE SYSTEMS  
CIRCUIT BREAKERS  
PROGRAMMABLE CONTROLLERS  
TRANSFORMERS  
DISTRIBUTION EQPT.

**GOULD SHAWMUT**  
FUSES  
FUSE BLOCKS  
TAYLOR WIRE DUCT

**TOSHIBA**  
MOTORS  
MOTOR CONTROLS  
VACUUM EQUIPMENT  
AC DRIVE SYSTEMS  
PROGRAMMABLE CONTROLLERS\*  
VACUUM RETROFITS

**SIEMENS\***  
Motors  
DC Controllers  
PLC's

### FIELD SERVICES

- FIELD ENGINEERING STAFF
- AC & DC DRIVE INSTALLATION
- PROGRAMMABLE CONTROL SYSTEMS
- SWITCHGEAR RETROFIT
- CUSTOM CONTROL SYSTEMS
- FIELD BALANCING
- VIBRATION ANALYSIS
- AC & DC DRIVE SERVICE

---

**FLANDERS ELECTRIC OF ILLINOIS**  
**(618) 993-2681**

# Motor Skills

We've  
got 'em



In Illinois Mining Country your total source for electro-mechanical equipment, repair and service is Decatur/Mt. Vernon Industrial Electric.

With two strategically placed service centers and 24-hour emergency service, DIE/MVE support is always minutes away from any Illinois mining site.

DIE/MVE engineers can inspect and repair your electro-mechanical equipment on-site, or carry your equipment to the nearest DIE/MVE center for repair and return it to your operation fast.

Decatur/Mt. Vernon Industrial Electric is a distributor for most of the electro-mechanical equipment you use now. So you should never suffer a delay while waiting for parts.

For complete, dependable, electro-mechanical service... your total source is Decatur/Mt. Vernon Industrial Electric.

- A/C Motor Repair and Testing  
Mush and Form Coil Rewinding  
Surge, High Pot and Megger Testing  
Full Voltage Test Thru 4160V
- D/C Motor Repair and Testing  
Field Interpole and Armature Rewinding  
Surge and High Frequency Testing  
Full Voltage Testing Thru 500V
- Mechanical Service  
Complete Machine Shop  
IRD Analysis/Dynamic Balancing  
200T Horizontal Press • 30T Crane Bay
- 24-Hour Service

**DECATUR/MT. VERNON**  
**industrial electric**

**YOUR  
TOTAL ELECTRO-MECHANICAL  
SOURCE**

DECATUR Industrial Electric  
MT. VERNON Electric

1500 N. 22nd Street • Decatur, Illinois 62525 • 1-800-252-1598 • 217-428-6621  
1313 Harlan Road • Mt. Vernon, Illinois 62864 • 1-800-233-8830 • 618-244-1212



**Phillip E. Bennett**  
National Sales Manager

# Reaco

Battery Service Corporation

13756 Route 37  
Johnston City, IL 62951  
Office (618) 983-5441  
Cell Phone (618) 407-4802



**TABOR MACHINE**

*Company*

*"The Vibrating People"*

**MANUFACTURERS OF VIBRATING SCREENS AND RE-  
PLACEMENT PARTS FOR ALL TYPES OF VIBRATING  
SCREENS.**

Box 3037, Bluewell Station  
Bluefield, W. Va. 24701  
304-327-2431



1601 E. DeYoung • Marion, IL 62959  
Phone (618) 993-1170 • Fax: (618) 993-6181

***Representing***  
**Atlas Copco Wagner, Inc.**  
**Stamler Corporation**  
**Getman Corporation**  
**Atlas-Copco, Inc.**

**Products:**

- Stamler Battery Coal Haulers
- Stamler Continuous Haulage
- Stamler Feeder Breakers
- Stamler Bunkers
- Stamler Reclaim Feeders
- Wagner Scoops, Trucks, Shield Haulers
- Oldenburg Diesel Utility Equipment

## **We know the territory.**

We're Hanson Engineers Inc., a multidiscipline engineering and environmental consulting firm with offices nationwide. Our staff combines years of experience in mine reclamation and other services to the mining industry with a thorough grasp of the regulatory requirements you face. We can help you find solutions to your engineering and environmental challenges.



**HANSON  
ENGINEERS**  
INCORPORATED

*Global vision, local solutions*

**217/ 788-2450**

1525 S. Sixth St. • Springfield, Ill. 62703

*Engineers, Architects & Scientists*

**Offices nationwide**

**[www.hansonengineers.com](http://www.hansonengineers.com)**



**Master of The Air**

**P. O. Box 283  
McLeansboro, IL 62859  
Bus. 618/643-2588**

**Gary Bruce  
President  
Res. 618/439-4517**

## Continually On Top

Fansteel VR/Wesson Lexington has designed our carbide tipped bits with our continuous miner users in mind.

If you're looking for a bit that has been designed for fast penetration with less dust, a tapered cone that offers protection to the block and less drag, then Fansteel VR/Wesson Lexington has the variety of styles and grades you need.

We back up these carbide tipped bits with our blocks designed for quick-change.

Let us keep you "CONTINUALLY" on top, please return the enclosed reply card for more information.



**Fansteel**  
**VR/Wesson-Lexington**

lilse road, lexington, kentucky 40575

**606-252-1431**

**Martin Marietta Aggregates**



**FREDONIA QUARRY  
FREDONIA DUST PLANT  
CAVE-IN-ROCK DUST PLANT**

**SALES OFFICE**

125 AUGUSTA PLACE  
PADUCAH, KENTUCKY 42003  
270-554-0804  
270-554-0857 (FAX)

Serving the coal industry with Rock Dust, land  
reclamation and water purification products.

**Roe Machine Company**

*Serving Mining, Industrial and Construction*

**Since 1959**

**Willard Strain**  
President

P. O. Box 531 • West Frankfort, Illinois 62896  
Tel. 618-983-5524 ▲ 983-8132 ▲ 937-2509  
Fax. 618-983-8390 ▲ Res. 618-937-3222



## Sandvik Cap Carbide Tools Outlast Standard Insert Carbide Tools up to 2½ to 1

Meet the family of new Sandvik tools, with cap carbide, for longwall shears and continuous miners. They can save you important dollars every shift. That's because, under abrasive cutting conditions, they outlast and outperform standard, conventional plug type tools by up to 2 1/2 times—and more. No wonder they're fast becoming the choice of operators with the bottom line in mind.

There are lots of good reasons for switching. Here are some:

- Extended tool life means less down time, greater cost efficiency
- Avoid premature failure due to steel wash
- Reduce energy consumption
- Help cut down dust more effectively
- Reduce the potential for frictional ignition



Sandvik MGT • PO Box 639, Bristol, VA 24203-0639

Continental U.S. and Canada, Phone: 800-868-6657; Fax: 800-220-5224

Outside U.S. and Canada, Phone: 540-669-8311; Fax: 540-669-7130

**Sandvik has a complete product line of ROOF BITS, DRILL RODS,  
and RESIN for your roof control needs.**

# MINING DIRECTORIES!

**Our three mining directories cover the continental U.S. and Alaska! Researched and updated annually, these directories are the most complete and accurate available. Gives you all of the information you need on each mine such as physical location, mother company, phone number, operation, commodity, and much more! Organized by both state and mother company, they are easy to use to locate and contact the mine you are interested in. Only \$29.95 per book (plus \$6.00 S&H).**

**For more information or to place an order call 1-800-624-7212. Or send or check to Miners News, P.O. Box 5694, Boise, Idaho**

THE  
**MINERS NEWS**

**Will blow  
you away!**



Packed with all of the up to date information you need to stay on top of the fast paced mining industry! You'll find each issue full of the latest industry news -- mining companies, products, people, environmental law, and international mining as well as compelling stories of the history of mining and the people who impacted the industry.

All for only \$25.00 per year USA! 2 years..\$45.00, 3 years..\$65.00

Canada & Mexico - 1 year..\$35.00, 2 years..\$60.00, 3 years..\$85.00 All other countries - 1 year..\$70.00

To subscribe or to get advertising rates call 1-800-624-7212. Or send check to P.O. Box 5694 Boise, Id. 83705

# ILLINOIS MINING INSTITUTE

SALES      RENTALS    PARTS      SERVICE

FOR ALL YOUR MINING, RECLAMATION AND COAL PREPARATION  
EQUIPMENT NEEDS

**BRAMBLES**

**Equipment Services, Inc.**

(formerly CMC)

OWENSBORO, KY  
800-626-8406

SVEDALA (ALLIS-CHALMERS) CRUSHING & SCREENING EQUIPMENT  
KAWASAKI LOADERS    HYUNDAI EXCAVATORS    ALLISON TRANSMISSIONS



**STANDARD LABORATORIES, INC.**

8413 Peabody Rd, Freeburg, IL 62243 618/539-5836

Coal Sampling & Analysis  
Coal Washability Studies  
Prep Plant Performance Studies  
Water & Environmental Analysis  
Soil & Overburden Analysis  
Rock Mechanics

*"Where Quality Is Standard"*

Corporate Headquarters, 8541 River King Drive Charleston, West Virginia 25303



**The Wescott Bushing  
Makes the Difference.**

*...because it's  
forged, not cast,  
from 11-14%  
Manganese Steel.*

**Specify  
The Wescott Bushing  
for dragline and shovel repairs.**

*Send for our literature on the finest wrought  
Manganese Steel Bushings available anywhere.*

**Wescott Steel Inc.**

425 Andrews Rd., Trevoise, PA 19047 (215) 364-3636  
800-223-3887 FAX: (215) 322-5785





**Wil-Mar Hydraulics  
& Machine, Inc.**

Highway 41 North  
Madisonville, KY 42431  
Phone (502) 322-8654  
Fax (502) 322-8606

*Serving:*

**THE COAL MINING • INDUSTRIAL • CONSTRUCTION • AGRICULTURAL INDUSTRIES**

*Specializing in:*

**REBUILDING AND MANUFACTURING ALL TYPES OF HYDRAULIC CYLINDERS,  
PUMPS, MOTORS, DIRECTIONAL & FLOW CONTROL VALVES.**

*Full Stock of:*

**CHROME BAR, BRONZE, CAST IRON, ALUMINUM,  
HONED STEEL TUBING, PACKING AND SEALS**

*Mine Equipment Exchange Units Available For:*

**EIMCO • FLETCHER • GALIS • JOY • LEE NORSE • LONG AIRDOX • OWENS • STAMLER**



**Commercial Shearing - pumps & motors**

**Dynapower - pumps & motors**

**Eaton/Char-Lynn - motors**

**Denison - pumps & motors**

**Ross - motors & steering valves**

**Sunstrand - pumps & motors**

**Vickers - valves, vane & piston pumps**

**Hydrastatic - pumps & motors**



***We also sell and service the following items:***

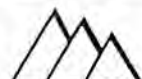
**Air Compressors • Heat Exchangers**

**Liquid Transfer Pumps • Torque Hubs**

**Vacuum Pumps (Blowers) Roots and Sutorbilt**



**24 Hour Emergency Service**



## **TRIUNE, INC.**

GENERAL OFFICES 2328 I-70 FRONTAGE ROAD, GRAND JUNCTION, COLORADO 81505 (970) 242-2200

AREA OFFICES PRICE UT, ROCK SPRINGS WY, GILLETTE WY, CARLSBAD NM

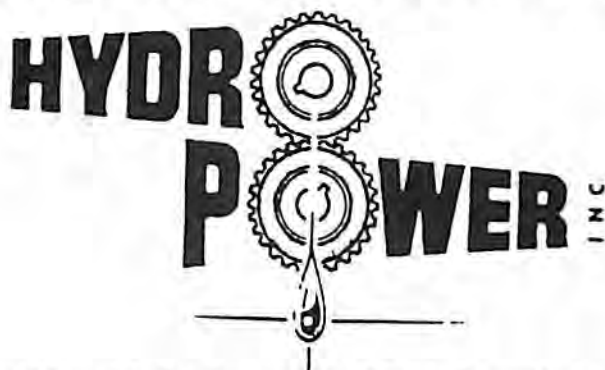
NEWEST LOCATION: HENDERSON, KY (270) 869-0072

### **SPECIALIZING IN PRODUCTS & SYSTEMS FOR MINING**

#### **TRITRONICS DIVISION**

Specializing in the Repair of Electronic Equipment, Methane Monitors  
Spotters, Ground Fault Monitors, Anemometers, Mine Monitoring

### **SPECIALISTS IN APPLICATION ENGINEERING**



- **PUMPS** – ABS, Goulds, Vertical, ITT-AC, Paco, Marlow, Warren Rupp
- **POWER TRANSMISSION** – Browning, Dodge, Reliance, Eurodrive, Toshiba
- **HOISTS** – Coffing, Ingersoll-Rand, Robbins & Myers, Wright, Yale

1221 Hulman Street  
Terre Haute, IN 47802  
812-232-0156

1133 West Mill Road  
Evansville, IN 47710  
812-425-1657

3192 North Shadeland Ave.  
Indianapolis, IN 46226  
317-541-1500



## OUR HERITAGE

Peabody Coal Company was born in Illinois over 100 years ago, founded in 1883 by Francis S.



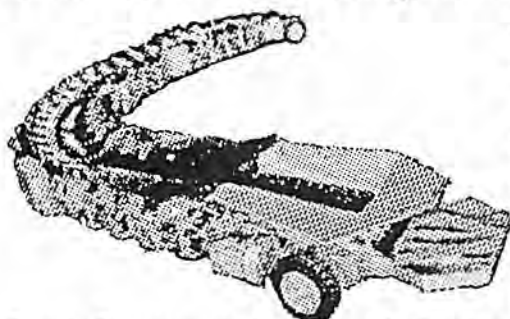
Peabody as a retail coal business in Chicago, with start-up capital of \$100 invested in a two-wagon mule. By 1895

the cornerstone was firmly laid with the opening of Peabody Coal's first mine in Williamson County, Illinois. Mr. Peabody also acquired thousands of acres of the Illinois Basin's vast coal reserves. More Illinois mines followed as the future began to unfold. Peabody Coal's history mirrors the history of America, through periods of prosperity and growth and through dark days of war and depression.

***Peabody is an innovative, growing  
solutions that help customers***

## OUR FUTURE

The men and women of Peabody Coal Company remain committed to being the industry's safest



and most productive coal miners, still a part of Peabody's proud tradition. Today, Peabody

Coal Company is part of Peabody Group, the world's largest coal company. Peabody coal products fuel more than 9% of U.S. electricity and 2.5% of the world's electricity. Peabody Group's mission is to be a worldwide supplier of low-cost energy, which contributes to economic prosperity and a better quality of life.

***supplier of low cost energy and  
succeed in changing markets.***

**Peabody**



## HEAD OF ITS CLASS

If you're looking for a highly productive, efficient, reliable wheel loader that's comfortable enough to make long shifts seem shorter, look no further than the all-new Komatsu WA380-3 Avance wheel loader. From its Proportional Pressure Control (PPC), dual-speed hydraulics to its human-engineered operator's cab, the WA380-3 sets new standards. It does more work, faster and with less effort, than other loaders in its class — to help you win more bids and stay on top. To find out more, ask us about the Komatsu WA380-3 Avance wheel loader.

**KOMATSU**



**SPRINGFIELD, IL (800) 252-2926 • BOLINGBROOK, IL (800) 826-9608 • LAKE-IN-THE-HILLS, IL (800) 765-2635 • CARTERVILLE, IL (800) 274-7202 • BRIDGETON, MO (800) 274-7230 • CAPE GIRARDEAU, MO (800) 274-7210 • COLUMBIA, MO (800) 274-7212 • PALMYRA, MO (800) 274-7214**

ILLINOIS MINING INSTITUTE



# CENTRAL ILLINOIS STEEL CO.

## MINE ROOF PLATES-MATS

P.O. BOX 78  
CARLINVILLE, IL 62626  
217/854-3251

***We Deliver Immediately On Our Fleet of Trucks  
Anywhere in the U.S.A. or Canada***

*Tim Millard*

*Representing The Best In Equipment And Service  
For The Material Handling Industry*



**POWER  
TECHNIQUES  
INCORPORATED**

*Conveyor Services  
Sales & Engineering*

Sales & Service For: Gordon Conveyor Belt Cleaning Accessories & Simplicity Slider Beds; PS Doors; Perma Automatic Lubricators; MESCO Idlers; Global Mfg. Industrial Vibrators & Air Blasters, Big Ben Skirt Board Clamps, Rema Specialty Chute Linings and Conveyor Belt Products, Conveyor Belt Trappers, Ceramic Idlers, Belt Clamps and Urethane Sheets, Chute Liners and Custom Urethane Castings

Phone: (800) 425-2356

Fax: (618) 432-5869

ALMA, IL 62807

# ADVERTISERS PRODUCTS AND SERVICES INDEX

## BUILDING MATERIALS AND CONSTRUCTION

Allen Lumber Company (P. 110)  
Arneson Timber Company (p. 128)  
Fabick Machinery Company (p. 124)  
Gunther Nash Mining Construction Company (p. 136)  
G. W. Van Keppel Company (p. 100)  
Henry A. Petter Supply Company (p. 129)  
Jack Kennedy Metal Products & Building Inc. (p. 134)  
Metals USA Levinson Steel (p. 149)  
Ritecrete Concrete Products (p. 126)  
Sedgman (p. 105)  
Woodruff Supply Inc. (p. 138)

## CONTRACTORS AND PROFESSIONAL SERVICES (CONSULTANTS, ENGINEERS, DRILLING, ETC.)

Commercial Testing and Engineering Company (p. 145)  
Fosroc, Inc. (p. 107)  
Frontier—Kemper Construction, Inc. (p. 131)  
Gunther—Nash Mining Construction Company (p. 136)  
G. W. Van Keppel Company (p. 100)  
Hansen Engineers Inc. (p. 156)  
Kerco (p. 135)  
Patrick Engineering Inc. (p. 111)  
Power Engineering Inc. (p. 169)  
Reaco Battery (p. 154)  
Roberts & Schaefer Company (p. 150)  
Sedgman (p. 105)  
SIU Coal Research Center (p. 143)  
Stagg Engineering Services, Inc. (p. 100)  
Standard Laboratories, Inc. (p. 162)  
Weir International Mining Consultants (p. 111)  
Woodruff Supply Company (p. 138)

## ELECTRICAL EQUIPMENT (SUPPLIES, MOTORS, CABLES, LAMPS AND REPAIRS)

Altorfer, Inc. (p. 99)  
Ashby Supply Company (p. 108)  
Associated Supply Company (p. 117)  
DuQuoin Iron—Supply Company (p. 124)  
Fairmont Supply Company (p. 122)  
Flanders Electric Motor Services of Illinois, Inc. (p. 152)  
Henry A. Petter Supply (p. 129)  
Hopcroft Electric Inc. (p. 149)  
J. H. Service Company, Inc. (p. 132)

## ELECTRICAL EQUIPMENT (CONT'D)

IBT, Inc. (p. 117)  
Kirby Risk Electrical Supply (p. 141)  
Mine and Process Services Inc. (p. 104)  
Minesafe Electronics (p. 127)  
Morgantown National Mine Supply (p. 137)  
Mt. Vernon Electric Inc. (p. 153)  
Ocenco Inc. (p. 148)  
Reaco Battery (p. 154)  
Triune Inc. (p. 165)

## MINING AND INDUSTRIAL SUPPLIES

Associated Supply Company (p. 117)  
Brambles (p. 162)  
Century Lubricants (p. 119)  
Construction Machinery Corporation (p. 105)  
Duquoin Iron and Supply (p. 124)  
Excell Mining Systems (p. 120)  
Fabick Machinery Company (p. 124)  
Fairmont Supply Company (p. 122)  
Fansteel Inc. (p. 157)  
Gauley Sales Company (p. 113)  
G. W. Van Keppel Company (p. 100)  
Henry A. Petter Supply Company (p. 129)  
J. H. Service Company, Inc. (p. 132)  
Martin Marietta Aggregates (p. 158)  
Midwestern Machine and Hydraulics (p. 119)  
Mine and Process Service, Inc. (p. 104)  
Mine Supply Company (p. 109)  
Morgantown National Mine Supply (p. 137)  
Naylor Pipe Company (p. 142)  
Norris Screen and Manufacturing (p. 101)  
Phillips Machine Service, Inc. (p. 139)  
Raben Tire Company (p. 102)  
Reaco Battery Service Company (p. 154)  
Richwood Industries (p. 121)  
Sandvik, Management (p. 159)  
Sollami Company (p. 123)  
Towers Mine Tool, Inc. (p. 140)  
Wil-Mar Hydraulics, Inc. (p. 164)  
Woodruff Supply, Inc. (p. 138)

## MINING COMPANIES

American Coal Company (p. 113)  
Consolidated Coal Company (p. 114)  
Freeman United Coal Company (p. 98)

### MINING COMPANIES (CONT'D)

G. W. Van Keppel Company (p. 100)  
Old Ben Coal Company (p. 133)  
Peabody Coal Company (p. 166, 167)

### PETROLEUM PRODUCTS AND CHEMICALS

Century Lubricants Company (p. 119)  
Fabick Machinery Company (p. 110)  
Fairmont Supply Company (p. 122)  
Henry A. Petter Supply Company (p. 129)

### POWER TRANSMISSION EQUIPMENT (SERVICE AND PARTS)

G. W. Van Keppel Company (p. 100)  
Henry A. Petter Supply Company (p. 129)  
Hydro-Power Inc. (p. 117)  
IBT Inc. (p. 117)  
Mine and Process Service, Inc. (p. 104)  
Morgantown National Mine Supply (p. 137)  
Reaco Battery (p. 154)

### PREPARATION PLANTS AND EQUIPMENT (SERVICE AND PARTS)

Associated Supply Company, Inc. (p. 117)  
Centrifugal and Mechanical Industries (p. 151)  
Chase Pump and Equipment Company, Inc. (p. 112)  
Construction Machinery Corp.-A Brambles Company (p. 105)  
DuQuion Iron and Supply (p. 124)  
Fairmont Supply Company (p. 122)  
G. W. Van Keppel Co. (p. 100)  
Gunther-Nash Mining Construction Company (p. 136)  
Henry A. Petter Supply Company (p. 129)  
Morgantown National Mine Supply (p. 137)  
Mt. Vernon Electric, Inc. (p. 153)  
Norris Screen and Manufacturing (p. 101)  
Reaco Battery Service Company (p. 154)  
Richwood (p. 121)  
Roberts and Schaefer Company (p. 150)  
Sedgman (p. 105)  
Tabor Machine Company (p. 154)  
Wil-Mar Hydraulics and Machine Inc. (p. 164)  
Woodruff Supply Company (p. 138)

## PUMPS

### (ALL KINDS, PIPE VALVES, FITTINGS, HYDRAULICS)

Chase Pumps and Equipment (p.112)  
DuQuoin Iron and Supply Company (p.124)  
Fabick Machinery Company (p.110)  
Fairmont Supply Company (p.122)  
Farrar Pump and Machinery Company (p. 144)  
G. W. Van Keppel Company (p.100)  
Henry A. Petter Supply Company (p.129)  
Hydro-Power, Inc.(p.165)  
Industrial Process Equipment Company (p.127)  
Midwestern Machine and Hydraulics (p.119)  
Power Techniques, Inc. (p.169)  
Wil -Mar Hydraulics, Inc. (p.164)  
Woodruff Supply Inc.(p. 128)

## RECLAMATION, EROSION CONTROL, GROUND STABILIZATION

DuQuoin Iron and Supply Company (p.124)  
Fabick Machinery Company (p.110)  
G. W. Van Keppel Company (p.100)  
Patrick Engineering, Inc. (p.111)

## RUBBER PRODUCTS

### (TIRES, BELTING AND HOSE)

Associated Supply Company (p.117)  
DuQuoin Iron and Supply Company (p.124)  
Fairmont Supply Company (p.122)  
Gooding Rubber Company (p.115)  
G. W. Van Keppel Company (p.100)  
Henry A. Petter Supply Company (p.129)  
IBT, Inc. (p.117)  
J. H. Service Company, Inc. (p.132)  
Morgantown National Mine Supply (p.137)  
Raben Tire Company (p.102)  
Richwood (p.121)  
Semcor (p.135)  
Woodruff Supply Company (p.138)

## STEEL AND STEEL FABRICATION

### (SCREENS, RAIL, ETC.)

Associated Supply Company (p.117)  
DuQuoin Iron and Supply Company (p.124)  
Fairmont Steel Company (p.122)  
Ford Steel Company (p.118)  
Metals USA-Levinson Steel Company (p.149)  
Morgantown National Mine Supply (p.137)  
Norris Screen and Manufacturing (p.101)  
Wescott Steel, Inc. (p.163)

## SURFACE MINING EQUIPMENT

A. L. Lee Corporation (p.102)  
Continental Conveyor and Equipment Company (p.116)  
Construction Machinery Company-Brambles Company (p.105)  
Fabick Machinery Company (p.110)  
J. H. Fletcher and Company (p.125)  
G. W. Van Keppel Company (p.100)  
Henry A. Petter Supply Company (p.129)  
Phillips Machine Service (p.139)  
Power Techniques, Inc. (p.169)  
Reaco Battery Service Corporation (p.154)  
Roland Machinery Company (p.168)  
Rudd Equipment Company (p.106)  
Wescott Steel, Inc. (p.163)  
Wil-Mar Hydraulics and Mine Supply (p.164)

## TRANSPORTATION (RAILROADS, TRUCKING, BARGE)

Associated Supply Company (p.117)  
Reaco Battery Service Corporation. (p.154)  
Rollet Bros. Trucking Company, Inc. (p.145)

## UNDERGROUND MINING EQUIPMENT (EQUIPMENT, REPLACEMENT PARTS AND REBUILDERS)

A. L. Lee Corporation (Allco) (p. 103)  
Associated Supply Company (p.117)  
Ashby Electric Company (p.108)  
Central Illinois Steel (p. 170)  
Continental Conveyor Equipment Company (p.116)  
Fabick Machinery Company (p.110)  
Fansteel, Inc. (p.157)  
Henry A. Petter Supply Company (p.129)  
J. H. Fletcher and Company (p.125)  
J. H. Service Company (p.132)  
Joy Mining Machinery (p.130)

Kennametal, Inc. (p.96)  
Kirby Risk Electrical Supply Company (p.141)  
Lakeshore Mining Equipment (p.155)  
Midwestern Machine and Hydraulics (p.119)  
Minesafe Electronics (p.127)  
Mine and Process Service Inc. (p.104)  
Morgantown National Mine Supply(p.137)  
Phillips Machine Service (p.139)  
Power Techniques, Inc. (p.169)  
Rabin Tire Company, Inc. (p. 102)  
Reaco Battery Service Corporation (p.154)

## UNDERGROUND MINING EQUIPMENT (CONT'D)

Richwood (p.121)  
Roe Machine Company, Inc. (p.158)  
Roland Machinery Company (P.168)  
Sandvik (P.159)  
Sollami Company (P.123)  
Triune, Inc. (P.165)  
Wil-Mar Hydraulics and Mine Supply (P.164)  
Woodruff Supply Inc. (P.138)

## UNDERGROUND ROOF SUPPORT, SAFETY AND VENTILATION

Arneson Timber Company (P.128)  
Associated Supply Company (P.117)  
Dupont Chemicals (P.124)  
Eagle Seal (P.156)  
Excel Mining Systems (P.120)  
Fairmont Supply Company (P.122)  
J. H. Fletcher Company (p.125)  
J. H. Service Company, Inc. (p. 132)  
Jack Kennedy Metal and Building Products, Inc. (p.134)  
Jennmar Corporation (p.146,147)  
Joy Mining Machinery (p. 130)  
Lakeshore Mining Equipment (p.155)  
Midwestern Machine and Hydraulics (p.119)  
Ocenco, Inc. (p.148)  
Pyro-Chem Corporation (p.97)  
Sandvik Manufacturing (p.159)  
Sollami Company (p.123)  
Towers Mine Tool, Inc. (p.140)  
Triune, Inc.(p.165)  
Wil-Mar Hydraulics and Machine Inc. (p.164)  
Woodruff Supply Inc. (p.138)

## USERS OF COAL (UTILITIES, INDUSTRY, ETC.)

G. W. Van Keppel Company (p. 100)  
Phillips Machine Service (p.139)

## OTHER

Frontier-Kemper Construction (p.131)  
Ford Steel (p.118)  
Hydro-Power Inc. (overhead traveling cranes) (p.165)  
J. H. Service Company, Inc. (cable repair/coupler installations) (p.132)  
Miners News (p. 160,161)  
Mossner Company, Alfred (reprographics/printing) (p.118)  
Sedgman (p.105)  
Sollami Company (p. 123)

## ALPHABETICAL INDEX

- A. L. Lee Corp. (p.103)  
Alfred Mossner Company (p. 118)  
Allen Lumber Company, Inc. (p. 110)  
Altofer, Inc. (p. 99)  
American Coal Co., Inc. (p.113)  
Arneson Timber Company (p. 128)  
Ashby Electric Company (p. 108)  
Associated Supply Company (p. 117)
- Brambles/Construction Machine Corp. (p.162)
- Central Illinois Steel Co./Crown Batters (p.170)  
Centrifugal and Mechanical Inc., Inc. (p.151)  
Century Lubricants Company (p.119)  
Chase Pump and Equipment (p.112)  
Commercial Testing and Engineering Company (p.145)  
Consolidation Coal Company (p.114)  
Construction Machinery Corp./Brambles (p.105)  
Continental Conveyor and Equipment Company (p.116)
- Duquoin Iron and Supply Company (p.124)  
Dupont Chemicals (p.144)
- Eagle Seal (p.156)  
Excel Mining Systems (p.120)
- Fabick Machinery Company (p.110)  
Fairmont Supply Company (p.122)  
Fansteel (p.157)  
Farrar Pump and Machinery Company (p.144)  
Flanders Electric of Illinois, Inc. (p.152)  
Ford Steel Company (p.118)  
Fosroc, Inc. (p.107)  
Freeman United Coal Mining Company (p.98)  
Frontier-Kemper Constructors, Inc. (p.131)
- G. W. Van Keppel Company (p.100)  
Gauley Sales Company (p.113)  
Gooding Rubber Company (p.115)  
Gunther-Nash Mining Construction Company (p.136)

Hanson Engineers, Inc. (p.156)  
 Henry A. Petter Supply Company (p.129)  
 Hopcroft Electric (p.149)  
 Hydro-Power, Inc. (p.165)

IBT, Inc. (p.117)  
 Industrial Process Equipment Company (p.127)

Jack Kennedy Metal Products and Buildings (p.134).  
 Jennmar Corporation (p.146, 147)  
 J. H. Fletcher and Company (p.125)  
 J. H. Service Company, Inc. (p.132)  
 Joy Mining Machinery (p.130)

Kennametal, Inc. (p.96)  
 Kerco, Inc. (p.135)  
 Kirby Risk Electrical Supply Company (p.141)

Lakeshore Mining Equipment (p.155)  
 Levinson Steel Company/Metals, Inc. (p.149)

Martin Marietta Aggregates (p.158)  
 Midwestern Machine and Hydraulics, Inc. (p.119)  
 Mine and Process Service, Inc. (p.104)  
 Mine Supply Company (p.109)  
 Miners News (p.160, 161)  
 Minesafe Electronics, Inc. (p.127)  
 Morgantown National Mine Supply (p.137)  
 Mt. Vernon Electric, Inc. (p.153)

Naylor Pipe Company (p.142)  
 Norris Screen and Manufacturing, Inc. (p.101)

Ocenco, Inc. (p.148)  
 Old Ben Coal Company (p.133)

Patrick Engineering (p.111)  
 Peabody Coal Company (p.166, 167)  
 Phillips Machine Service, Inc. (p.139)  
 Power Techniques, Inc. (p.169)  
 Pyro-Chem Corporation (p.97)

Raben Tire Company (p.102)  
Reaco Battery Service Corp. (p.154)  
Richwood Industries, Inc. (p.121)  
Ritecrete Concrete Products (p.126)  
Roberts and Schaefer Company (p.150)  
Roe Machine Company (p.158)  
Roland Machinery Company (p.168)  
Rollett Bros. Trucking Company, Inc. (p.145)  
Rudd Equipment Company (p.106)

Sandvik (p.159)  
Sedgman (p.105)  
SEMCOR (p.135)  
SIU-Coal Research Center (p.143)  
Sollami Company (p.123)  
Stagg Engineering Services, Inc. (p.100)  
Standard Laboratories, Inc. (p. 162)

Tabor Machine Company, Inc. (p. 154)  
Towers Mine Tool, Inc. (p. 140)  
Triune, Inc. (p. 165)

Weir International Mining Consultants (p. 111)  
Wescott Steel, Inc. (p. 163)  
Wil-Mar Hydraulics and Mine Supply (p. 164)  
Woodruff Supply, Inc. (p. 138)

**CANDID PHOTOGRAPHS**  
**ILLINOIS MINING INSTITUTE**  
**ANNUAL MEETING**











