

U.S. Department of Energy



Office of Energy Efficiency and
Renewable Energy

Office of Industrial Technologies

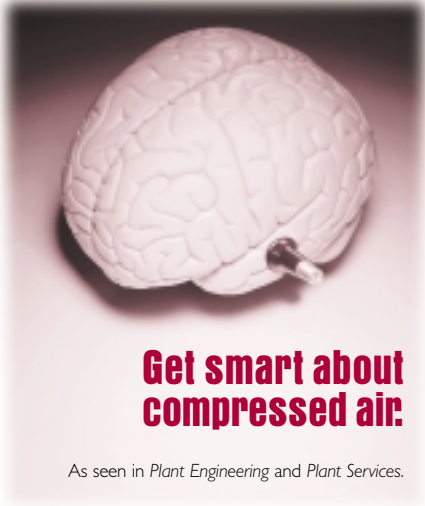
A large, stylized gauge graphic with a black face and a white arc at the top. The needle is a thick red line pointing towards the right. The text "IMPROVING INDUSTRIAL COMPRESSED AIR SYSTEM PERFORMANCE" is written in white, bold, sans-serif font across the gauge face.

IMPROVING
INDUSTRIAL COMPRESSED AIR SYSTEM
PERFORMANCE

KNOW PRESSURE

 **COMPRESSED AIR
CHALLENGE™**

A S A COSPONSOR of the Compressed Air Challenge™, DOE's Office of Industrial Technologies (OIT) is working to improve the efficiency and reliability of industrial compressed air systems, and in the process is helping industry to realize reduced operating costs and increased production. The Compressed Air Challenge™, initiated by DOE, the American Council for an Energy-Efficient Economy, and the Energy Center of Wisconsin, is in keeping with OIT's mission of partnering with industry, and other government and non-governmental organizations, to significantly improve the resource efficiency and competitiveness of the materials and process industries.



Improvements to major fluid systems (pumps, fans, and air compressors) represent up to 62% of potential savings for manufacturing plants, as reported in DOE's *U.S. Industrial Electric Motor System Market Opportunities Assessment*. To help U.S. industry achieve these savings, DOE has developed the following products in partnership with the other Compressed Air Challenge™ sponsors:

- **Sourcebook**
- **Training on compressed air systems**

In addition, DOE is developing case studies and software to support the goals of the Compressed Air Challenge™.

TRAINING

DOE, in cooperation with other Compressed Air Challenge™ sponsors, is offering training on ways to improve productivity, energy savings, and profitability through better planning and operation of compressed air systems. The training is targeted to plant engineers, maintenance supervisors and other industry personnel responsible for compressed air systems within an industrial or commercial setting.

The one-day sessions include information on how to calculate the energy costs of compressed air systems, how to cut the cost of operating these systems, and strategies for improving system efficiency and reliability.

SOURCEBOOK

Improving Compressed Air System

Performance: A Sourcebook for Industry is



an awareness-building tool for anyone who wants to learn more about improving the effectiveness, efficiency, and reliability of industrial compressed air systems.

This sourcebook, a cooperative effort of DOE and the Compressed Air Challenge™ sponsors, provides an overview of industrial compressed air systems; a roadmap for identifying system improvement opportunities; fact sheets describing these opportunities; and a directory of programs, resources, and tools.

CASE STUDIES

Modeled after DOE's Motor Challenge Showcase Demonstration projects, these case studies will document best practices and lessons learned in compressed air system management. Companies can read what their peers are doing to improve system performance and increase reliability and productivity.

A NETWORK OF RESOURCES

OIT is helping to spread the word about energy savings opportunities in compressed air systems through its wide array of resources, including:

- a bimonthly *Energy Matters* newsletter that covers technical topics and case studies on steam, motor and compressed air system efficiency.
- an Information Clearinghouse with publications, technical experts on hand to answer questions, and a toll free number **(800-862-2086)**.

INFORMATION ON OIT

The Office of Industrial Technologies (OIT)—Industries of the Future

The U.S. Department of Energy's Office of Industrial Technologies encourages industry wide efforts to boost resource productivity through an initiative called Industries of the Future. This initiative, which focuses on energy- and resource-intensive industries, accelerates research and development of advanced technologies identified as priorities by industry. Participants in the process represent the agriculture, aluminum, chemicals, forest products, glass, metal casting, mining, petroleum, and steel industries. Together with Motor Challenge, Steam Challenge, Compressed Air Challenge™, NICE³, Industrial Assessment Centers, Inventions and Innovation, OIT assists industry, small business, and inventors in developing and implementing near-, medium- and long-term, energy-efficient, and environmentally beneficial technology.



For More Information

For information on the Compressed Air Challenge™ and any of the resources listed in this brochure, call the Information Clearinghouse at (800) 862-2086 or access the Web site at www.oit.doe.gov/techdeliv.shtml#assistance.

COMPRESSED AIR CHALLENGE SPONSORS

The following organizations have joined to form an advisory board and have committed financial support for the Compressed Air Challenge:

U.S. Department of Energy

Northwest Energy Efficiency Alliance

**New York State Energy Research and
Development Authority**

NEES Companies

Iowa Energy Center

**Illinois Department of Commerce and
Community Affairs**

Honeywell, Inc.

Energy Center of Wisconsin

Eastern Utilities

Duke Solutions, Inc.

Consortium for Energy Efficiency

Compressor Distributors Association

Compressed Air and Gas Institute

**Association of Ingersoll-Rand
Distributors**



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