



Confederation of Indian Industry
LM THAPAR
Centre for Competitiveness
for SMEs

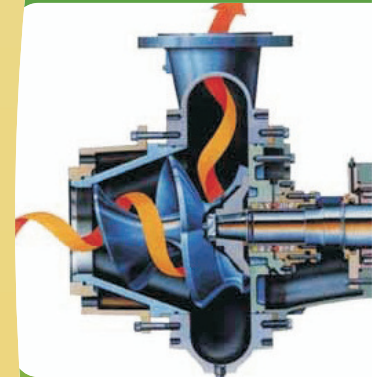
6th edition
ROTEQ
2009

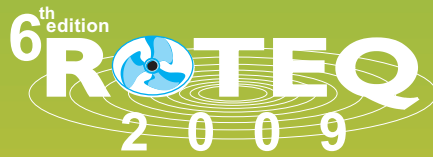
National Seminar cum Exposition
on
Rotating Equipment & Systems

- Compressed Air System
- Motors, Transmission & Auxiliary System
- Pumps, Fans & Blowers
- Control Techniques & Monitoring
- Self-Generation, Cogeneration & Green Power
- Corrosion Management of Rotating Equipment

28 - 29 April, 2009

Venue: Confederation of Indian Industry, N.R. H.Q.,
Sector 31-A, Dakshan Marg, Chandigarh





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Rotating equipments account for a large amount of energy consumption in Indian industries. Rotating equipments are prime movers, driven equipments, transmission equipment and auxiliaries equipments (Lubrication, cooling and sealing systems). The technology in the field of rotating equipments has seen revolutionary changes in terms of design, selection, testing, efficiency, start-up, control and condition monitoring. To underscore the importance and to highlight the technological leaps in the field of rotating equipments, CII - L M Thapar Centre for Competitiveness for SMEs organized ROTEQ-2003, ROTEQ-2004, ROTEQ-2006 and ROTEQ-2008 which got huge applause from the industrial sector.

Enthused with the success of past 5 ROTEQ's and on demand from all stake holders, the Centre is again organising Roteq 2009 a two day National level Seminar on Rotating Equipment and System at Chandigarh.

SCOPE

1. Compressed Air System

90 % of today's industries/buildings uses air compressors and refrigeration compressors in some aspect of their operations, and more than 70% have some form of problems and inefficiencies associated with their systems. The bottom line is that the problems that exist are very costly in the long run. These hidden costs can be seen in terms of lack of equipment longevity and invisible but noticed operating costs.

- Energy efficient compressors
- Efficient compressed air layout
- Efficient air treatment
- Advancement in O & M
- Efficient controls with respect to demand fluctuation
- Technological Advancements & Automation

2. Motors, Transmissions & Auxiliary System

Motors are the heart of an industry, which transfer energy to various equipment and machines. Almost 75% of the electrical energy is consumed through electrical motors only. A little efficiency improvement in motors could lead to huge energy saving.

Transmission equipments are essential to transmit power from driver to driven equipment at required torque and speed.

- Efficiency improvement scope in motors
- Effect of power quality on motors
- Facts and myth about Energy Efficient Motors
- Motor protection system
- Motor troubleshooting
- Technological advancement in Transmission Belts, Bearings and Gear boxes

3. Pumps, Fans & Blowers

These are extensively used in almost every plant, whether it is engineering, process or power plant and even buildings. It will be no exaggeration to mention that a little increased awareness in this field can result in huge benefits. Engineering studies & energy audits have shown that these utilities have extensive improvement opportunities. Adjusting, modifying, or retrofitting can result in tremendous benefits. Efficient design and latest controls not only make the process smooth but also save lot of energy too. In an efficient system, key lies not only to go for energy efficient equipment but also to make the complete system efficient.

- Selection of Pumps, Fans & Blowers
- Selection criteria
- Efficient layout design
- Role of Vibration towards Life and efficiency
- Latest controls in system & technological advancement

4. Self - Generation, Cogeneration & Green Power

For low captive power requirement, DG sets are very popular because of higher efficiency, low installation cost and reliability. However increased cost of power generation through DG sets inspired industries to increase capacity utilisation with maximum possible recovery of waste heat.

In the 1970s, oil shortages pushed the development of alternative energy sources. In the 1990s, the push came from a renewed concern for the environment about emissions from fossil fuel generation. Latest technology and higher costs for fossil fuels have promoted the potential in renewable energy sources to grow substantially over the last 10 years.

- Selection and Installation criteria
- Capacity utilization and Cogen
- Monitoring and troubleshooting
- Eco-Energy Planning
- Renewable energy option : Solar, Wind
- Renewable energy subsidies & energy conservation
- Economic & environmental advances in industry

5. Control Techniques and Monitoring System

It is only fantasy to design a system which always works on the maximum efficiency region in different operating conditions. An efficient control system can help us to operate the equipment in or near the maximum efficiency zone. At the same time if we do not know how much energy goes in to different section and equipments, we cannot save much energy. So it is imperative to know what kind of measurement is required for rotating equipment to save energy

- Right Selection of control and its impact on efficiency
- Reliability and cost effective control systems
- Energy Monitoring and targetting System
- Imporatnace of monitoring and latest monitoring instruments
- Thermography and condition based monitoring

6. Corrosion Management of Rotating Equipment

Statistics reveal that due to corrosion and its consequences India is losing about Rs.36, 000 crores every year which is amounting to 3.5% of GDP. Damages due to corrosion lead to loss in production and unscheduled shut down in plants and installations and more importantly pose severe safety hazards.

As the requirements for improved productivity and cost effectiveness increase, combined with an increased attention to safety and environmental issues, activities related to corrosion management play an increasingly important role.

- Recommendations of Corrective and Preventive Actions
- Importance of Corrosion Management
- Corrosion vis-a-vis equipment life cycle
- Best Maintenance Practices for Corrosion Prevention

SCHEDULE

Day 1

Tuesday, 28 April 2009

0900 hrs : Registration

0930 hrs : Technical Session

1730 hrs : Adjourn

Day 2

Wednesday, 29 April 2009

0930 hrs : Technical Session

1730 hrs : End

Participation fee (per delegate)

CII Members	4000/-
Non-Members	4500/-
Education/Research Institutes/SSIs	4000/-

➤ Fee is inclusive of Service Tax.

➤ 10% Discount for 3 or more registrations from same organisation.



Confederation of Indian Industry

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the growth of industry in India, partnering industry and government alike through advisory and consultative processes.

CII is a non-government, not-for-profit, industry led and industry managed organisation, playing a proactive role in India's development process. Founded over 113 years ago, it is India's premier business association, with a direct membership of over 7500 organisations from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 83,000 companies from around 380 national and regional sectoral associations.

CII catalyses change by working closely with government on policy issues, enhancing efficiency, competitiveness and expanding business opportunities for industry through a range of specialised services and global linkages. It also provides a platform for sectoral consensus building and networking. Major emphasis is laid on projecting a positive image of business, assisting industry to identify and execute corporate citizenship programmes. Partnerships with over 120 NGOs across the country carry forward our initiatives in integrated and inclusive development, which include health, education, livelihood, diversity management, skill development and water, to name a few.

Complementing this vision, CII's theme "India@75: The Emerging Agenda", reflects its aspirational role to facilitate the acceleration in India's transformation into an economically vital, technologically innovative, socially and ethically vibrant global leader by year 2022.

With 64 offices in India, 8 overseas in Australia, Austria, China, France, Japan, Singapore, UK, USA and institutional partnerships with 271 counterpart organisations in 100 countries, CII serves as a reference point for Indian industry and the international business community.




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for SMEs

Business enterprises worldwide are increasingly focusing on enhancing production and improving quality, while reducing costs. In, such a scenario, it is important for small and medium costs. In such a scenario, it is important for small and medium enterprises (SMEs) to remain competitive.

The CII - L M Thapar Centre for Competitiveness for SMEs was established in 2004, with a view to providing SMEs in India with one-stop consulting service. There are more than 11.86 million SMEs in India, which contributed nearly 40 percent of the country's total industrial output. If the country's economy is to be strengthened, it is imperative that these SMEs receive tactical support to remain competitive.

The Chandigarh-based CII - L M Thapar Centre for Competitiveness for SMEs aims to build competitive and visionary SMEs. The Centre offers consultancy services on a wide range of critical issues such as manufacturing excellence, energy management, cost management, human resource development, etc. Although the Centre does provide services to individual companies, it encourages the formation of groups or clusters of SMEs. A number of companies, which share the same location, sector or even OEM vendor, are allocated to these clusters. This approach encourages SMEs to form, share and draw from a common knowledge pool.

The CII - L M Thapar Centre for Competitiveness for SMEs has successfully established such clusters at Mohali, Gurgaon and Jalandhar and is running parallel clusters across the country at Jaipur, Faridabad, Lucknow, Pune, Kolkata, Chennai and various other locations.

Apart from offering consultancy services, the Centre is also committed to helping SMEs remain abreast of contemporary issues through seminars, conferences and training programmes.

The Centre offers the following Services

- Clusters for Competitiveness
- Energy Audit & Management
- Manufacturing Excellence
- Total Cost Management
- Human Resource Management
- Corrosion Management

CII - L M Thapar Centre for Competitiveness for SMEs
Confederation of Indian Industry

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Glimpses of Past ROTEQ's



Relevant Sectors

Automobiles
Cement
Chemical
Distilleries
Engineering
Fertilizes
Pharmaceuticals
Industrial & Project Consultant

Power Plant
Pulp and Paper
Refinery
R & D Institutes
Sugar & Food
Textile
Buildings & Hospitals
Steel, Foundry & Mini Steel

Target Audience

- Project Managers
- Consultants
- R & D Professionals
- Energy Managers / Auditors
- Maintenance / Production Engineers / Managers
- Top and middle level Manufacturing Managers

Our Partners

ROTEQ 2003, ROTEQ 2004, ROTEQ 2006 & ROTEQ 2008

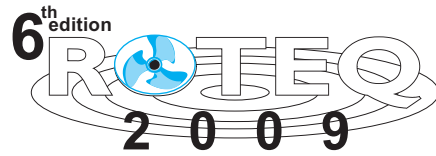
ABB Ltd.
Anest Iwata Motherson Ltd.
Atlas Copco India Ltd.
BHEL
Bharat Bijlee Ltd.
Blue Star Ltd.
BOC India Ltd.
Crompton Greaves Ltd.
Danfoss Industries Pvt. Ltd.
Elgi Equipments Ltd.
Engineers India Ltd.
Everest Transmission
Flakt India Ltd.
General Imsubs Pvt Ltd.
Godrej & Boyce Mfg. Co. Ltd.
Grundfos Pumps India Pvt. Ltd.
Hoer Biger India Ltd.
Techmark Engineers & Consultants
Rockwell Automation India Ltd.
Pravara Rural Engineering College
Kirloskar Pneumatics Company Ltd.

Holtec Consulting Pvt. Ltd.
Infomedia India Ltd.
Ingersoll Rand India Ltd.
Jay Dee Enterprises
Kirloskar Brothers Ltd.
Nevcon Engineers Pvt. Ltd.
Resistoflex Pvt. Ltd.
Siemens India Ltd.
SKF India Ltd.
Trident Pneumatics Pvt. Ltd.

Our Sponsor's

**Rockwell
Automation**

gtz



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Registration Form

I am / We are interested in participating in the Seminar as a delegate

Sl.	Name	Designation
1)	_____	_____
2)	_____	_____
3)	_____	_____

A Cheque / DD of Rs. _____ favouring
'Confederation of Indian Industry', payable at Chandigarh is attached.

Name _____ Designation _____

Company _____

Address _____

Tel No _____ Fax No _____

E-Mail _____

Date _____ Signature _____

Participation Fee (Per Delegate)

CII Member	Rs 4,000/-
Non CII Member	Rs 4,500/-
Institution	Rs 4,000/-

- Delegate fee is non-refundable/non-adjustable against any other event of CII. However change in nomination is accepted.
- 10% Discount for 3 or more registrations from same organisation.
- Fee is inclusive of Service Tax.

Participation Fee Includes the following:

- Participants will receive soft copy as well as hard copy of the Seminar Presentations.
- Booklet on Energy Savings will be given.
- Certificate of Participation will be given to the delegates.
- Lunch, Tea and Refreshments will be served during the two day session.

For more details, please contact

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