

Company Profile

India Boiler dot Com is a knowledge Management Organization, offering training and consultancy services to the industries. Since its inception in 2000, IBDC has excelled in effective knowledge transfer to various industries and expanded its strength areas. Today, almost all major industries of India and also some of the Middle East & African countries are regularly availing our services.

Core Competency

Team Work: There is a harmonious team effort behind every session by any faculty. We have a core group of experts comprising of senior professionals from different spheres. Once the scope of training is defined and the faculty is decided, the design and preparation of the module is jointly carried out by the selected faculty and the core group. The team is responsible for:

Identifying the learning objective:

The learning objective describes what the participant will be able to do upon completion of the learning experience.

Evaluating the scope for Customization:

Based on the availability of information like SOP, OEM documents, plant parameters, past history, check lists, drawings etc., our team works out on maximum possible customization of the training.

Structured Conceptualization:

After evaluating the scope for customization our team conceptualise the structure of the entire programme to achieve the learning objective most effectively.

Designing the Course content:

Based on the outcome of the above three, the course content of the entire programme is designed. In some of our specialised programme, much more time goes in preparing the programme manual to make it totally customized.

Designing the Delivery Method:

We believe that designing the delivery method is the most important part for an effective training. Our core team ensures that the delivery techniques are designed in such a way so that our faculty can engage the participants in thinking; questioning and doing real work activities and even getting encouraged in mentoring others. The delivery methods are designed with a primary objective of developing critical analysis and decision-making skills amongst the participants. Some of the delivery methods that we frequently use are animated presentation, 3D presentation, demonstration, project activity, real-time case study, role-play, team activity, group discussion, plant tour etc. Each delivery method is introduced with a specific approach and objective. For example the case studies, which is a presentation in narrative form of an actual event, are frequently used to enable the participants to apply previously learned theories to the circumstances in the case, decide what is pertinent, identify the real issues, decide what should have been done, and develop a plan of action". The topics for group discussion or project activity are selected in a manner so that it creates an opportunity for each team or group to collaborate on an actual problem by determining a solution and committing to an action plan under the guidance of the faculty.

Blended delivery system:

In all our trainings the traditional instructor-led training is further supplemented with other technology-based delivery systems and instructional methods. For this we have created an exclusive facility in our website, which we call 'Virtual Class room'.

Virtual Class room:

There is many fold advantage for this technology-based delivery system that we have created.

- It has no limitation of time or geographical location. The candidates can participate

- at anytime and from anywhere with an Internet connection.
- The candidates get an opportunity to review and revise aspects of the training even after going back to their work field.
 - The Faculty gets an opportunity to further extend or enhance his training content.
 - With this extended follow-up arrangement available, the faculty doesn't feel the time pressure during the training. The faculty can adjust the pace of his presentation according to the level of the candidates, encouraging more of two-way flow of information and avoid a "knowledge dump."
 - The management can track the performance improvement of their candidates through the use of various assessment tests available in our virtual class room.
 - Actual period of training increases significantly without affecting the viability at a nominal cost
 - Video Conference: needing only a high speed internet and no special hardware, the faculty can conduct live interactive video conference if any particular issue comes up during follow up queries from the participants, which requires detailed presentation. Participants who are unable to attend the live conference can get the opportunity to see the recorded session.

Faculty Development.

We have started in the year 2000 with a vision to create a common knowledge sharing platform for the experienced industry professionals. Since then, more than 500 professionals have joined the network, showing their interest in sharing their knowledge and experience through this platform. Out of which, we have identified and enlisted around 200 professionals, who possess sufficient experience and technical knowledge on specific area as per our standard requirements. Though a majority of them are still not equipped enough with the skills required for a successful knowledge transfer, we are giving continuous effort to develop special training skills amongst them.

Our team has created an 'instructors manual' to make our faculties aware about all important characteristics in adult learning process. In this manual we have also outlined in detail, the range of instructional methods that can be employed for effective training outcome.

Time to time, we invite them to our various programmes to observe the training process delivered by our skilled faculties, at times offering them a small session in presence of our regular faculty, briefing them about all important issues in adult learning process.

So far we have developed nearly 25 highly experienced and skilled faculties with expertise on different areas of plant engineering and collectively we are capable of offering training and technical consultancy services in almost every area to Power, Chemical, Refinery, Fertilizers, steel, Cement and various other process Industries.

Training Activities

1. On-Campus Plant specific Training at Organization Premises

We are designing and conducting equipment specific training at various organizations. We have so far conducted more than 800 on-campus training on various Mechanical, Electrical, Instrumentation, Energy Management and General Engineering topics.

2. Training Abroad

Our training services are availed by a number of Industries from different Middle East and African Countries. Some of the trainings are conducted abroad, where our faculties are visiting the country to offer the training. A number of organizations are sending their personnel to participate in-house training workshops conducted by us in India.

3. Preparatory Training for BOE Certificate Examination

We are the only organization in India offering the Preparatory Training for BOE Certificate since 2002. We are offering this training as

- On-Campus Training at various corporate
- Conducting In-House Training Workshops
- On-line Training

4. Preparatory Training for Energy Manager/ Auditors Certificate Examination

We are offering Preparatory Training for National EM-EA Certificate Examination, for various industries like Reliance and Essar regularly since 2007. A number of other industries are also sending their participants to the In-house training workshops arranged by us. Some of the participants of our training were amongst the top ranking professionals in the National Certificate Examination. In the 4th National Examination, Country wise 1st in Energy Auditors and 2nd in Energy Managers exam were ranked by our candidates from Essar Steel and Reliance Industries, respectively.

5. National/ Global Level Training Workshop

Since 2000, we have conducted a number of In-House training workshops at various cities in India. We have conducted more than 75 National level and Global level training workshops where most of the major organizations in India and number of overseas organizations are participating.

6. Total Power Plant Systems Training for Newly Commissioned Plant

On behalf of the EPC organizations, we are offering plant specific training on total plant systems to the O&M personnel of newly commissioned Power plant. The training covers introduction to all systems/ equipment, their operation philosophies, start-up/ shutdown procedures, normal/ emergency operation and Maintenance.

7. Covering Complete Technical Training Calendar for Corporate

We have conducted all technical trainings, coming under the complete training calendar of a corporate for consecutive two calendar years.

8. Induction Training to Fresh Graduate Engineers

We are offering plant induction training to fresh graduate engineers, introducing them to various aspects of plant engineering, so that when they are finally exposed to the field, they know what to look for and what to learn. This is done with an objective of initiating a smooth transition from academics to Plant engineering practices for the newly recruited engineers by connecting the fundamental knowledge they have acquired in the college with actual practice.

9. On-line Certification Course for Boiler O&M Engineers

Through the innovative distance learning tools available at the Virtual Classroom, we are conducting six months on-line certification course for Boiler O&M engineers. With innovative use of Video Conferencing, Discussion Forums, Live Chat, periodic

assignments and on-line self assessment test, participants of this programme are guided by experienced faculties to clear their concepts and developing proficiency in Boiler O&M.

Technical Consultancy Services:

We are offering technical consultancy services on:

- Improvement of Plant Performance by conducting Gap Analysis of Power Plant's Systems & Equipments
- Power Plant Performance audit
- Optimizations of Pumps and Fans
- Reliability assessment of critical components of power plant
- Electrical Safety audit
- Combustion Optimization
- Boiler Tube Failure Analysis

List of Organizations in India who have availed our Trainings:

(There are more than 600 organizations in India, who have availed one or more of our training services mentioned above. Some of the names are listed below)

- Aditya Birla Corporate Technical and Energy Services, Talaja
- Aditya Birla Management Corporation
- BHEL (various units)
- Cairns energy
- Chennai Petroleum Co. Ltd.
- Chambal Fertilizers & Chemicals Ltd., Kota
- Chhattisgarh State Power Generation Co. Ltd - various units
- Dwarikesh Sugar Industries Ltd., Bijnor
- ESSAR Ltd. (Steel, Power and Refinery)
- GAIL (Various units)
- Gujarat State Electricity Co. Ltd. - (various power plants)
- GMR Energy Ltd. (various units)
- HINDALCO, Renupower
- HPCL, (Mumbai & Vizag)
- IFFCO, (Kandla, Kalol and Phulpur unit)
- IOCL Refinery (various units)
- Indo Rama Synthetics (I) Ltd., Butibori, Nagpur
- JSW Energy - Various units
- Jindal Power Ltd., Raigarh
- JK Lakshmi Cement Limited, Jaykaypuram
- Lanco Power Ltd., Champa
- L&T Ltd. (various units)
- MahaGenCo - various power stations
- Mawana Sugar Ltd.
- MRPL, Mangalore
- Nalco, Damanjodi
- Neyveli Lignite Corporation Limited
- NTPC Ltd. (various Thermal Power Stations)
- ONGC Ltd. (Various units)
- Reliance Industries Ltd. (Jamnagar, Hazira, Dahej, Vadodara)
- Reliance Energy (various Power Plants)
- Shree Cement Ltd., Beawar
- Shree Renuka Sugar, Athani
- TATA Chemicals Ltd., Mithapur
- TISCO, Jamshedpur
- TATA Power, (various units)
- UltraTech Cement Ltd. (various units)
- Vedanta Group (Korba, Jharsuguda, Lanjigarh, Chittaurgarh)
- Wartsila India Ltd. (various units)

List of Organizations Abroad who have availed our Training

- Al Ghubhrah Power & Desalination Co. Ltd., Muskat, Oman
- AllSector Business Network & Communication Ltd., Johannesburg, South Africa
- Al Ezzel Power Plant, Bahrain
- ArcelorMittal, South Africa
- Babcock, South Africa
- Central Electricity Generating Company, Amman, Jordan
- Emirates Steel Industries, Abu Dhabi
- ESKOM, South Africa
- Impala Platinum Holding Ltd., Zimbabwe
- Integral Training Institute Ltd; Mauritius
- Natref Refinery, South Africa
- NAMPOWER, Namibia
- Petroleum Coke Industries Company, Kuwait
- SAPPI Ltd., South Africa
- SASOL Ltd., Johannesburg, SA
- TSB sugar Holding, Malalane, south Africa
- Veolia water (SIPCHEM plant) Saudi Arabia

Organizations where we have offered Total Power Plant Systems Training for Newly Commissioned Plant

- **370 MW (KA-26-1 MS) Utran CCPP - II**
In November 2008, we have conducted 15 days training for the O&M personnel from GSECL, Utran at 370 MW (KA-26-1 MS) Utran CCPP - II on behalf of Alstom Power Division.
- **388 MW Vemagiri Combined Cycle Power Plant, Rajahmundry**
In October - November 2006, we have conducted an extensive 31 days training at 388 MW Vemagiri Combined Cycle Power Plant, located at Rajahmundry, Andhra Pradesh on behalf of L&T Power

Organizations where we have offered Induction Training to Fresh Graduate Engineers:

In September 2010, we have conducted a comprehensive Induction Training for 12 days for the fresh graduate engineers appointed by ONGC Petro Addition Ltd. (OPaL) for their Petro-chemical Plant at Dahej SEZ. The module included introduction to all Mechanical, Electrical and Instrumentation Systems of a Petro-Chemical Plant.

Organizations where we have conducted all technical trainings covered under Complete Corporate Training Calendar:

We have conducted 73 training programmes for 2009-10 calendar year and 105 training programmes for 2010-11 calendar year for Gujarat state Electricity Corporation Ltd. These trainings were conducted at all seven thermal power stations under the corporate, covering various mechanical, electrical and Instrumentation topics. The complete training were arranged through GETRI (Gujarat Energy Training Research Institute), the nodal training institute of GSECL.

Training topics on which we have conducted On-Campus Equipment Specific trainings at various organizations:

Mechanical Engineering Topics:

- Improving Performance and reliability of Boiler through Analytical Approach
- Steam Turbine O&M & Troubleshooting
- Failure of steam Turbine and its prevention
- Turbine Governing system
- Power Plant Optimization
- Fan Engineering, Application & Practice, common Site Problems, Improvement & Approach
- Basic Principles & Definitions for Vibration Measurement & Analysis and Initiating the Equipment Condition Monitoring
- Combined Cycle Power Plants Performance Analysis
- Rolling Bearing
- Maintenance Welding & heat treatment
- Systematic Lubrication for Industrial Equipment
- Optimization of Power Plant Performance & Performance Enhancement of Existing Thermal Power Plant with Life Extension
- Cooling Tower and CW treatment
- Critical Analysis of Boiler Tube Failure
- Metallurgical Failure, Corrosion and Heat Treatment
- Boiler Maintenance & Troubleshooting
- Best Practices in Distribution Loss Reduction - Distribution Reform, Upgrades and Management (DRUM) Training Program
- Essential Boiler Water Chemistry for O&M Engineers

Electrical Engineering Topics:

- Electrical safety in the plant
- Maintenance and Condition Monitoring of Electrical Equipments
- Electrical Power System and Protection
- Power Distribution & Evacuation System
- Transformers: Construction, Specification, Commissioning, Testing, Maintenance, Operation, Breakdowns & repairs
- HT/LT Switch gear and Protection
- Electrical Earthing & Bonding

Instrumentation Engineering Topics:

- Basic Principles, definitions and Operation & Maintenance of Instrumentation and Control System
- Training workshop on instrumentation for non instrumentation

Energy Management:

- Energy Management in Thermal Power Plant
- Electrical Economics & Energy saving
- Energy Management in Centrifugal Pumps
- Energy Management in compressed air & refrigeration system
- Energy Management in Fertilizers Plant

General Engineering Topics:

- Multi-skill training on Mechanical, Electrical and Instrumentation Engineering
- PC Based Simulator Training For Operation Engineers for 210 MW Coal based Thermal Power Plant

We can design and deliver all types of technical training programme for Power Plants (coal, gas and oil), Chemical, Petro-chemicals, Fertilizers, Cement and Process Utility industries.