



## **EnSave Consultancy and Training Pvt Ltd**

### *Training on*

## **Energy Efficiency in Boiler & Steam System August 19-20, 2016**

### **Introduction**

Boilers are one of the major sources of thermal energy in industrial sector. Efficiency, reliability and initial costs are the three important attributes for assessing the performance of boiler technologies. With the prevailing energy shortage and cost of fuels, opportunities to reduce costs have been catching the attention of users. Simple measures such as control of boiler blowdown, maintenance of steam traps, the recovery of flash steam, and increasing condensate return rates, can make immediate and significant cost savings boiler and use of steam. Optimization of the system can often bring high returns with little investment. It has been observed that about 50% of boilers operate at efficiencies below 70% and 10 – 15% of fuel used in industries can be saved by efficient operation of these boilers.

This training will serve as a valuable programme in imparting knowledge on various improved techniques of boiler & steam system operation, maintenance, and safety and energy conservation. In this course, you will learn the technical energy audit on boiler and steam system and apply it back into your work place.

### **PROGRAMME OBJECTIVES**

At the end of the programme, participants will be able to:

- ✓ Understand the typical energy losses of boiler/ steam system in your facilities
- ✓ Acquire tools and techniques for Performance assessment, energy audit, and energy conservation in boiler and steam systems.
- ✓ Update right expertise for energy efficiency project implementation
- ✓ Update knowledge on energy saving tips energy efficient technologies and energy audit instruments

### **WHO SHOULD ATTEND?**

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- Process/Energy/ Utility manager, Boiler supervisors and engineers
- Maintenance /Facility managers or engineers supervisors from industry and hotels
- Chemical or Mechanical engineer from process industries/engineering and consultancy
- Certified energy auditors and energy managers

### **PROGRAMME CONTENTS**

#### **Day 1 : Boiler System Audit**

- Introduction to different boiler system , key components and functions
- Fuels, Combustion, and Emissions
- Determination of boiler efficiency by direct and indirect methods
- Flue gas analysis and Optimization of air to fuel ratio

- Choice of burners and efficient operation
- Waste heat recovery
- Boiler Feed water Treatment
- Blow down losses control
- Fuel substitution

**Day 2 : Steam System Audit**

- Energy Conservation for Steam and Utility System
- Quantity & Quality of Steam and Steam Pricing
- Steam Distribution Network, piping and Insulation
- Steam balance and Steam System Optimisation
- Condensate and Flash Steam Recovery
- Selection ,operation and maintenance of Steam Trap
- Steam Leakages and survey

**Faculty**

Senior Consultants and Certified Energy Auditors with 20–25 years of experience in the field of energy auditing and management.

**Methodology**

This programme will be conducted through lecture session, discussions and visual aids

**VENUE & DATE**

Hotel Residency Towers,Chennai

**August 19-20, 2016**, Time: 9:30 AM to 5.00 PM

**FEE**

- Program Fee is Rs.9, 800/- (Rs. Nine thousand eight hundred only) inclusive of service tax per participant for Non- Residential program
- Fee includes professional fees, course material, program kit, working lunch and Certificate.
- Participation fee is non-refundable. However change of nomination is acceptable

**Registration**

Last date for registration is 12nd**August, 2016**

Duly completed nomination form(s) along with Demand Draft drawn in favour of 'EnSave Consultancy and Training Pvt. Ltd', payable at 'Chennai' may be sent to

Director  
 EnSave Consultancy & Training Pvt. Ltd.  
 B-4,2nd cross 3rd Main road  
 Nolambur TNHB Scheme Phase-I  
 Mogappair West, Chennai-600037  
 Tamil Nadu, India.

Phone +91 44 43551245, Mob+91 9884229044 Email: info@ensaveindia.com www.ensaveindia.com

The registration fee can also be paid through bank transfer (NEFT/RTGS).

Account Holder	:	Ensave Consultancy and Training Pvt Ltd
Name of Bank	:	HDFC Bank, Mogappair West , Chennai - 600037
Branch Code	:	001765
Account No.	:	50200018193900
IFSC / RTGS IFSE Code	:	HDFC0001765
MICR code	:	600240056



## EnSave Consultancy and Training Pvt Ltd

*Training on*  
**"Energy Efficiency in Boilers & Steam System "**  
July 22-23, 2016

### **REGISTRATION FORM**

We nominate the following officials to attend the programme from our organisation

S.No	Name	Designation	Email/Mobile No
1			
2			
3			
4			

Please find enclosed our Cheque/Demand Draft No ..... dated.....

for Rs. ....drawn in favour of "EnSave Consultancy & Training Pvt. Ltd" payable at Chennai.

Name of the sponsor : \_\_\_\_\_

Designation : \_\_\_\_\_

Organisation : \_\_\_\_\_

Address for Communication : \_\_\_\_\_

City, State, Pin : \_\_\_\_\_

E mail: \_\_\_\_\_

Phone:/Mobile

Fax:

Signature & stamp of  
Nominating authority