

# THERMACT-B

**Multifunctional Catalyst** 



**ABHITECH ENERGYCON LIMITED** 

## Introduction

Sugar mills world over have been traditionally using Bagasse as fuel in Boilers for generation of steam and power. Similarly, Co-generation with Bagasse-fired Boilers has become a supplementary income source to the sugar industry.

But due to high moisture content, Bagasse-fired boilers are subjected to incomplete combustion leading to tremendous amount of heat loss thereby reduced Boiler Efficiency.

These losses can be reduced by using State-of-art technologies. One such technology is the use of combustion catalyst to enhance the Boiler Efficiency of Bagasse-fired boilers.

### What is THERMACT-B?

THERMACT-B, a formulation comprising various catalysts, specifically designed to improve the Boiler Efficiency of Bagasse-fired boilers. THERMACT-B has been developed by Abhitech Energycon Ltd in collaboration with IIT, Mumbai, after years of Research and Development.



20 Kg HDPE Packing

# THERMACT-B can be used for all types of Boilers

- Dumping Grate Boilers.
- Traveling Grate Boilers.
- Horse-shoe Boilers.
- High Pressure Co-gen Boilers.

#### **Performance Evaluation Methods**

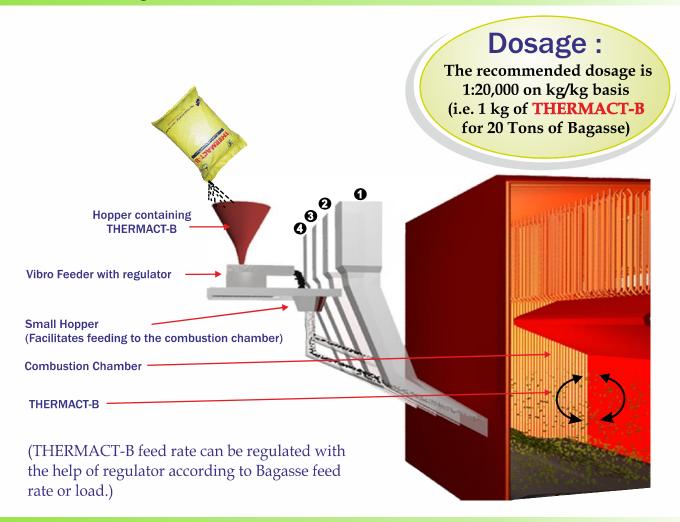
The following methods may be employed to establish the performance of THERMACT-B in the Boilers.

- 1. Measurement of steam to fuel ratio.
- 2. Measurement of heat losses in the Boiler & converting them to equivalent fuel loss.
- 3. Measurement of Oxygen %, CO<sub>2</sub> %, CO ppm, flue gas exit temperature & Boiler Efficiency with the help of gas analyzer.

# **Technical Manpower**

Our Technical team comprising of skilled & qualified manpower will provide the necessary services to establish the performance of THERMACT-B.

# **Method of Dosing**



#### Without THERMACT-B

## With THERMACT-B

## Fly Ash is Black in colour indicating presence of unburnt carbon





Fly Ash is Gray in colour indicating reduction in unburnt carbon

#### **CLINKER**







Soft & Reduced amount of Clinker

# Benefits of THERMACT-B

The use of THERMACT-B in Bagasse-fired Boilers results in:

- Reduction in clinker and scale deposits on traveling grate & super heater zone.
- Reduction in Bagasse consumption by 3 to 5% resulting in increase in steam to fuel ratio.
- Steady steam temperature and pressure, thereby improving generation.
- Reduction in Stack Emissions.
- Reduction in Unburnt Carbon in Ash.
- Reduction in Auxiliary power consumption.
- Improvement in Boiler Efficiency.

#### Abhitech's Global Presence





#### **ABHITECH ENERGYCON LIMITED**

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