



IJT BOILERS

Operations & Maintenance

Power Plants



E N G I N E E R I N G F O R E X C E L L E N C E



OPERATIONS & MAINTENANCE for Power Plants



Isgec Heavy Engineering Limited is a multi-product, multi-location public company that has been providing engineering solutions to customers across the globe for more than 85 years.

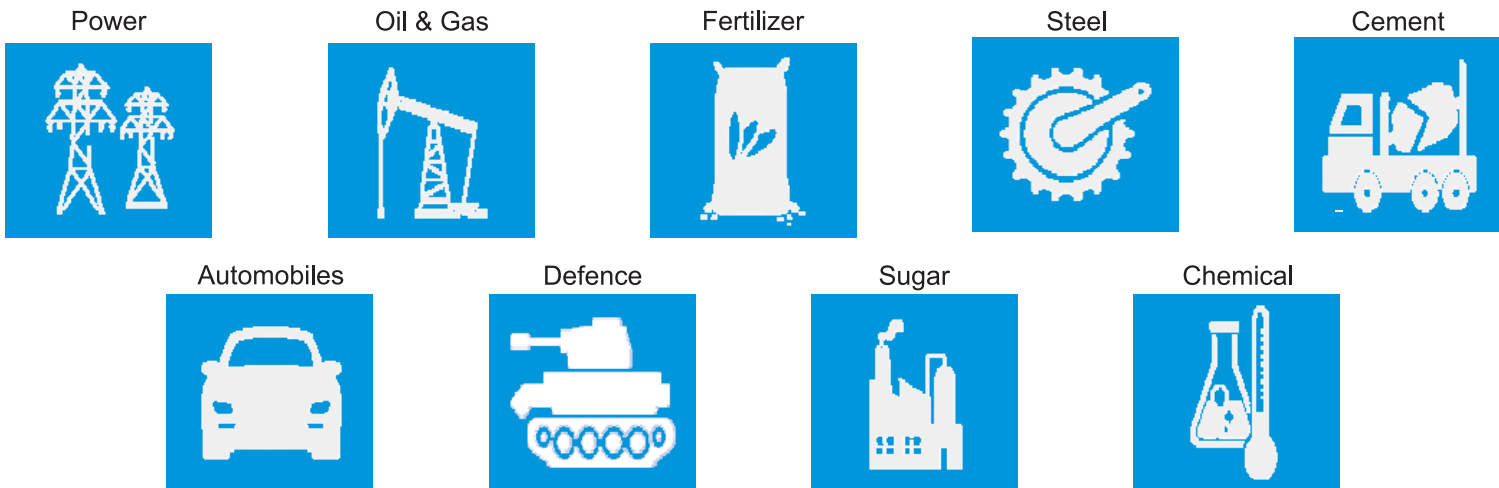
Isgec has over 5 decades of experience in turnkey execution of Projects related to Industrial & Utility Boilers, EPC Projects, Sugar Plants, Distilleries, & Refineries, Air Pollution Control Equipment, Bulk Material Handling, Civil Construction including Factories, as well as manufacturing of Process Equipment, Mechanical and Hydraulic Presses, Alloy Steel and Iron Castings, and Contract Manufacturing for customers in India and abroad.

Having executed a large number of projects around the world, our unique blend of design, engineering, project management, operational services, and disciplined approach enables us to ensure maximum availability and maximum productivity with high safety standards for plant owners.

With Isgec O&M you can be sure of the very best maintenance practices and procedures that provide high reliability and cost effective operations.

Our O&M Capabilities

Isgec provides Operation and Maintenance Services globally for Power Plants and Boilers across a wide variety of sectors including:



Our Offerings

- Plant Operation & Maintenance
- Supervision of Plant Operation & Maintenance
- Plant Safety Procedures & Audit
- Periodical Performance Reviews
- Break Down Maintenance
- RLA Studies
- AMC Services



AMC Services

- Boilers
- Turbines
- Air Pollution Control Equipment
- Electrical Package

- Control System
- Material Handling
- Water Treatment
- Cooling Tower

- Effluent Treatment
- Air Compressors
- Emergency DG
- HVAC

Key Specialities

- Prompt intervention in case of emergencies
- Optimisation and Tune-ups of the system
- Tailor made cost effective solutions as per client's requirements
- Guidelines through collaboration with global technological leaders
- Flexible, responsive and resourceful
- Direct access to expertise
- Short term deliveries of spares and consumables
- Well equipped in-house training facilities
- Large pool of dedicated, and trained manpower within the group

2%
Minimum
Increased Plant Availability

0.5%
Minimum
Lower Aux Power Consumption

850
Boilers
Experience Across Sectors

Lower Operational Expenses • Higher Profits • Lower Risk of Opportunity Loss

Key Facts

Experience in

- Independent Power Plants
- Captive Power Plants
 - Co-generation
 - Gas Fired
 - Refineries

Customers / Projects Across 91 Countries



OEM for all

Major Technologies
CFBC, AFBC, Biomass, Oil & Gas,
HRSG, Slop Fired, WHRB

Dedicated Manpower

More than 800 manpower
allocated at sites
to ensure smooth O&M

Vast Operational Databank

from 1000+ Installations
(including our technology providers)
totaling 50,000 MWe globally

What we Deliver

When servicing our customers we have a strong focus on providing:

- Process integration / Heat balance optimisation
- High efficiency
- High availability
- High plant operation flexibility
- Guaranteed performance and extended plant life
- High safety standards
- One stop solution for service and spares
- Professional and experienced O&M management

Vashp Kutir (House of Steam)

An integral part of our in-house learning process, this innovative & one-of-a-kind lab helps us study on-ground operational issues so as to add to our knowledge base and help improve our technology and execution on an on-going basis

- Display of a wide variety of fuels that Isgec Boilers are capable of firing
- 3D & 2D Boiler Models representing the wide variety of technologies that Isgec offers
- Wide range of Components and Boiler Parts from different stages of operation
- Various kind of tube failure samples
- Boiler RPMS (Remote Performance Monitoring System)
- Houses 100s of case studies and is a bank of experience of more than 5 decades



Simulator for Training (Internal & External)

- On Operations ⇔ Improved Knowledge Level
- On O&M ⇔ Improved Availability of Boilers
- Simulation of Control Loops and Interlocks ⇔ Improved Engineering Validation
- Simulation of Emergencies ⇔ Improved Handling of Operations
- Refining Critical Parameters ⇔ Improved efficiency Operations

Simulator Services available by

HMEL • Nirma • DSCL • BCML • Triveni • Simbhaoli

Tools used for Effective Operations

- Simulator
- RMS
- Latest Softwares
(AMIGO, NOWA Circulation, PBAP, CFD Analysis, FE Pipe, CAESAR-II)
- Steam House
- Training
- BPRC



30 MW CFBC based Power Plant for Bharathi Cement (Andhra Pradesh) India

Few of our Prestigious O&M Clients

Customer / Site	Sector	Capacity	Technology
HPCL - Mittal Energy Ltd., Bathinda, Punjab, India	Refinery	150 MW	CFBC
Honduran Green Power Corporation S.A. de C.V., Choloma, Honduras	Biomass Power Plant	43 MW	TG
Ingenio La Gloria S.A, Mexico	Biomass Power Plant	42 MW	TG
Bijao Electric Company, S.A., Bijao, Honduras	Cement	3 x 35 MW	CFBC
UPL Ltd., Jhagadia, Gujarat, India	Chemical	35 MW	CFBC
Bharathi Cement, Kadapa, Andhra Pradesh, India	Cement	30 MW	CFBC
Deepak Phenolics Ltd, Dahej, Gujarat, India	Chemical	25 MW	CFBC
Spark Green Energy Pvt. Ltd., Ahmednagar, Maharashtra, India	Biomass Power Plant	12.5 MW	TG
Roquette Riddhi Siddhi Pvt Ltd., Rudrapur, Uttrakhand, India	Food & Pharma	12 MW	AFBC
Krishna Tissues Pvt. Ltd., Burdwan, West Bengal, India	Paper	11.5 MW	AFBC

Isgec Offerings

STEAM GENERATORS	AUXILIARY EQUIPMENT *	STEAM GENERATOR SERVICES	EPC PROJECTS
- Pulverised Coal Fired (PC)	- Air Pollution Controller (ESP)	- Site Construction & Commissioning	- Independent Power Plants
- Circulating Fluidised Bed Combustion (CFBC)	- Deaerator / Fans	- Retrofitting and Modernisation	- Cogeneration Plants
- Atmospheric Fluidised Bed Combustion (AFBC)	- Valves	- Replacement / Upgradation of Parts	- Sugar Plants
- Travelling / Pulsating / Pinhole / Dumping Grate	- Electricals & Instrumentations	- Troubleshooting & Services	- Bulk Material Handling
- Oil & Gas Fired	- Burner	- Residual Life Assessment (RLA) Studies	- Water Treatment Plants
- Heat Recovery Steam Generators	- Bed Ash Coolers	- Training	- Distilleries
- Waste to Energy	- DCS	- Spares	- Civil Construction including Factories
- Waste Heat Recovery	- Feeders	- Operation & Maintenance	- Waste Water Treatment Equipment
- Slop / Spent Wash / Vinasse Fired	- Pumps		

* Only available with the Boiler

Feed Cycle Equipment (HP Heater, LP Heater & Condenser)
Process Equipment • Presses • Castings • Contract Manufacturing



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