



GB

ENMAS GB POWER SYSTEMS PROJECTS LIMITED

Customer Service Through Partnering



Clientele



KAMACHI GROUP



Technology Collaborations



Doosan
Babcock
Energy

Industrial boilers, AFBC, PF, Stoker &
Grate Fired Boilers

Doosan Babcock, U.K

EckRohrKessel



CFBC Boilers, Corner tube Boilers

EckRohrKessel(ERK), GmbH, Germany

Hamon Research-Cottrell
Air Pollution Control



Electro Static Precipitators

Hamon Research Cottrell, USA



PIC Group, Inc.
"The Best Of The Best"

Operation & Maintenance
(Power Plants above 100MW)

PIC Marubeni Energy Group, Atlanta, USA

Mission Statement

To capitalize on the experience of three decades in industrial and Utility Power sectors and its evolution as an unique integrated Corporate Group by partnering with Business Associates.

Enmas GB partners with its customers to conceive, develop, jointly own, operate and maintain Power Plants through their entire life.

Enmas GB Group

An enterprise specialized domains

The group's competence in Design and Engineering, Manufacturing, Construction, Operation & Maintenance and Project management is reflected in the involvement of its constituent business entities focused on specialized activities, yet sharing knowledge and expertise with one another, and also collaborating with global players. This synergy, heightened by the adaptation of multi-layer networking methodology within the Group, ensures outstanding performance and optimum results for its customers, time and again.

Broad Spectrum of Business

EPC of Power Plants
(Boiler Turbine Generator & Balance of Plant)

Power Boilers

EPC of Electrical Balance of Plant, Control
& Instrumentation Balance of Plant, Switch
Yard, Transmission & Distribution

Manufacturing

Erection and Commissioning Services

Associate Company - Enmas O&M Services (P) Ltd
Operation and Maintenance Services for
Comprehensive Asset Management

Responsibility Matrix for Implementation of Power Plant

Boiler & Auxiliaries

Doosan Babcock Energy Limited

Technology Licensor for Boiler - Design Specialist for Industrial Boilers including Pulverised Fuel/ AFBC/ Stoker / Oil & Gas Fired

Eck Rohr Kessel Germany - License Agreement

Technology holding for CFBC Boiler- Design Specialist Vetting by Design Team USA

Hamon Research Cottrell, USA

Technology Licensee for
ESP for Boilers

GB Engineering Enterprises (P) Limited

Manufacturing arm
of the group

Electrical and Instrumentation Group

Electrical BOP, C&I BOP,
Switchyard, Transmission
& Distribution Line

**Enmas GB Power Systems
Projects Limited**
Turnkey provider of Engineering,
Procurement and Construction
services

Turbine Island supplier

Air Cooled / Water Cooled
Condenser

Civil Works

**Other Bought out
supplies & services**
including mechanical &
electrical (from reputed
vendors)



EPC of Thermal Power Plants

- Design, Engineering, Procurement, Supply, Erection and Commissioning of Thermal Power Plants
- Turnkey execution of Boiler Turbine Generator Island
- Turnkey execution of Balance Of Plant

1 x 40MW ISMT Limited

Chandrapur, Maharashtra

2 x 35 MW Kamachi Sponge & Power Corporation Limited

Gummidipoondi, Tamil Nadu

2 x 35 MW Tulsyan NEC Limited

Gummidipoondi, Tamil Nadu

1 x 12 MW Surendra Mining Industries Private Limited

Bonai, Orissa

1 x 12 MW ITC Limited - PSPD

Tribeni, West Bengal

2 x 55 MW Tannex Power Generation Limited

Cuddalore, Tamil Nadu



Power Boilers

- Design, Engineering, Manufacturing, Erection & Commissioning of Power Boilers
- Circulating Fluidized Bed Combustion Boilers
- Pulverized Fuel Boilers
- Atmospheric Fluidized Bed Combustion Boilers
- Waste Heat Recovery Boilers - Direct Reduction of Iron Kiln / Coke Oven / Blast Furnace Gas / Calcined Petroleum Coke / Cement Kiln
- Traveling Grate, Tail Gas Fired & Inline / Reactor Boilers

Abhishek Industries, Punjab

2 x 130 TPH, 105 kg/cm², 520°C, AFBC Boiler

Fuel : Indian Coal, Imported Coal, Lignite, Pet Coke & Rice Husk

Consultant: SPBPC

Completion Time :
Unit I – 14 Months, Unit II – 16 Months



JSW Steels, Salem

1 x 127 TPH, 88kg/cm², 520°C, AFBC Boiler

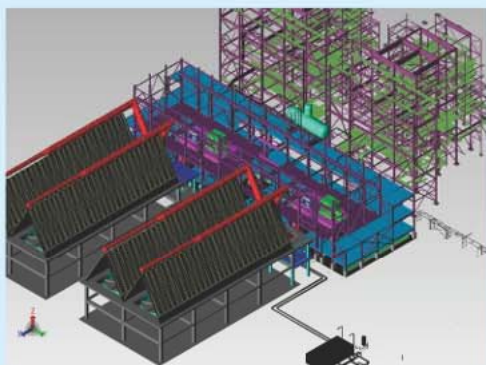
Fuel : Indian Coal & Imported Coal.

Completion Time : 15 months



CII Carbon LLC, USA

1 x 108 TPH, 93 kg/cm², 426 °C, Waste Heat Recovery Boiler.



Tulsyan NEC Ltd.

2 x 150 TPH, CFBC Boiler,
96 kg/cm², 525°C

Fuel : South African Coal, Indian Coal, Indonesian Coal, Australian Coal, Washery Rejects & Char





**Tamil Nadu Newsprint & Paper Limited,
Karur, Tamil Nadu**

125 TPH, AFBC Boiler, 105 kg/cm², 525 °C

Fuel : Indian Coal, Imported Coal & Bagasse Pith

Goa Energy Private Limited, Goa

2 x 64 TPH, WHR Boiler, 64 kg/cm², 485 °C

Fuel : Coke Oven & Blast Furnace Gas



**Sarda Metals & Alloys Limited
Vizag, Andhra Pradesh**

84 MW, 320 TPH, PF Fired Boiler, 109 kg/cm², 540 °C

Fuel : Indian & Indonesian Coal



Electrical BOP, Switchyards, Power Evacuation, Transmission & Distribution

- Design, Engineering, Procurement and Construction of Electrical balance of plant
- Design, Engineering, Supply, Erection, Testing & Commissioning of Switchyards
- Transmission & Distribution

Third Party Inspection (TCIL) – For “Rajiv Gandhi Grameen Vidyutikaran Yojana”(RGGVY)

Implementation underway in the State of Jharkhand

- 10th Plan (Five year plan)
- 100% Inspection of 4720 Villages
- covering 5,00,000 house holds.

Implementation underway in Uttar and Dakshin Haryana

- 11th Plan (Five year plan) Inspection
- 2000 Villages and 2,00,000 house holds.



Electrical Balance of Plant & Switchyards:

2x35MW: M/s Kamachi Sponge and Power Corporation Limited

EBOP including 6-bay, 230kV switchyard and 4km long 230kV double circuit transmission line

2x35MW: M/s Tulsyan NEC Limited

EBOP including 8-bay, 110kV switchyard

2x45MW: M/s SBQ Steels Limited

Electrical, C&I Balance of Plant & 9 bay 220kV Gas Insulated Substation (GIS).

1x12MW: M/s Surendra Mining Industries Pvt. Ltd.

Electrical, C&I Balance of Plant

Power Evacuation Facilities

Wind Power Evacuation: 220kV & 110kV Switchyards to evacuate 300MW of Power for M/s Gamesa Wind Turbines Private Limited



Enmas O&M Services Private Limited

- Plant Start-up and Commissioning services.
- O&M Training and Development.
- Operation management with MIS.
- Plant Operation, control room and field.
- Fuel management and Water treatment.
- Plant Maintenance – Preventive, Break down Maintenance & Plant shutdown planning and Execution.
- Maintenance Planning, Equipment History, CMMS.
- Consumable Planning, Procurement and Stores.
- Chemical cleaning of boilers & condensers (Pre & Post operational cleaning)
- Water treatment plant – Spares ,Chemicals & Consumables
- Spares Management Planning, Procurement, Stores and Inventory Control.
- Periodical Performance Review, Analysis and Optimization.
- Audit services of plant safety, condition monitoring of critical equipment & NDT service.
- Energy studies & Performance testing.
- RLA studies, Plant betterment services, Renovation & Modernization (R&M).



Manufacturing Facilities of GB Engineering Enterprises Private Limited

S.No	Works Name	Area Available (sq ft)	Covered Area (sq ft)	Handling Capacity (MT)	Man-hours available per day	Annual Tonnage Capacity (MT) (2009 - 10)
1	Main	5,22,720	1,60,000	40	4,000	4,800
2	Tubular	2,17,800	40,000	40	2,000	3,600
3	Pudukkudi	65,00,000	1,00,000	20	2,400	4,600
4	Visakhapatnam	1,80,740	52,285	15	4,500	8,000
5	Tuticorin	87,000	Port side assembly facility for Export Jobs			
Total		75,08,260	3,52,285		12,900	21,000



ASME 'U' & 'S'
Authorised



NABL Accreditation
for Mechanical Testing,
Chemical Testing and
Mechanical Calibration



ISO 9001:2008
Certified

Column & Boom
(Submerged Arc Welding)



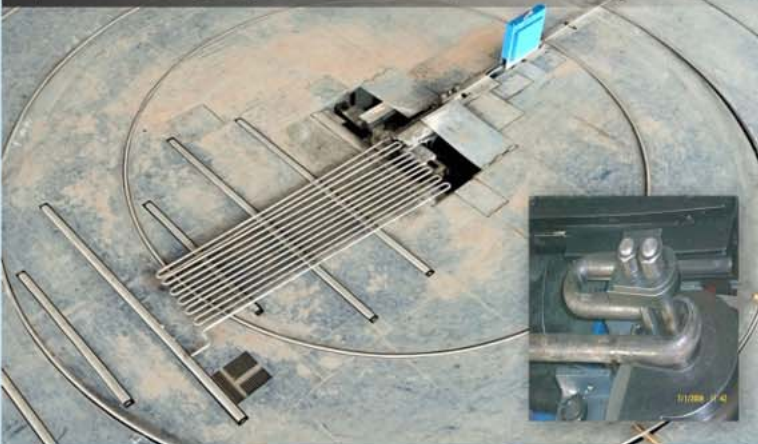
Helical Pipe Bending Machine



Butt Welding Machine



Serpentine Tube Bending Machine
Capable of bending single coil of 100m length

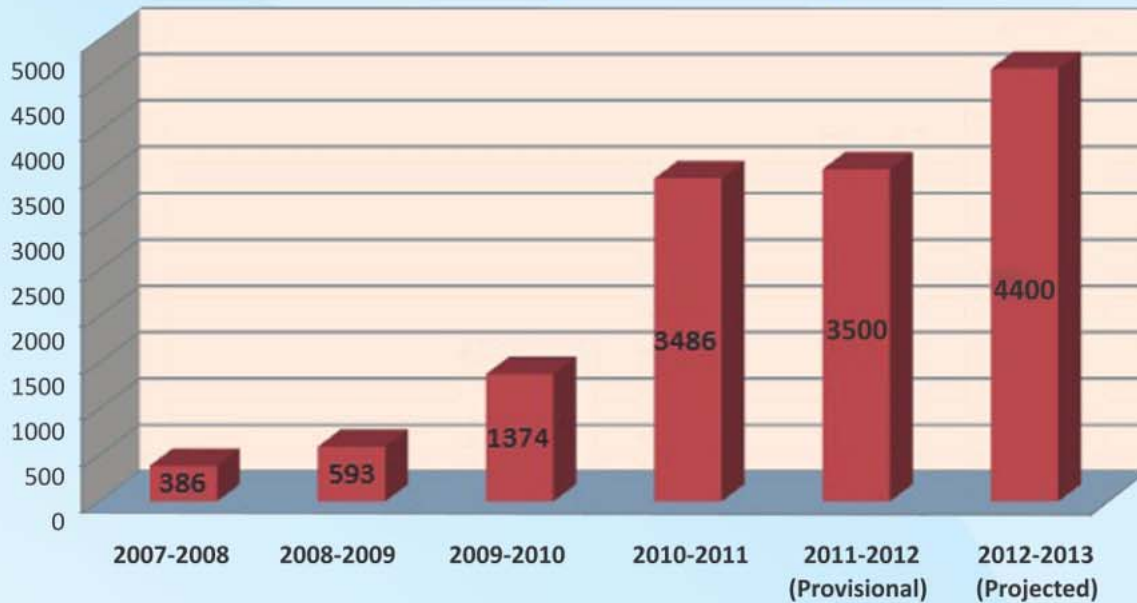


Automatic Panel Welding Machine



Financial

TURNOVER (INR MILLIONS)



Testimonials

"M/s ENMAS GB Power Systems Projects Limited, Chennai have successfully completed Supply, Erection, Testing & Commissioning of Electrical Balance of Plant including 6 Bay 230 kV Switch Yard & 4 km Double Circuit 230 kV Transmission Line

KAMACHI SPONGE & POWER CORPORATION LIMITED,
Chennai, Tamil Nadu

"M/s ENMAS, Chennai have supplied one (1) No 90T/hr, 63 kg/cm², 450° C multi-fuel Fired CFBC Boiler through FOSTER WHEELER PYRO POWER INDIA [FWPI] for our captive power plant The Boiler is in successful operation since the year 1998. The boiler is unique in design with a compact separator design, which burns a variety of fuels (100% coal or coal plus biomass)....."

THE MYSORE PAPER MILLS LIMITED,
Bhadravati, Karnataka

"M/s GB Engineering Enterprises Private Limited, Trichy is our approved sub-contractor for the supply of lignite Bunkers and Boiler Bunker Structures. M/s GB Engineering Enterprises Private Limited, Trichy has supplied about 5000 MT of fabricated structures including lignite bunkers during a period of 11 months (October 1999 to August 2000) against contract no. 229235 DATED 31st JULY 1999 with them....."

ASIA POWER PROJECTS PVT LTD,
(Formerly Ansaldo Services Pvt Ltd)

"M/s Enmas have supplied two (2) nos. 64 T/hr 64 kg/cm², 480° C waste heat recovery boilers for our 30 MW power plant located in Amona/ Navelim village, Bicholim Taluka, Goa. Their scope of work included design, manufacture, supply, erection and commissioning of these boilers complete, including fans, ducts, control & instrumentation, electrical drives and cables, boiler structures, LDO system, main steam and internal piping etc. The boilers are in operation since April'07 and June'07 resp. The boilers are unique in design in as much as they use Blast furnace gas and high temperature (upto 1300° C) coke oven gas in one composite boiler...."

GOA ENERGY PRIVATE LIMITED
New Delhi

"M/s ENMAS GB POWER SYSTEMS PROJECTS LIMITED, Chennai have supplied one (1) No. 127 T/hr, 88kg/cm², 520° C Coal fired, AFBC Boiler for our captive power plant located in our JSW, Salem Unit, Mechery Village, Tamil Nadu, India. The boiler successfully commissioned in 2006 was later installed with Rifle bore bed coil design burning a variety of coals is providing continuous availability from Jan, 2008 without any forced outage...."

JSW STEEL LIMITED
Salem, Tamil Nadu

In the Thermal Power Station-I (600 MW Capacity) of Neyveli Lignite Corporation, there are 6 numbers of 50 MW Units and 3 Numbers of 100 MW Units. There are 12 Boilers designed to supply steam at 89 Kg. pressure and 535° C temperature with a flow of 220 Tonnes/Hr to the Turbines of the above Units. Units 1 and 9 have undergone Life Extension Programme recently. The Water Walls, uprisers and down comers for boilers 1, 9A and 9B were manufacture and supplied by M/s G.B Engineering Works, Tiruchirappalli, Tamil Nadu and the performance after L.E.P. is found to be very good.

NEYVELI LIGNITE CORPORATION LIMITED
Neyveli, Tamil Nadu

- Boilers
- ★ EPC of Power Plants
- EBOP & Switch Yard
- ◆ Manufacturing Facilities
- ▲ Regional Office
- Corporate Office
- O&M



Contact Us

EPC, POWER BOILERS, SWITCH YARDS, EBOP, C&I BOP, T&D

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