

CONTRACT MANUFACTURING









ISO 9001 : 2015 - (Quality Management System) by Lloyds Register of Quality Assurance

ISO 14001 : 2015 - (Environmental Management System) by DNV

 $\textbf{ISO 45001:2018} - (\textbf{Occupational Health and Safety Management System}) \ \textbf{by DNV}$

NABL Approved Lab - National Accreditation Board for Testing and Calibration Laboratories



Isgec Heavy Engineering Ltd. is a multi-product & multi-location, public company that has been providing engineering solutions to customers across 90 countries for the past 90 years.

The company has a diversified range of offerings that range from the manufacturing of highly sophisticated and finely engineered products to the setting up of EPC projects for customers around the world.

Isgec has varied capabilities and credentials for supplying "Built to Print" and "Built to Specifications" equipment.

Isgec has extensive infrastructure covering 1,110,000 sq.m. of covered shop area across 6 locations. These are internationally certified and boast of a wide range of facilities. In fact, most of the manufacturing and testing requirements are met internally, with almost zero dependence on outside sources.

Self reliant manufacturing infrastructure along with strong supply chain provides a cutting edge to Isgec's strength in this domain. Isgec believe in enhancing the profitability of its partners through best manufacturing practices and innovative solutions.

Approvals

- Directorate General of Quality Assurance (DGQA)
- Banaras Locomotive Works (BLW)
- Diesel Loco Modernisation Works, Patiala (DMW)
- Nuclear Power Corporation of India Ltd. (NPCIL)
- Research Design and Standards Organisation (RDSO)
- Defence Research and Development Organisation (DRDO)

Sectors Served

Steel



Dewatering Drum



Ladles Turret for Steel Melting Shop (SMS)



Material Hopper



Segment for Slab Caster



Drive & Tipping Station



Tundish







Hot Metal Ladle Transfer Car Segment for Continuous Caster Tension Leveler for Cold Rolling Mill

Power

Valve Body



Mining



Base Frame







Lower & Middle Housings with Roller Covers for Pulveriser

Combined Bracket

Power Head

Cement



Medical



Gantry for Proton Beam Therapy Equipment (Cancer Research)

Shipyard



Trestle

Aerospace



Nuclear



Automobile



Rubber Moulding Press Nuclear Waste Compaction Press Tandem Press

In-House Infrastructure



Manufacturing Capabilities

- · Compliance to Global Codes and Standards
- Process Centric Approach for Manufacturing
- · Robust Quality System
- Tool Room and Standard/Calibration Room
- Jig & Fixture based manufacturing to achieve controlled fabrication and precision machining accuracies
- Advanced Tooling for Metal Cutting
- WPS, PQR, Welder Qualification, Visual Inspection, Non Destructive Testing and Compliance of Statutory Fabrication Requirements as per various International Codes & Standards such as IS, ASME, EN etc.
- Welding Training Centre to enhance capabilities for ensuring Stringent Fabrication
- Automated Welding Processes
- Maximum Height available under Crane Hook: 15 m (on the floor), 21 m (in the pit)
- · Maximum Handling Capacity: 300 Tonnes
- Maximum Pit size: 28m x 10m x 6m
- Thermal Stress Relieving (Maximum Size: 14.5 m x 4.6 m x 4 m), Vibratory Stress Relieving, Grit Blasting and Painting Room
- Maximum size of Boring Machine: 16 m x 4.5 m x 2.4 m
- · Large Floor Type Boring Machines: 15 Nos.
- Maximum Capacity of Gear Hobbing Machine: Diameter 2000 mm and module 20

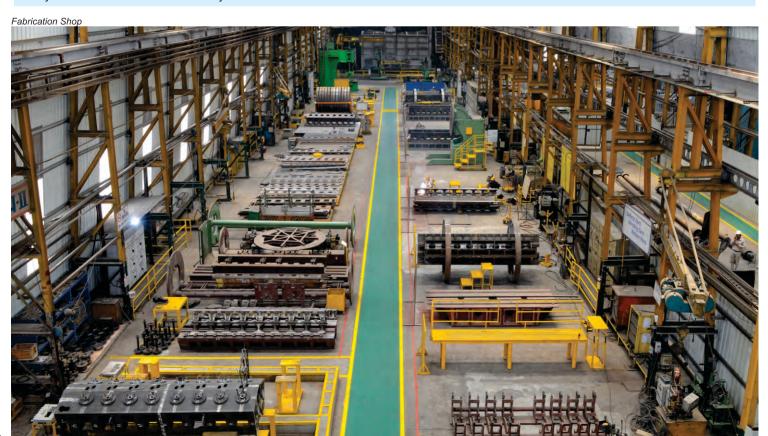
Testing and Inspection

- Dedicated team for Quality Assurance
- NABL (National Accreditation Board for Testing and Calibration Laboratories) Approved Lab
- · Wide Range of Measuring Instruments
- CARL ZEISS Make Coordinate Measuring Machine (6 m x 3 m x 2 m)
- · Radiography up to 300 mm thickness
- · Helium Leak Testing
- · Mechanised Ultrasonic Testing / TOFD

- Positive Material Identification (PMI)
- · Magnetic Particle Testing (MPI)
- Dye Penetrant Testing
- Impact Testing up to -196°C (- 321°F)
- Tensile Testing
- IGC (Inter Granular Corrosion) Testing
- · Hardness Testing
- Qualified Manpower (Engineers & Supervisors) having Certification of various National & International Certifying Bodies such as ASNT, CWI etc.

Third Party Inspection

• Lloyds • RITES • TUV • Tata Projects • ABS • Bureau Veritas







Machine Shop



Fabrication Shop



Carl Zeiss Coordinate Measuring Machine



Gleason Pfauter Gear Hobbing Machine



Manipulator for Handling large size Fabrication



Horizontal Boring Machine

Design Capabilities

Mechanical Design

Structural Engineering & Kinematics and Dynamics Analysis of Linkage Mechanism.

Pneumatic Design

Pneumatic circuit design, normally used for Auxiliary system. Selection and Sequence / Interface of various Pneumatic elements to achieve desired function.





Hydraulic Design

Hydraulic Cylinder designing suitable to handle 315 bar pressure. Experience of using Servo / Proportional Hydraulics to match with improved equipment Control / Function.

Advance level hydraulics circuits meeting CE and OSHA safety norms.

Electrical & Electronics Design

Hands-on experience of using PLC/SCADA system, Electrical circuits (SLD) in E-Plan software. Interface with Automation (Robotics, Pick and Place, 3-Axis Transfer) equipment & other accessories to offer complete solution. Advance level Electrical / Electronics components meeting CE and OSHA safety norms. Use of Servo Motors to meet advanced process requirements / special materials.



Lubrication Design

Selection and designing of Lubrication system-must for smooth running of machine.





Other Isgec Offerings

MANUFACTURING

Presses • Process Equipment • Castings • Boiler Manufacturing & Piping • Liquified Gas Containers • Contract Manufacturing • Skids



ydraulic & Mechancial



Critical Process Equipments



Castings



Boiler Brocoure Borts



Piping Spools



& Mod



Liquified



Tantalum

ENGINEERING, PROCUREMENT & CONSTRUCTION

Boilers • Sugar Plants & Distilleries • Power Projects • Air Pollution Control Equipment & Projects • Industrial Waste Water Treatment Projects

Bulk Material Handling Equipment & Projects • Civil Construction including Factories



Industrial Boilers



Sugar Plants & Machinery



Distilleries



Captive Power Plants



Bulk Material Handling



Electrostatic Precipitators (ESP)



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