



A JOINT VENTURE OF
ISGEC HEAVY ENGINEERING LTD., INDIA
AND
HITACHI ZOSSEN CORP., JAPAN

Process Equipment

Specialised & Critical Process Equipment for the
Refineries, Fertilizer, Petrochemical & GTL Industries



*Reform Gas Waste Heat Boiler
for an Indian Fertiliser Plant
(Proprietary Equipment)*



Isgec Hitachi Zosen Ltd. is a joint venture company set up to cater to the specialised & critical Process Equipment requirements of Refineries, Fertilizer, Petrochemical & GTL industries, across the world.

Located at the port town of Dahej (Gujarat), on the west coast of India, the venture is backed by two established and experienced companies - Isgec Heavy Engineering Ltd. from India, and Hitachi Zosen Corp. from Japan.



Isgec has a history of 85+ years and is a diversified heavy engineering company with interests in Process Equipment, EPC Power Plants, Boilers, Sugar Plants & Machinery, Mechanical & Hydraulic Presses, Castings, Metal Cutting Machinery and Contract Manufacturing.



Hitachi Zosen is a 135-year-old company, based out of Osaka, Japan with interests in Process Equipment, Environmental Systems, Industrial Plants, Industrial Machinery, Precision Machinery, Steel Structure, Construction Machinery, and Disaster Prevention Systems.

The joint venture brings together state-of-the-art technical & engineering skills of Hitachi Zosen and the manufacturing expertise of Isgec.

The joint venture, which is manned by personnel from India and Japan, is actively supported by both Isgec and Hitachi Zosen, in all its activities, including design & marketing, manufacturing & project management.

Plant at the port town of Dahej (Gujarat), India



PRODUCTS

- | | |
|---------------------------------|---|
| • Tubular Reactors | • Gas Heat Exchangers |
| • Ammonia Converters | • Reactor Internals |
| • Ammonia Converter (Internals) | • Insitu Modification & Repair for Critical Equipment |
| • Hydroprocessing Reactors | • Splitter and Fractanator Columns |
| • Urea Reactors | • CCR Reactors |
| • Urea Strippers | • Coke Drums |
| • Carbamate Condensers | • Tertiary Separators |
| • Reform Gas Waste Heat Boiler | • Feed Gas Dryers |
| • Steam Superheater | • GTL Reactors |
| • Site Fabricated Equipment | |

MATERIALS

Cr-Mo-V Steels • 2¼Cr-1Mo • 1¼Cr-½Mo • Stainless Steels • Duplex Stainless Steels • Inconel • Titanium • Cr-Ni-Mo • Urea Grade Material



Heavy Shop at Dahej

APPROVALS

- KBR
- Chevron Lummus Global
- Haldor Topsoe
- Toyo
- Shell
- Lummus Technology
- Wood
- Total
- Sasol
- Exxon Mobil
- Air Product
- PDIL
- EIL
- BP
- Scientific Design
- UOP
- AXENS
- INEOS
- Thyssenkrupp

INFRASTRUCTURE

- Rolling Capacity - 250 mm in cold condition
- Multi-Wall construction type vessels
- Linear Accelerator for Radiography
- Grit Blasting and Painting Room
- Horizontal Boring Machine
- Inner Bore Welding
- ESSC Strip Cladding
- Modular Fabrication Shop for over dimensional equipment manufacturing
- Intermediate Tube to Tube Sheet joint expansion
- Ro-Ro Jetty for Ocean Transportation
- Automatic Tube to Tube Sheet Welding
- Deep Hole Gun Drill machine (up to 1000 mm depth)
- VTL
- Single Piece Equipment Handling Capacity (Inside Shop): 2400 MT & 14 M Diameter

ACCREDITATIONS

- ASME 'S' 'U' 'U-2' & 'U-3' Stamps
- National Board, USA 'R' Symbol
- National Board, USA 'NB' Mark
- Chief Inspector of Boilers (CIB)
- ISO 9001 : 2015 Approval by Lloyds Register of Quality Assurance
- ISO 45001 : 2018
- ISO 14001 : 2015
- OHSAS 18001 : 2007
- Ad Merk Blatter
- CE Marking
- GOST



Cr-Mo-V Reactor for an European Refinery

HTAS technology Ammonia Converter Shell for a Fertiliser Plant





Ammonia Unitized Chiller
for a Fertiliser Plant

SOME OF OUR PRESTIGIOUS CLIENTS

Air Product-USA	GNFC, India	MHI, Japan	Saudi Aramco
Adnoc Fertilisers, Abudhabi	GSFC-India	NFL, India	Sonatrach, Algeria
Bharat Petroleum Corp. Ltd., India	HURL, India	ORPIC, Oman	Thai Oil, Thailand
Belco Technologies, USA	Indian Oil Corporation, India	PDO, Oman	Toyo Engineering, Japan
Braskem Idesa, Mexico	IFFCO, India	Petrokimia, Gresik, Indonesia	Total, France
Chambal Fertilisers, India	JGC, Japan	Petrofac, UAE	Technip Energies
Chennai Petroleum Corp. Ltd., India	KBR	Reliance Industries, India	Tecnicas Reunidas, Spain
Dyno Nobel, USA	KIMA-Egypt	RFCL, India	Yara, Australia
Engineers India Ltd., India	KNPC, Kuwait	Saipem, Italy	YPFB, Bolivia
	Linde, Germany		



105 Mtr. Long
Ethylene Fractionator



Coke Drum
for an Indian Refinery



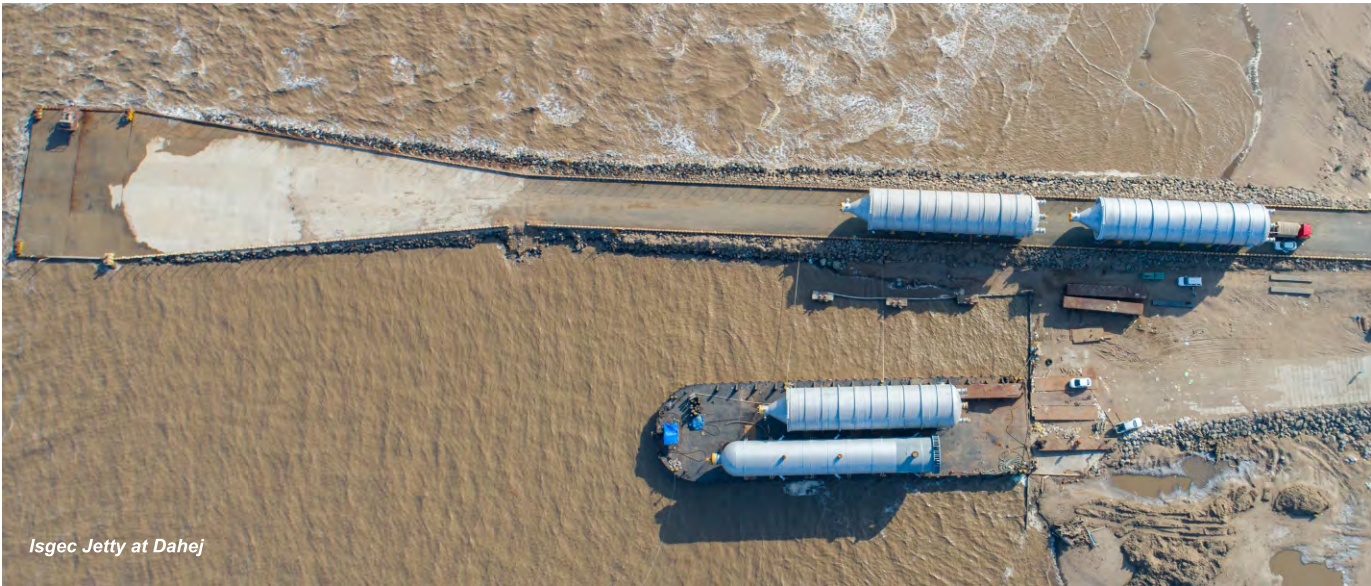
Cr-Mo-V Reactor
for an Indian Refinery

Modular Fabrication Area

3 Bays of Modular Fabrication Area



Shipping Facility



Isgec Jetty at Dahej



TESTING FACILITIES

- NABL Approved Lab
- Radiography up to 300 mm Thickness
- Helium Leak Testing
- Mechanised Ultrasonic Testing / TOFD
- Positive Material Identification (PMI)
- Impact Testing up to -196°C (-321°F)
- Tensile Testing
- IGC Testing
- Theodolite System
- Hardness Testing
- Magnetic Particle Testing
- Dye Penetrant Testing
- TOFD / PAUT
- Chemical Testing
- Tube to Tube Sheet Joints RT & UT
- Hydro Test



Automatic Tube to Tube Sheet Welding in EO Reactor



Cold Rolling upto 250 mm



Shrink fitting of Multi-Wall type Vessels



Urea Stripper



Urea Reactor (Toyo Technology)



Casale Technology Urea Reactor for a Fertiliser Plant



Steam Superheater for an Indian Fertiliser Plant



Marketing

Contact:

T. Terai E-mail: terai@hitachizosen.co.jp

E-mail: shalabh@isgsec.com

www.isgechitachizosen.com

Works

Dahej (Port Town) Gujarat, India