Corporate Overview

Head Office, Noida

Plant at port town of Dahej, Gujarat

New Plant at Bawal for Standard Presses

Plant at Yamunanagar, Haryana
ISGEC Group Turnover & Exports

Financial Year: October - September
Conversion @ Rs.45/- to 1USD
- Experience

• **Presses**
  Over 2700 Presses supplied including:
  - Including 31 Press Lines
  - Most of them supplied in the last 10 years
  - Presence in 19 Countries

• **Contract Manufacturing**
  Over 15000 Tonnes of Mechanical Equipment made to customers design.

• **Equipment for Sugar Plants**
## Repeat Orders

<table>
<thead>
<tr>
<th>Customer</th>
<th>Country</th>
<th>Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>ThyssenKrupp</td>
<td>USA &amp; India</td>
<td>7 (28 Presses)</td>
</tr>
<tr>
<td>Valeo</td>
<td>France, Mexico &amp; India</td>
<td>4 (9 Presses)</td>
</tr>
<tr>
<td>LuK</td>
<td>Germany, China, Brazil, South Africa &amp; India</td>
<td>5 (7 Presses)</td>
</tr>
<tr>
<td>Brandl</td>
<td>Germany, Romania and Czech Republic</td>
<td>2 (3 Presses)</td>
</tr>
<tr>
<td>Marubeni</td>
<td>India</td>
<td>2 (4 Presses)</td>
</tr>
<tr>
<td>Bellsonica Corporation</td>
<td>India</td>
<td>2 (19 Presses)</td>
</tr>
<tr>
<td>Suzuki Maruti</td>
<td>India</td>
<td>4 (5 Presses)</td>
</tr>
<tr>
<td>Ford Motors</td>
<td>India</td>
<td>2 (4 Presses)</td>
</tr>
<tr>
<td>Tata Motors</td>
<td>India</td>
<td>6 (11 Presses)</td>
</tr>
<tr>
<td>Mahindra &amp; Mahindra</td>
<td>India</td>
<td>4 (9 Presses)</td>
</tr>
<tr>
<td>Kalyani Lemmerz</td>
<td>India</td>
<td>8 (17 Presses)</td>
</tr>
<tr>
<td>Caparo Group</td>
<td>India</td>
<td>10 (31 Presses)</td>
</tr>
<tr>
<td>JBML Group</td>
<td>India</td>
<td>23 (85 Presses)</td>
</tr>
</tbody>
</table>
CIE Automotive, Egania, Spain

Stamping Center
- 2500T Link Drive Press
- Bed Size: 7m x 2.8m
- Press is equipped with:
  Electronic Transfer System and Feed Line Equipment
2000T Link Drive Transfer Press.

Bolster Size: 6100mm x 2800mm

This Press fitted with Robots for transfer of components
Brandl, Pfeffenhäusern, Germany

- Interfacing Of COMAU Robots by ISGEC
- Press equipped with 5 working stations with a die Cushion capacity of 64T at each station.
- Output of 8 parts per minute.

- Repeat Order received from the customer after supply of 315T Hydraulic & 400T Mechanical Presses to their Plants in ROMANIA & CZECH REPUBLIC.
Brandl, Czech Republic & Romania

400T Mechanical Press for Kaplice, Czech Republic

315T Hydraulic Press for Sibiu, Romania

(Photographs taken during inspection at ISGEC Works)
• Blanking Line with Oscillating Shear for Neel Metal
• Integrated with Feedline, Washing Machine and Stacker
• Working Speed: 60 SPM
• Bed Size 4500 x 2500 mm (~180” x 100”)
• Similar Blanking Press supplied to Ford Motors
Mahindra & Mahindra India

• 1200T Mechanical Tryout Press.
Benteler, South Africa

- 630T Hydraulic Press
- Press is fitted with Robots for transfer of components
- Repeat Order for India received
- Repeat Order for China under consideration
JBM OGIHARA, India

Press Line 8-5-4-4 commissioned in 2010.
ThyssenKrupp, India

1000T & 800T Press Lines (10-6-6-6-4) & (8-6-6-6-4) – Commissioned in 2000
3rd Line (10-6-4-4-4) supplied in 2008
Die Spotting Press:

- Accuracies as per JIS 6403 – 1994, special grade
- **25** Presses supplied to valued customers such as:
  - Suzuki Motorcycles
  - Maruti Suzuki
  - ThyssenKrupp
  - Tata Motors
  - Sermo Mould
  - Ashok Leyland
1200T Hot Forming Press:

- Interfaced with furnace, loader, unloader and cooling circuit for quenching
- For Hot Forming of Boron Steel Components
- The components produced (Pillars, Front Case etc.) have high strength and low weight and are used in luxury car segment
Tandem Press Line 2 x 1000T and 3 x 600T Presses supplied to Valeo, Mexico.
ISGEC’s scope includes:
Presses; Die Transfer System
Die Storage Racks and interfacing with Press to Press transfer system
Valeo, San Louis Potosi, Mexico

1000T Feed Press
Valeo, India

- 1st Installation in Valeo Group
- 630T Press for Progressive Dies application
- Interfaced with Feedline Equipment
- Satisfactory performance since 1998
- Working Speed (Variable) : 30 to 90 SPM's
• 2nd Installation in Valeo Group

• 1000T Press for Progressive Dies application

• Interfaced with Feedline equipment

• Satisfactory performance since 2001

• Working Speed (Variable) : 30 to 100 SPM’s

(Photograph taken during inspection at ISGEC Works)
Valeo, Amines, France

- Repeat order from Valeo, in 2005
- 1000T Mechanical Press
- Installed at Valeo, Amiens, France
- Working Speed (Variable) 30 to 120 SPM’s
LuK, Sorocaba, Brazil

- 630T Mechanical Press
- 2nd Installation in LuK Group
- Satisfactory performance since 2000
- Working Speed (Variable): 30 to 100 SPM’s

Similar Press supplied to LuK, Port Elizabeth, South Africa in 2007

(Photograph taken during inspection at ISGEC Works)
LuK, Sorocaba, Brazil

- 1500T Hydraulic Press commissioned at LuK, Brazil in 2008
- High Speed Hydraulic Press with dry cycle time of 3.3 seconds
• 630T and 160T Mechanical Presses commissioned at LuK, China in 2006
630T Mechanical Press commissioned at LuK, Germany in 2008
General Motors, San Louis Potosi, Mexico

• One of the three 1000T Link Drive Mechanical Presses manufactured for GM, Mexico

• These Presses are part of Automated Tandem Press Line supplied by WIA

(Photograph taken during inspection at ISGEC Works)
Tata Motors, India

- 1200T Hydraulic Press for Deep Drawn Sheet Metal Components

We have so far supplied 11 Presses to this customer
• 1200T Hydraulic Press for component tryout built to JIS 6403 Special Grade
Wheels, India

• 2000T Hydraulic Press for Hot Forming of Earth Mover Wheels

We have so far supplied 27 Presses to this customer
Force Motors, India


• Repeat order for machine supplied in year 1999

• 4 Point CNC Die Cushion

• Cushion in Slide

• Manufacturing components for Mercedes Utility Vehicle

(Photograph taken during Inspection at ISGEC Works)
Hemming Presses: Ford, Marubeni (Suzuki), Honda

- Repeat Orders from Ford, India
- 6 Presses Supplied to Marubeni (Suzuki India Project)
- Similar Presses supplied to Honda Motors
PRODUCTION FACILITIES
MANUFACTURING CAPACITY - 12 LINES PER YEAR
Each Equivalent to A1 Line (1500T Press)

- Shop Area: 20,000 sq.m.
- Maximum Crane capacity: 200T
- 85 Qualified Engineers
- Work Force: 450
- Assembly Pits: 4
- Maximum pit size: 25m x 10m x 5.5m
Production Facilities

One of the Shops for Assembling and Machining
Production Facilities

• Horizontal Boring Mills:
  - 15 Nos. (including 7 axis CNC)
  - Maximum Ram Size (square): 550mm
  - Maximum size: 16m x 4.5m x 2.4m (X x Y x Z)

• Plano Millers - 2 Nos.
  Table Size: 6000 mm x 3000 mm
  Clear Height: 3000mm
Production Facilities

One of the 6 CNC Turning Lathes
maximum turning capacity:
- Diameter : 1100 mm
- Length : 10000 mm

One of 9 Vertical Boring Machines

- Maximum size of job:
  6.1m Dia. X 3.5m Ht.
This Furnace [size 4m (13’) x 4.5m (15’) x 14.5m (47.5’)] is one of the 5 Heat Treatment Furnaces used for Normalizing, Annealing, Hardening, Tempering and Stress Relieving of Fabrications and Castings.

We also have facility for Water and Polymer Quenching.

We can hot roll Steel Plates up to 200 mm (8”) thickness and cold roll up to 100 mm (4”) thickness.
Production Facilities

Radiography facility up to 200 mm (8”) thickness using a Cobalt 60 source. We have 7 radiography halls and take more than 100,000 radiographs annually. We also have facility for X-Ray and Iridium Radiography.

Steel is melted in an 8.5Tonne Arc Furnace and Dual Track Induction Furnace having 2 crucibles of 9 Tonnes each. Besides, there is also a AOD Furnace of 16 Tonnes capacity and a LR Furnace of 22T capacity for secondary refining of steel.
QUALITY, SAFETY AND ENVIRONMENT
Quality, Safety and Environment - Standards

- Accuracy

**Hydraulic Presses** : J IS 6403 - 1994, Grade I
**Die Spotting & Tryout Presses** : J IS 6403 - 1994, Special Grade
**Mechanical Presses** : J IS 6402 - 1985, Grade I

- Rigidity

  **Deflection of Bed / Slide under full load** : 0.17 mm/m or better as per customer requirement

- Safety

  : EN (CE Safeties) / OSHA
Quality, Safety and Environment

ISO 9001: 2000

OSHAS 18001: 1999
(Occupational Health & Safety Management System)

ISO 14001: 2004
(Environmental Management System)
Global Sourcing

Component

Hydraulic Components
PLC Controls
Safety Relays
Electrical Motors
Clutch and brake unit
Cam limit Switch
Electrical Drives
Pneumatic Components
Dual Solenoid Safety Valve
Die Clamps
Slide Locking arrangement
Tonnage Monitor
Brake Monitor

Make*

: Bosch Rexroth, Parker, Vickers
: Siemens, Telemechanique, Allan Bradley, Mitsubishi,
: PILZ
: Siemens, ABB, Reliance
: Ortlinghaus, Goizper, Omri
: Balluf, KAMCO, Showa Seiki
: Siemens, Allan Bradley, Mitsubishi
: SMC, Festo-Norgen
: ROSS, Herion
: Pascal, Hilma
: Pascal, Hilma, Ortlinghaus
: IMCO, Toledo
: Wintress, Helm

* Other makes can be provided on request
Design Capabilities

Software

• Drafting : Auto Cad

• 3-D Modelling : MDT (Mechanical Desktop)
  INVENTOR
  Solid Edge
  Solid Works

• Analysis : NISA (Stress, Strain, Deflection)
  DDM-Pro (Mechanism of Link Drive and Knuckle Joint Presses)

• Electric Circuits : E Plan

• Software Available for Ladder Diagrams of most of the PLC manufacturers including Siemens, Allen Bradley, Telemechanique, Mitsubishi

Manpower

• Total Manpower : 30, including 7 for Electrical & Electronics design

• Dedicated team for Technology Upgradation
Finite Element Analysis

- To ensure safe stress and strain in critical members of the Press
Servo Presses: Under Development

High torque servo motors

Main drive shaft
New Plant being set up at Bawal (near Delhi) for manufacturing standard Gap Frame and ‘H’ Frame Presses
OTHER PRODUCTS
Lavalin, Canada for PDO, Oman job weighing 210T with a length of 12.5 M
Other Group Products

- Heat Exchangers

Galaxy Projects, UAE for Burrup Fertiliser, Australia
Other Group Products
- EPC, Power Plants, Boilers

30.4MW Power Plant
Zambia Sugar Plc, Zambia
(II T capability - up to 100MW)

Dhampur Sugar Mills
Asmoli, India
Other Group Products

- Complete Sugar Plants

- Consolidated Farming Ltd., Zambia
Other Group Products
- Castings

G.E. Hydro, Canada

VA Tech Hydro, India
THANK YOU