

ISO 9001 : 2015
ISO 14001 : 2015
OHSAS 18001 : 2007



- English
- German
- Spanish
- Russian
- Japanese

PRESSES

MECHANICAL
&
HYDRAULIC



85+
YEARS & BEYOND
ESTB. 1933

Engineering for Excellence



Isgec Corporate Office at Noida (a suburb of New Delhi) India.



**ISGEC HEAVY
ENGINEERING LTD.**

Isgec Heavy Engineering Ltd. is a multi-product, multi-location public company that has been providing engineering solutions to customers around the world for the past 85 years.

Manufacturing Facilities:

- **Mother Plant:** Yamunanagar (Haryana) India
- **Eagle Presses Plant:** Windsor (Ontario) Canada
- **Coastal Plant:** Dahej (Gujarat) India
- **Boiler Manufacturing & Piping Plant:** Rattangarh (Haryana) India
- **SMP Plant:** Bawal (Haryana) India
- **Foundry:** Muzaffarnagar (U.P.) India

Other Businesses:

- **Process Equipment**
- **EPC Projects**
- **Boilers**
- **Sugar Plants & Machinery**
- **Castings**
- **Air Pollution Control Equipment**
- **Built-to-Print Equipment**

**The Company has Customers in
90 Countries, across 6 Continents**



Plant at Bawal (Haryana) India for the manufacture of Standard Gap Frame and H-Frame Mechanical Presses.

A Google Earth view of the Isgec Plant at Yamunanagar (Haryana) India.



We started production of Hydraulic Presses in 1968 with technical knowhow from John Shaw of UK (1967 to 1978) and of Mechanical Presses in 1985 with technical knowhow from Rovetta of Italy (1985 to 1997). We acquired **Eagle Press & Equipment Co. Ltd.**, a Windsor (Ontario) Canada based Press manufacturer in 2018. Eagle is now a wholly owned company of Isgec Heavy Engineering Ltd. We have experience of building over 5000 Presses, most of which have been supplied in the last 15 years.

Isgec Presses - References include

- | | | | |
|-----------------------|------------------------------|-----------------------|-------------------------------|
| • AK Pres | • Force Motors | • Kalyani | • Tata Motors |
| • Amvian | • Franke | • Lear | • Thai Summit |
| • Big Rapids Products | • Gruppo Azpiaran | • LuK | • ThyssenKrupp |
| • Brandl Maschinenbau | • GM de Mexico | • Mahindra & Mahindra | • Topre |
| • Benteler | • Hirotec | • Maruti Suzuki | • Toyota |
| • Bharat Forge | • Honda Motorcycle & Scooter | • Magnetto | • TVS Group |
| • Caparo | • Honda Siel Cars | • Nissan | • Unipres |
| • Camaco | • H-One | • Ogihara | • Uliana Metallurgica |
| • CIE Automotive S.A. | • IFB | • Sangwoo Hitech | • Valeo Group |
| • Farguell | • Isuzu | • Sankei | • Willmes Umformtechnik (UTW) |
| • Ford Motors | • JBM Group | • Suzuki Motorcycle | • Y-Tec |
| | | | • Yutaka |



Press Manufacturing Plants

- Windsor (Ontario) Canada
- Yamunanagar (Haryana) India
- Bawal (Haryana) India

5000⁺ Presses
100⁺ Transfer Presses
70⁺ Press Lines
26 Countries

Coastal facility at the port town of Dahej (Gujarat) India with a lifting / handling capacity of 300 MT.



Plant at Windsor (Ontario) Canada for the manufacture of Mechanical Presses.



GLOBAL REACH

USA • Canada • Germany • Brazil • China • Mexico • France • Spain • Sri Lanka • India • Iran • South Africa • Czech Republic • Slovakia
UK • Indonesia • Thailand • Turkey • Poland • Hungary • Romania • Egypt • Algeria • Saudi Arabia • Bangladesh • Vietnam



ThyssenKrupp Fabco



This Servo controlled 12000 kN Press is for Hot Stamping of High Tensile Steel Components. The two slides of 6000 kN capacity each, can move independently. The bolster size is 3000 x 3000 mm.

This Press was supplied to the ThyssenKrupp Fabco plant at **Detroit, Michigan, USA** (now owned by Martinrea Fabco). We have supplied 20 Presses to the ThyssenKrupp Group since 1999.



- Customers
- Agents
- Offices

GM de Mexico



This is one of 3 Link Drive Mechanical Presses of 10000 kN, installed at GM de Mexico, **San Luis Potosi** plant in **Mexico**, with bolster size of 4500 x 2400 mm. These Presses are part of an Automated Tandem Line for production of skin panels of Cars.



This extra rigid (deflection 0.07 mm / m) 6300 kN Mechanical Press, running at 100 SPM, is for Progressive Die Applications. It has been supplied to LuK, **Sorocaba, Brazil**. Another 15000 kN Hydraulic Press has also been supplied to the same customer.





6300 kN Automated Hydraulic Press supplied to **Benteler Group** for their plant near **Port Elizabeth, South Africa**. This Press is fitted with Robots for loading & unloading of components. Repeat order was placed for their Plant in **India** and similar 10000kN and 8000kN presses have also been supplied to same customer for their **China** facility.



20000 kN Mechanical Transfer Presses supplied to **Big Rapids Products, Kentucky, USA** with Bolster Size 7600 mm x 2800 mm, 3-Axis Servo Transfer System. Below photograph was taken during installation. Subsequently, we have received another order for an identical Press.

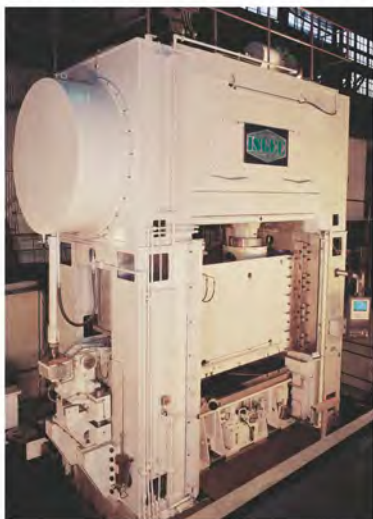


This 20000 kN Press has been supplied to **Brandl Group** for their Plant in **Pfeffenhausen (near Munich) Germany**. This is in addition to a 4000 kN Mechanical and a 3150 kN Hydraulic Press supplied for their Plants in the **Czech Republic & Romania**. The Press has a bed size of 6100 mm x 2800 mm and 5 Station Robotic Transfer with 64 T capacity Die Cushion at each Station.



We have supplied 4 similar Progressive Pressing (Progdie) Presses to the **Valeo Group**. These Presses are equipped with inbuilt shears and feedlines.

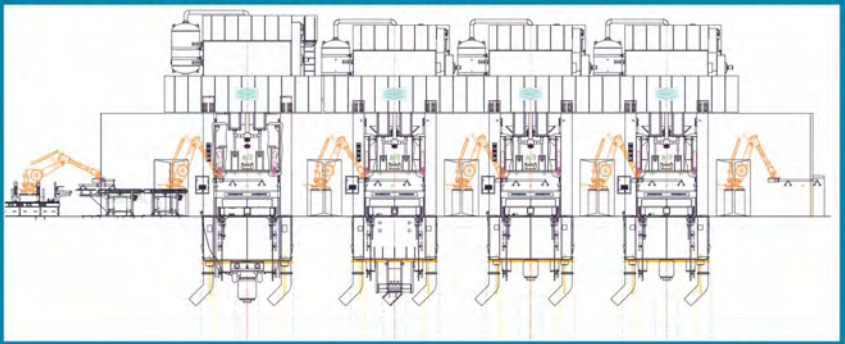
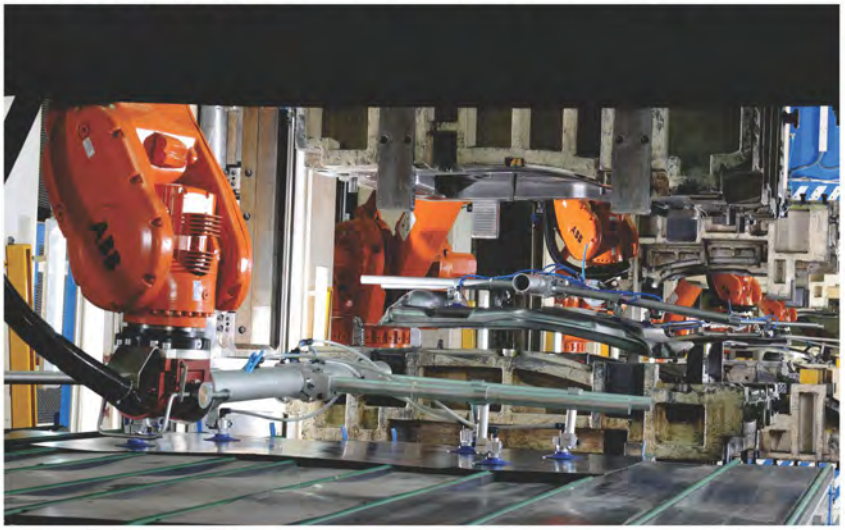
Two of these Presses of 10000 kN capacity are installed at **Valeo Amiens, France**. The first one, supplied in the year 2000, is being run at a speed of 100 SPM. Subsequently we have supplied another 10000 kN Press to Valeo in 2005. This Press runs at a speed of 120 SPM.



TANDEM PRESS LINES

Isgec 12-8-8 Automated Tandem Press Line with sound / dust proof enclosure supplied to **JBM Group** at their plant in **Manesar, Haryana, India**. The Press Line is equipped with **ABB** make Robotic Automation which includes De-Stacker, Centering Station, Robots for loading / un-loading & Exit Conveyor. This Press Line is being used for producing skin components for Maruti Suzuki.





TANDEM PRESS LINES

Isgec has so far supplied **70+ Tandem Press Lines.**

Most of these have:

- Link Drive Mechanism on Head Press.
- Variable Speed Drive to Maximize production.
- Compatibility for Inter-Press Automatic Transfer of Parts.
- Quick Die Change with Moving Bolsters, Auto Die Setting and Auto Die Clamps.



8-8-5 Tandem Press Line supplied to ASAL (a JV of Gestamp, Spain & Tata Auto Components, India) at their Pantnagar Plant in India.



10-8-6-5 High Speed Automated Tandem Press Line supplied to Mahindra-CIE for their plant in Zaheerabad, India. The Press line is equipped with ABB make Robotic Automation

6-10-10-6-6 Compact Automated Tandem Press Line with Die Transfer & Storage System installed at **Valeo Transmissions, Mexico.**



1200MT Automated Robotic Mechanical Press Line (12-8-5-8-8-5) equipped with Yaskawa Robots followed by 315T Mechanical Press Line (3-3-3-3) supplied to **SKH Y-Tec** (A JV of Y Tec, Japan and Krishna Group, India)



TRANSFER PRESSES



12000 kN Transfer Press supplied to a MNC Car Seat producer for their plant in **China**. Bolster Size 5500 mm x 2500 mm, equipped with 3 Axis Electronic Servo Transfer System & Destacker.



8000 kN Hydraulic Transfer Press with Parallelism Control System, Supplied to **Benteler Group** for their plant in **Shanghai, China**

25000 kN Transfer Press supplied to CIE Automotive, **Egana, Bilbao, Spain**, with Bolster size 7000 mm x 2750 mm, 3-Axis Electronic Servo Transfer System and Coil Feed Line. The Press was supplied in the year 2009 and is used for manufacture of components for General Motors (GM).



HIGH SPEED PRESSES

Servo Mechanical Press
1100kN to 30000kN



6300kN
Servo Mechanical Press
installed in Slovakia

A line of 2000 kN High Speed Presses installed in Mexico to produce Automotive Heat exchanger Plates @ 200 spm.



6300 kN Progressive Die Mechanical Press supplied to **Comaco Group** for their plant in Poland. The press has a bed size of 3700 x 1600 mm, Slide Stroke 400 mm and speed of 22-44 spm. Identical presses supplied for their plants in **Mexico and Brazil**.

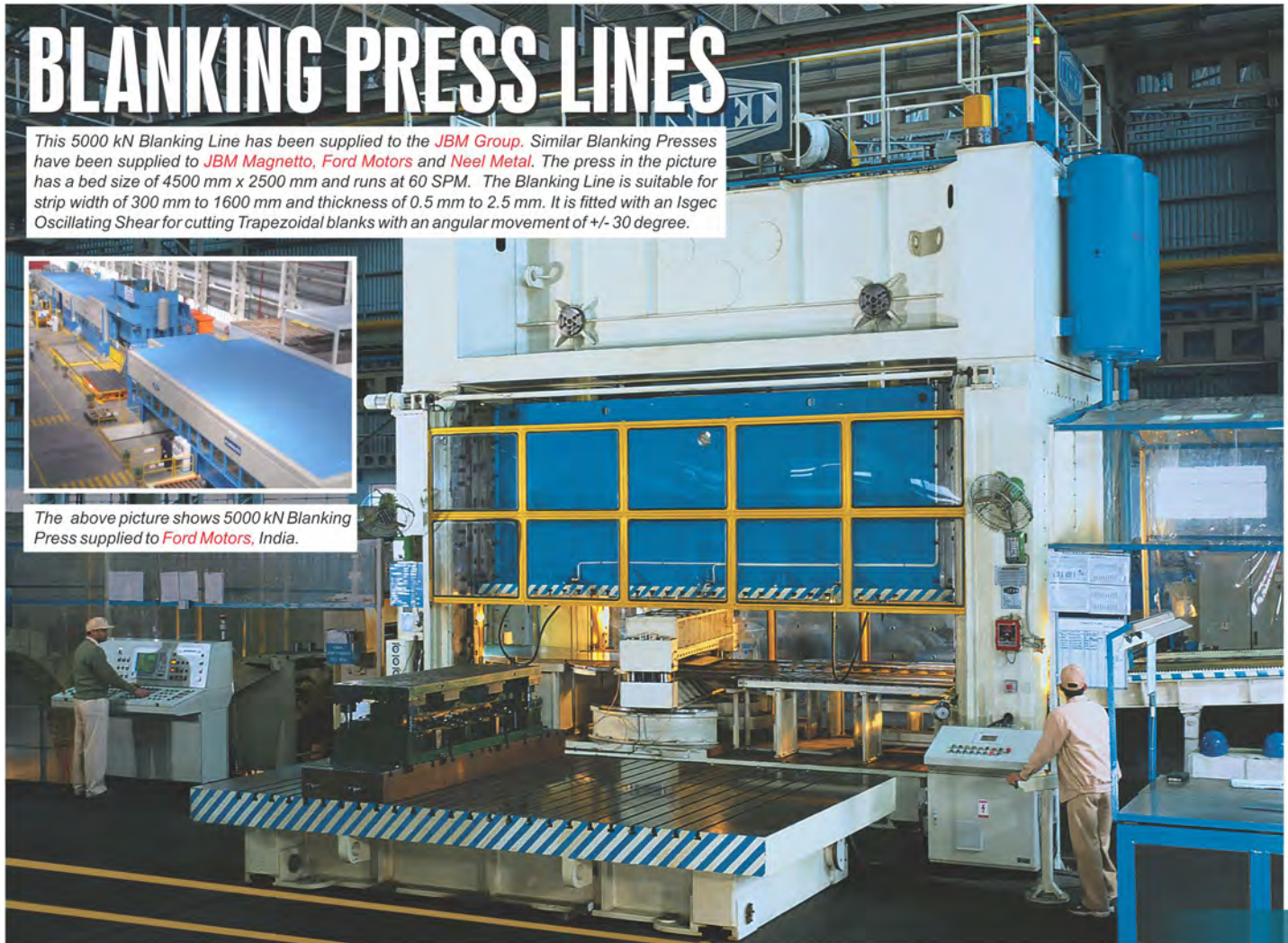
Comaco Group awarded an order for 2 no's 15000 kN Transfer Mechanical Presses for **Mexico & USA** and 12000 kN Progressive Die Mechanical Press for **Brazil** after satisfactory performance of 6300 kN Progressive Die Mechanical Presses.

BLANKING PRESS LINES

This 5000 kN Blanking Line has been supplied to the **JBM Group**. Similar Blanking Presses have been supplied to **JBM Magnetto, Ford Motors and Neel Metal**. The press in the picture has a bed size of 4500 mm x 2500 mm and runs at 60 SPM. The Blanking Line is suitable for strip width of 300 mm to 1600 mm and thickness of 0.5 mm to 2.5 mm. It is fitted with an Isgrec Oscillating Shear for cutting Trapezoidal blanks with an angular movement of +/- 30 degree.



The above picture shows 5000 kN Blanking Press supplied to **Ford Motors, India**.



STANDALONE PRESSES (Mechanical & Hydraulic)



This 12000 kN Hydraulic Press was supplied to UTW, at **Drolshagen-Scheda, Germany** for tryout and manufacturing critical components for Auto majors. The Press is equipped with moving bolster of size of 4500 mm x 2200 mm and has provision for mounting Dampers, which makes it suitable for blanking.



Installed at **Wheels India, a TVS Group Company**, this 20000 kN Hydraulic Press, having a bed size of 3000 mm x 3000 mm, is used for Hot Forming of Earth Mover Wheels for Caterpillar and Komatsu.



16000 kN Hydraulic Press supplied to **Hirschvogel Group** for their plant in **Pune, India**. This press is being used to manufacture cold forged transmission components used in Automotives.

125000 kN Hydraulic Press with large Accumulator Bank is being used for Hot & Cold Forming of High Tensile Steel Plates for **Defence & Aerospace Applications**



7000T and 2000T Hydraulic Presses supplied to manufacture Heat Exchanger Plates for High Capacity Industrial Heat Exchangers



This 7500 kN Hydraulic Press has been supplied to Franke, Switzerland, for their Aurangabad Plant in India. Franke is market leader in the manufacture of Kitchen Sinks. The first Hydraulic Press of 630 T was supplied in the year 2000, followed by a second Press in 2009.



630T MAX-2L Mechanical Press installed at Ajkai, Hungary

MAX-2 Series Presses specifically designed for White Good Producers and other Light Stamping Applications at very economical prices. We offer Standardized Presses in capacities from 2000 kN to 6300 kN

We have supplied similar presses to Toksan, Turkey; Metalurgica Nematec, Brazil, Amvian & Lear, Mexico.



The LuK Group has entrusted Isgec with all orders for their requirements of Progressive Die Presses in the last 11 years for their plants around the world. These include 11 Presses for their plants in Buhl, Germany; Sorocaba, Brazil; Taicang, China; Port Elizabeth, South Africa and Hosur, India. The Presses shown in this picture are installed at the LuK Plant in China.



PRESSES for SPECIAL APPLICATIONS

HYDRAULIC DIE SPOTTING PRESSES

2000 kN Die Spotting Hydraulic Press supplied to *Bajaj Auto*. This Press is equipped with feature of 180 Deg Reversal of Top Die to carry out corrections in top die safely



3000 kN Die Spotting Press built to JIS B 6403 Special Grade with Equalizing Beam, Micro-inching features & Blanking Shock Absorbers. We have supplied 35 similar Presses of capacities up to 4000 kN to major Tool Rooms and OEM's in India including *Toyota, Toyotetsu, Ashok Leyland, Tata Motors, Maruti Suzuki, Suzuki, Honda Motorcycles, Sermo-moulds, ThyssenKrupp, Rasandik, & JBM Group.*



HYDRAULIC HEMMING (CLINCHING) PRESSES

Isgec has supplied Hemming Presses to *Maruti Suzuki, Ford India & Honda Cars*. The Presses in the picture, installed at Ford India, are equipped with Die Carts and a Die Parking System for fast & efficient changeover.



MECHANICAL TRYOUT PRESSES

12000 kN Mechanical Tryout Presses with full force Micro Inching supplied to the **Mahindra Group**. We have supplied such press upto a capacity of 20000 kN to **Tata Motors, Mahindra-CIE, Unipres** etc.

5 Tandem Lines and over 20 Nos C-Frame Presses have been supplied to Mahindra-CIE.



20000 kN Mechanical Tryout Presses with full force Micro Inching supplied to **Tata Motors**.

TECHNOLOGY

At Isgec, we have been continuously working on developing and updating ourselves Technologically. After acquiring Technology for Mechanical Presses from Rovetta Presse Spa of Italy (1985 to 1997) and Hydraulic Presses from John Shaw of UK (1967 to 1978), we have now experience of building over 5000 Presses, most of which have been supplied in the last 15 years.

Today Isgec has in-house design capability, expertise in Finite Element Analysis & 3-D Modeling and proven skills in the development of dedicated software for System Controls.

To refine our knowledge base, we obtained the help of world renowned premier research institutes including the Indian Institute of Technology (IIT) and consultancy from Aachen University of Technology, Germany.

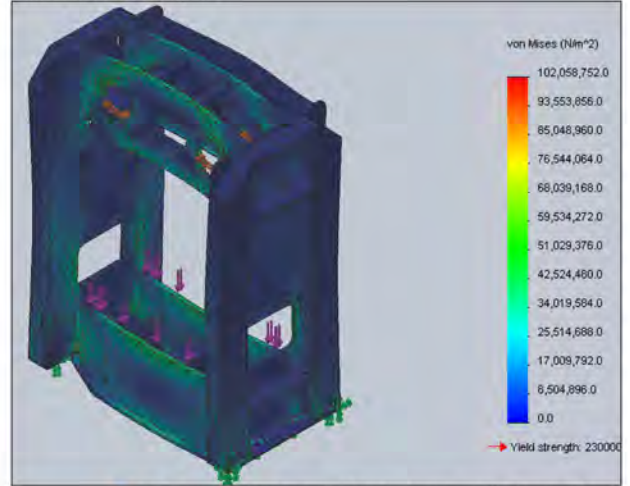
CNC Designs using Servo Motors and Servo Hydraulics are applied extensively on our Presses. Isgec has manufactured a large size 45000 kN Hydraulic Press for manufacturing Long Chassis Members for commercial vehicles. This press is equipped with a tool turning device.

R & D Center



R & D Center at Yamunanagar (Govt. Registered)

Finite Element Analysis



Finite Element Analysis (FEA) adopted to verify fatigue life of Press structure and to enable Maximum Rigidity.



Report of Design Verification of Hydrodynamic Bearings for Mechanical Presses conducted for Isgec by the Laboratory for Machine Tools and Production Engineering (WZL), Aachen University of Technology, Germany



Isgec has developed a Transfer System "Isgec ACTS" to offer Complete High Productivity Solutions



QUALITY

Safety

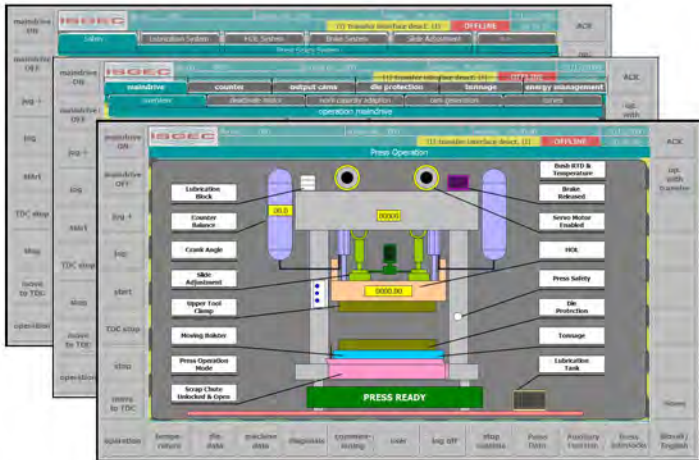
CE (EN 16092 : 2018)
 OSHA 1910.217
 CSA Z142
 NR-12

Accuracy

Mechanical Presses : JIS B 6402 - Grade 1
 Hydraulic Presses : JIS B 6403 - Grade 1
 Die Spotting Presses : JIS B 6403 - Special Grade

Rigidity

Deflection of Bed / Slide under full load:
 Standard - 0.167 mm/m
 Special - up to 0.07 mm/m



Dedicated software has been developed by Isgec for Press System Controls. The user friendly software is used for instant diagnostics. This picture is of the Main Menu Touch Screen.



ISO Certificate for Quality Assurance from Lloyd's Register.



CE certificate of Adequacy for Gap Frame Mechanical Presses.



OHSAS Certificate for Occupational Health & Safety Management from DNV.



ISO Certificate for Environment Management from DNV.

QUALITY COMPONENTS

Components

- Clutch & Brake Units
- Cam Limit Switches
- Electrical Drives
- Hydraulic Components
- Pneumatic Components
- PLC Controls
- Dual Solenoid Safety Valve
- Safety Relays

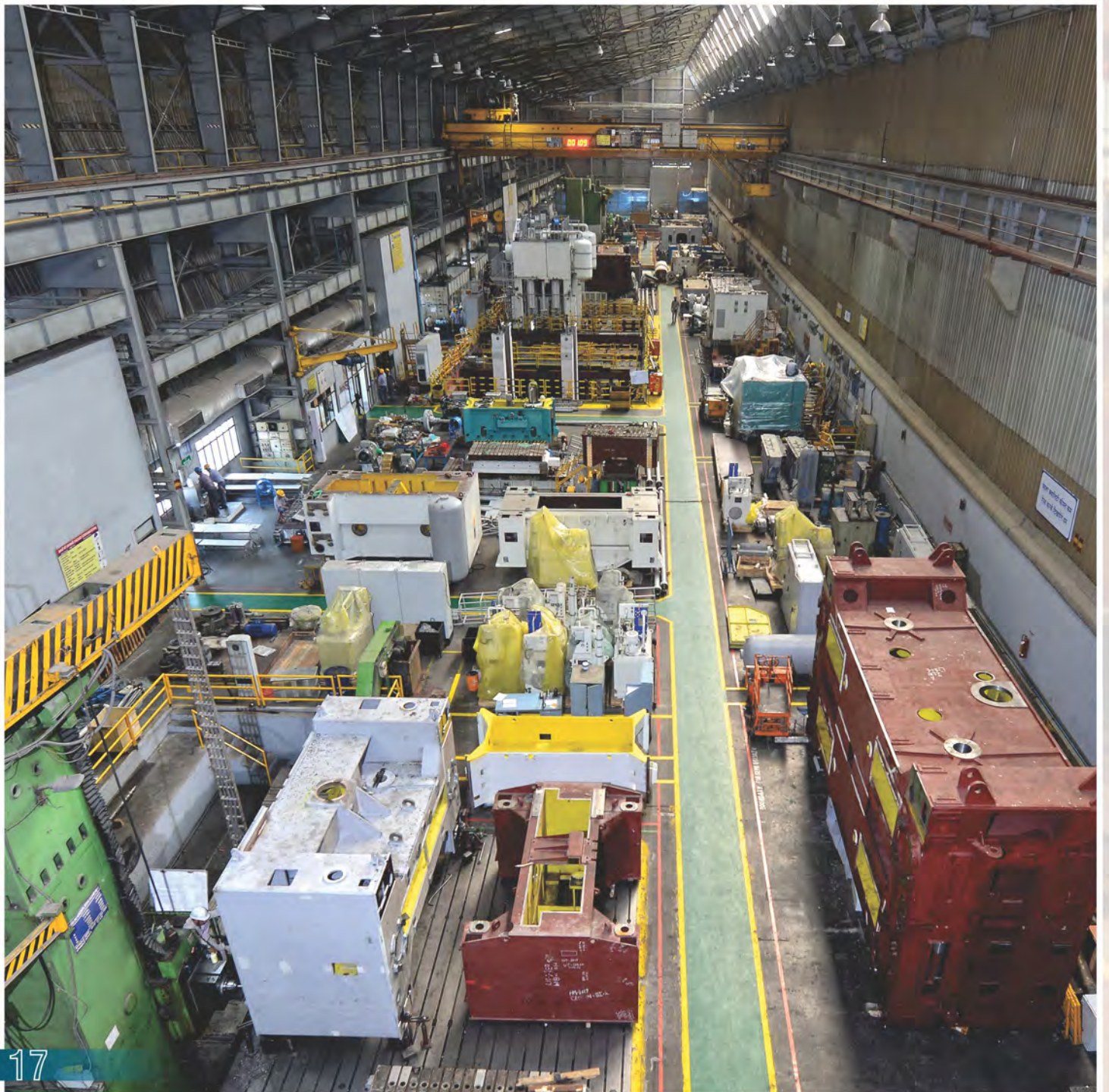
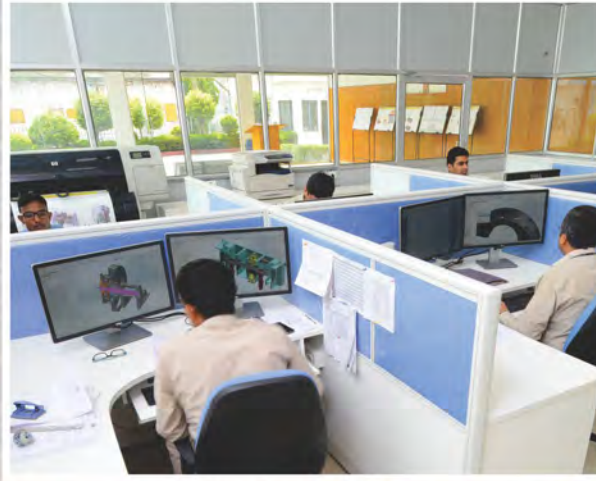
Makes Normally Used

- Ortlinghaus, Goizper, Ompi, Herion
- Balluf, KAMCO
- Siemens, Allen Bradley, Telemecanique, Mitsubishi
- Bosch Rexroth, Parker, Vickers
- Festo, Norgren, SMC Pneumatics
- Siemens, Allen Bradley, OmniLink, Mitsubishi
- ROSS, Herion
- PILZ, Safety PLC

Other Makes can also be used as specified by the customer

We can offer third party inspection by TÜV, Lloyd, SG or any other inspecting agency

INFRASTRUCTURE



MANUFACTURING CAPACITY : 15 Lines per year

Each Equivalent to G1 Line (2000 T Head Press)

• Shop Area	:	30,000 sq. m. (323,000 sq. ft.)
• Maximum Handling Capacity	:	300 Tonnes
• Maximum Pit Size	:	28 m x 10 m x 6 m
• Maximum Size of Stress Relieving Furnace	:	14.5 m x 4.6 m x 4 m
• Maximum Size of Boring Machine	:	16 m x 4.5 m x 2.4 m
• Large Floor Type Boring Machines	:	15 Nos.
• Qualified Engineers	:	180 Nos.
• Maximum Capacity of Gear Hobbing Machine	:	Diameter 2000 mm & module 20





Isgec has a core team of very experienced technicians and global presence through a network of Service agencies to provide prompt After Sales Service.

RANGE OF PRESSES

Presses for Sheet Metal Working:

MECHANICAL PRESSES:

- Servo Mechanical Presses
- Single Action & Double Action Presses
- Tandem Line Presses
- Progressive Die Presses
- Transfer Presses
- Blanking Lines
- High Speed Presses
- Standard Gap Frame Presses (630 kN to 3150 kN)
- Standard 'H' Frame Presses MAX 2 Series (2000 kN to 6300 kN)
- Standard Tandem Press Line MAT Series
- Standard Single Point Suspension MAG1 Series
- Standard Two Point Suspension MAG2 Series

HYDRAULIC PRESSES:

- Servo Hydraulic Presses
- Single Action & Double Action Presses
- Die Spotting Presses
- Die Tryout Presses
- Hemming Presses
- Rubber Pad Forming Presses
- Standard Presses HAG Series
- Forging Presses

Presses for other Applications:

MECHANICAL PRESSES:

- Knuckle Joint Presses
- Trimming Presses
- Presses for Hot and Cold Forging

HYDRAULIC PRESSES:

- Coining & Calibration Presses
- Powder Compacting Presses
- Moulding Presses – Rubber & Brake Lining etc.
- Composite SMC Forming Presses
- Decorative Laminates & Plywood Presses
- Straightening Presses
- Motor Assembly Presses
- Wheel & Axle Assembly Presses

OTHER BUSINESSES

Process Equipment

EPC Projects

Boilers

Sugar Plants & Machinery

Castings

Built-to-Print Equipment



www.isgec.com



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E-mail: smpbawal@isgec.com

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Windsor (Ontario) Canada

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Sales Representatives

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Mexico • Russia • South Africa • Spain • Thailand • Turkey • USA
Japan • Vietnam • Germany

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