



PRESSES

MECHANICAL • HYDRAULIC • SERVO

High Speed Mechanical Presses for Progressive Operation

MHS Series

63T - 400T



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

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

Precision & Productivity Hand in Hand

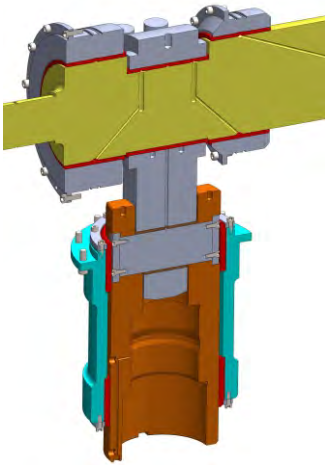
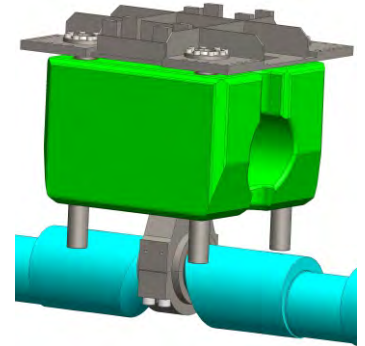
High Precision • Dynamically Balanced • Superior Part Quality

Enhanced Repeatability • Enhanced Die Life • Automated Operation



Dynamic Balancing

- Dynamic Balancing System to balance inertia forces generated due to high speed rotation of Crank Shaft.
- Dynamic Balancing System ensures oscillation free operation, High level of production accuracy, longer tool life and many other indirect benefits to the user.



Shaft Bearings

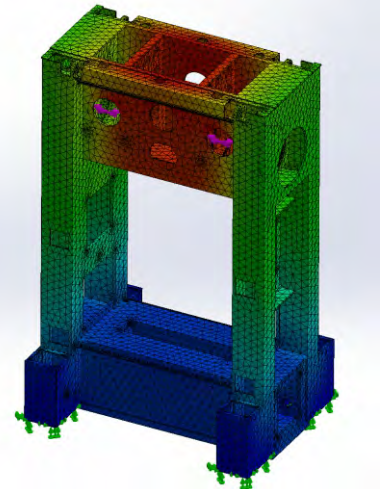
- High Quality ground Crank shaft supporting connecting rods on combination hydrostatic & hydrodynamic bearings.
- Widely supported connecting rods to ensure usage of long tools for progressive work with higher eccentric loading.

Plunger Guides

- Movement of Connecting rods through Plungers eliminates thrust on the Gibs due to eccentric motion of Press.
- Plunger Guides avoid change in guide clearance between Plunger and guide sleeve caused by different expansion rates of Crown and Slide in horizontal plane.

Highly Rigid Frame

- Structure fabricated from quality tested steel plates to ensure high fatigue life compatible for high speed working.
- Finite Element Analysis (FEA) optimized design to ensure high fatigue life of thermally stress relieved Press structure and also to ensure maximum rigidity & long fatigue life.

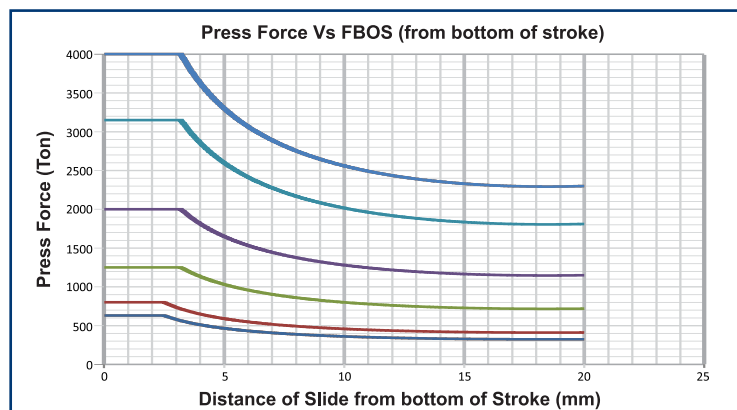


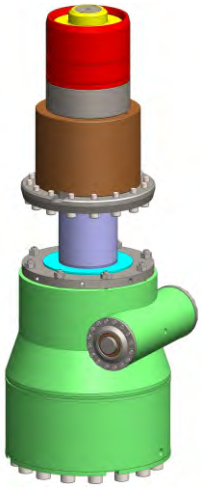
Automatic Re-circulating Lubrication

- Centralized Re-circulating Automatic lubrication system for lubrication of all critical points with monitoring and interlocks to give fault signals on HMI.
- In addition to above, hydrostatic lubrication system is provided to start press at a higher speed without any risk of damage to the bearings.

High Work Energy

Load Characteristics





Hydraulic Quick-Lift

- Hydraulic Quick lift system provides access to tool for maintenance and inspection purpose.
- Hydraulic system returns the Slide to its Original Shut height position against Mechanical Stop quickly & save time.

Hydraulic Locking of Slide Adjustment Screw

- Hydraulic Locking of slide adjustment screw prevents damage to slide adjustment system (on account of high dynamic load due to high speed) and to ensure precision in slide motion at high speed operation.

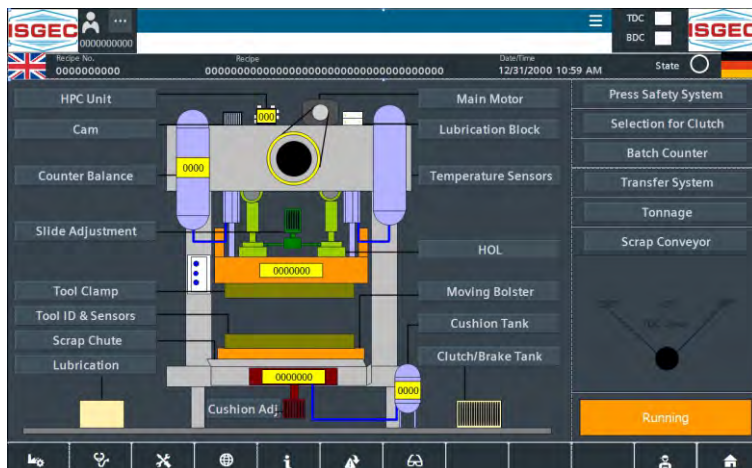
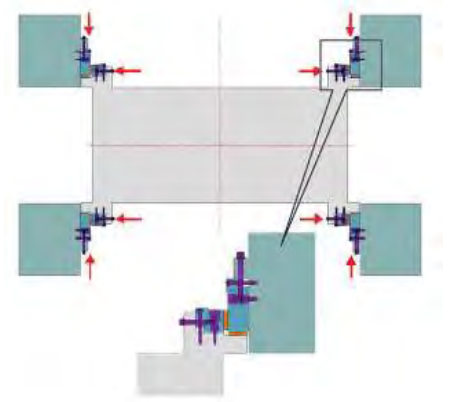
Hydraulic Jamming Release Device

- Hydraulic Jamming Release Device is provided as a standard feature to resolve tool jam problems instantly.

Eccentric Load Bearing Capability

Precisely Machined Eight (8) Face Power adjusted Slide Guiding to keep the slide fully guided at all point of Stroke and Slide Adjustment for Sustained Accuracies and Ease of Maintenance.

Hydrostatically lubricated guides for high reliability are available for medium thickness products. Alternatively, solution of High Precision Preloaded Guides are available as an option to meet the customer's process requirement and/or production of highly accurate and thin products.



User Friendly Operator Interface

- Programmable Logic Controller with user friendly operator interface through HMI (Human Machine Interface) screens with Diagnostic feature to troubleshoot and avoid stoppage.
- Ergonomically designed HMI screens developed over decades of practical experience, engineering efforts & constant feedback from press users.
- FMEA has been applied on machine, control system & operator interface for safety, maintainability & reliability to meet international bench marks for MTBF & MTTR.

Safeties for Operator

- Dual Safety in Controls with monitoring
- Dual Solenoid Valve for Clutch & Brake actuation for dual redundancy of the system
- Anti repeat Circuit with Dual circuit
- Control Voltage 110V AC & 24V DC for Operator Safety
- Safety Interlocks as per International standards
- Emergency stop buttons
- Under/Over Voltage & Single Phase Protection System
- Two Hand Run Button Station
- Flywheel Safety Guard

Standard Accessories

- Variable Speed through AC Inverter
- Anti Vibration Mounts
- Programmable Logic Control with User Friendly Interface
- Portable Two Hand Operator Stand
- Motorised Slide Adjustment
- Centralized Re-circulating Automatic Lubrication system
- Programmable Cam switches
- Dual Check safety electrical circuit
- Pneumatic Clutch & Brake
- Emergency Stop buttons
- Manual Guards in Front and Rear with Windows
- Maintenance Tool Kit

Optional Accessories

- Tonnage Monitor
- Quick Die Change System
- Die Automation Control
- Portable Die Area Lights
- REACH 4.0 Enabled Smart Control
- Coil Feed Line
- Noise Enclosure
- Hydraulic Clutch & Brake
- Thermal Control System
- Compliance with CE/OSHA Safety Standards
- Process Monitoring with Signature Analysis
- Scrap Conveyor

Technical Specifications

Two Point Suspension High Speed Presses - MHS Series							
Description	Unit	63T	80T	125T	200T	315T	400T
Model No.		MHS-63	MHS-80	MHS-125	MHS-200	MHS-315	MHS-400
Maximum Capacity	kN US Ton	630 69	800 90	1250 140	2000 225	3150 354	4000 450
Rated Distance	mm Inch	2.5 0.09	2.5 0.09	3.2 0.12	3.2 0.12	3.2 0.12	3.2 0.12
Strokes Per Minute (Variable)	SPM	150-450	150-450	120-380	110-340	100-300	80-260
Stroke Length (Fixed)	mm Inch	40 1.6	40 1.6	40 1.6	40 1.6	40 1.6	40 1.6
Shut Height (SDAU)	mm Inch	310-360 12-14	310-360 12-14	350-400 14-16	450-500 18-20	475-525 19-21	500-550 20-22
Slide Adjustment (Motorised)	mm Inch	50 2	50 2	50 2	50 2	75 3	75 3
Quick Upper Die Lift	mm Inch	100 4	100 4	100 4	100 4	100 4	100 4
Slide Face - LR x FB	mm Inch	1200 x 600 47 x 24	1200 x 600 47 x 24	1400 x 650 55 x 26	1800 x 700 71 x 28	2100 x 800 83 x 32	2500 x 900 98 x 35
Bolster Size - LR x FB	mm Inch	1200 x 800 47 x 32	1200 x 800 47 x 32	1400 x 900 55 x 34	1800 x 1000 71 x 39	2100 x 1100 83 x 43	2500 x 1200 98 x 47
Side Opening	mm Inch	400 16	400 16	425 17	450 18	525 21	600 24
Main Motor Power	kW	22	22	30	45	55	75

Wide Range of Presses

Servo Presses • Transfer Presses • Progressive Presses • High Speed Presses • Hot Stamping & Hot Forming Hydraulic Presses
Standard Straight Sided Mechanical & Hydraulic Presses • Blanking Lines • Tandem Press Lines - Mechanical & Hydraulic
Cold Forging Presses • Tryout & Die Spotting Presses • Gap Frame & Ring Frame Power Presses • Special Purpose Presses



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Sales Offices & Plants : **Isgec Heavy Engineering Ltd.**
Yamunanagar - 135 001 (Haryana) India
Tel.: +91-1732-661 104, 661 140
E-mail: presses@isgec.com

Bawal - 123 501 (Haryana) India
Tel.: +91-1284-302160
E-mail: smpbawal@isgec.com

Eagle Press & Equipment Co. Ltd.
Windsor (Ontario) Canada

Regional Offices : Ahmedabad • Bengaluru • Chennai • Gurgaon • Kolkata • Mumbai • Noida • Pune

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Corporate Office : Isgec Heavy Engineering Ltd.
A-4, Sector 24, Noida - 201 301 (U.P.) India
Tel.: +91-120-408 50 01 / 02

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Some of the accessories / fitments shown in the reference photograph may not be part of Standard equipment supplied.
Isgec reserves the right to change specifications without prior notice.
Details given in this Brochure are indicative & may change.