

High Speed Mechanical Presses for Progressive Operation

MHS Series 63T - 400T



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

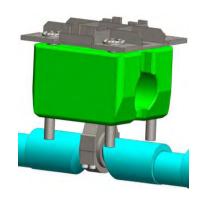
Precision & Productivity Hand in Hand

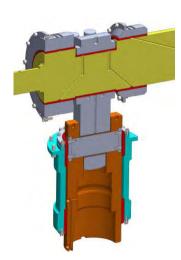
ISO 9001:2015 ISO 14001:2015 OHSAS 18001 :2007

High Precision • Dynamically Balanced • Superior Part Quality

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

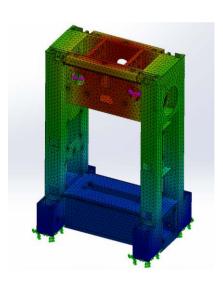
- Movement of Connecting rods through Plungers eliminates thrust on the Gibs due to eccentric motion of Press.
- Plunger Guides avoid change in guide clearance between Plunger and guide sleeve caused by different expansion rates of Crown and Slide in horizontal plane.

Highly Rigid Frame

- Structure fabricated from quality tested steel plates with quality Welding 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.

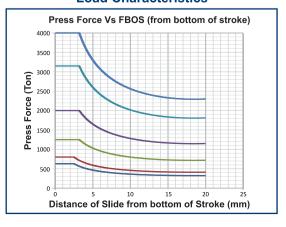
Automatic Re-circulating Lubrication

- 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.

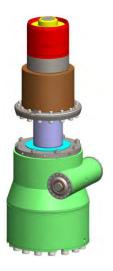


High Work Energy

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.

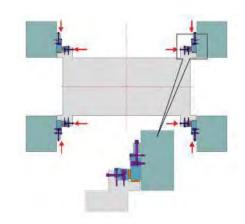
Hydraulic Jamming Release Device

• 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	630	800	1250	2000	3150	4000
	US Ton	69	90	140	225	354	450
Rated Distance	mm	2.5	2.5	3.2	3.2	3.2	3.2
	Inch	0.09	0.09	0.12	0.12	0.12	0.12
Strokes Per Minute (Variable)	SPM	150-450	150-450	120-380	110-340	100-300	80-260
Stroke Length (Fixed)	mm	40	40	40	40	40	40
	Inch	1.6	1.6	1.6	1.6	1.6	1.6
Shut Height (SDAU)	mm	310-360	310-360	350-400	450-500	475-525	500-550
	Inch	12-14	12-14	14-16	18-20	19-21	20-22
Slide Adjustment (Motorised)	mm	50	50	50	50	75	75
	Inch	2	2	2	2	3	3
Quick Upper Die Lift	mm	100	100	100	100	100	100
	Inch	4	4	4	4	4	4
Slide Face - LR x FB	mm	1200 x 600	1200 x 600	1400 x 650	1800 x 700	2100 x 800	2500 x 900
	Inch	47 x 24	47 x 24	55 x 26	71 x 28	83 x 32	98 x 35
Bolster Size - LR x FB	mm	1200 x 800	1200 x 800	1400 x 900	1800 x 1000	2100 x 1100	2500 x 1200
	Inch	47 x 32	47 x 32	55 x 34	71 x 39	83 x 43	98 x 47
Side Opening	mm	400	400	425	450	525	600
	Inch	16	16	17	18	21	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





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

Overseas Offices : Chonburi, Thailand • Ontario, Canada • Tennessee, USA

Corporate Office : Isgec Heavy Engineering Ltd.

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

Sales Representatives: Brazil • China • France • Germany • Hungary • Indonesia • Italy • Japan Malaysia • Mexico • Poland • Russia • South Africa • Spain • Thailand

Turkey • USA • Vietnam

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.



www.isgec.com







