



PRESSES
MECHANICAL & HYDRAULIC

MAG Series

315T - 1250T



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

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

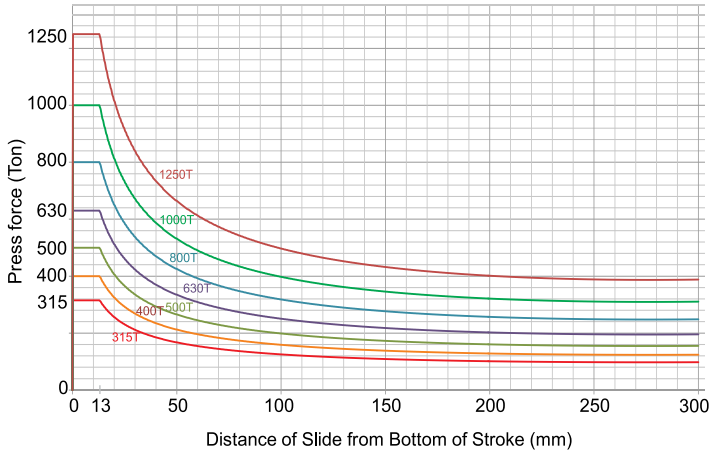
Heavy Duty Stamping Presses

High Work Energy • Eccentric Load Bearing Capability • Sustained Accuracies

MAG series presses are designed for Heavy Duty Stamping Applications involving Draw and Blanking of Thicker Sheets. Pneumatic Die Cushion up to 15% of Press Capacity is available as Optional feature to meet Draw requirements. Presses are capable to be integrated with various Automation equipments like 3-Axis Servo Transfer, Coil Feed Line etc. Further Isgec's experienced team can help you to select a suitable Press to suit your stamping requirements.

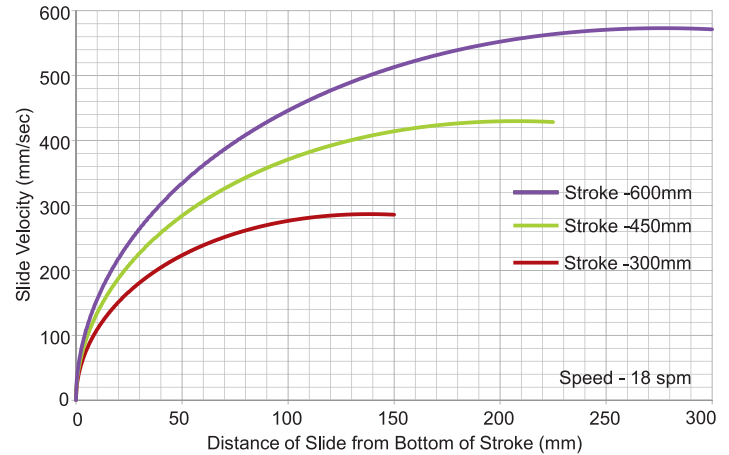
High Work Energy

Load Characteristics



Optimised Working Speed

Velocity Characteristics

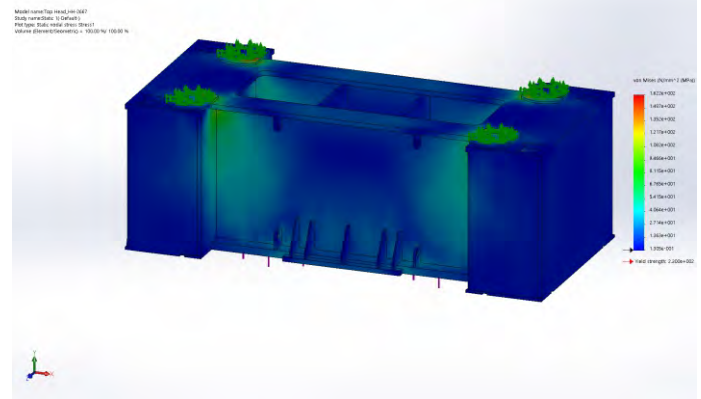


Enhanced Die Life from Maximised Rigidity

Finite Element Analysis (FEA) software used to verify fatigue life of Thermally Stress Relieved Press Structures and to maximised rigidity.

Press Frame components are fabricated from tested quality Steel Plates.

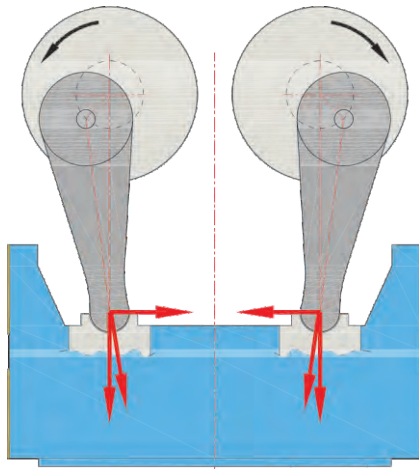
Modular Frame construction is integrated by Hydraulically pre-stressed Tie Rods.



Isgec's Standard Design

Horizontal Thrust Components are balanced in slide.

Further there is no motion on small end joint, under load. Hence no wear.



Balanced Drive

Counter Rotating Drive mechanism with high Conrod to Crank ratio ensure zero side thrust to achieve stability and long life with least maintenance of drive mechanism.

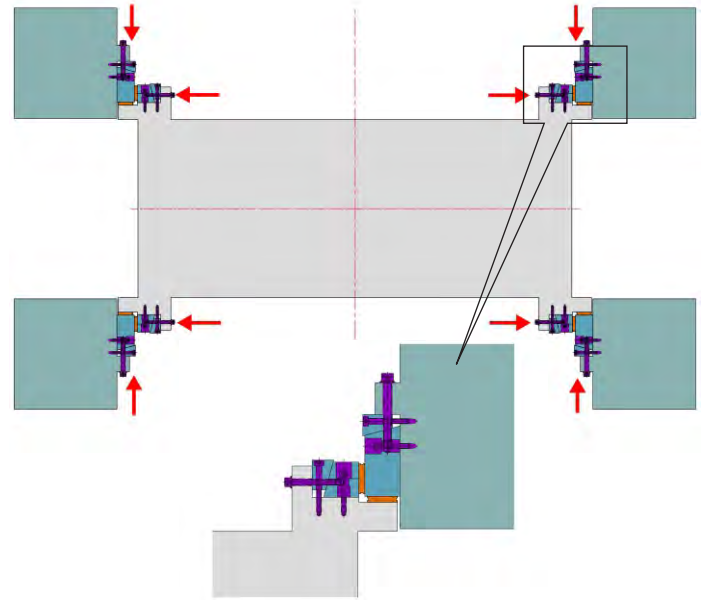
Plunger guide can be provided on demand.

Gears of drive train machined to precision grade conforming to DIN Grade 7 and better for smooth torque transmission and vibration free operation.

Eccentric Load Bearing Capability

Widely spaced suspension points and extra long Gibs enable high Eccentric Load Bearing Capability.

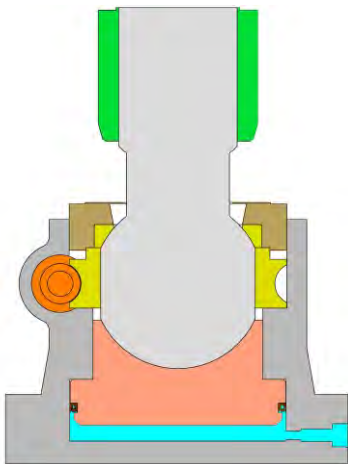
Precisely machined Eight (8) Face Power Adjusted Slide Guiding keep the slide fully guided at all point of stroke and slide adjustment, for sustained accuracy & ease of maintenance.



Sustained High Precision

Parts are machined on high precision CNC Boring mother machines for built-in Geometrical Accuracies which are sustained.

Press Geometrical accuracies (Parallelism, Perpendicularity & Flatness) confirming to JIS 6402 B Grade-I.

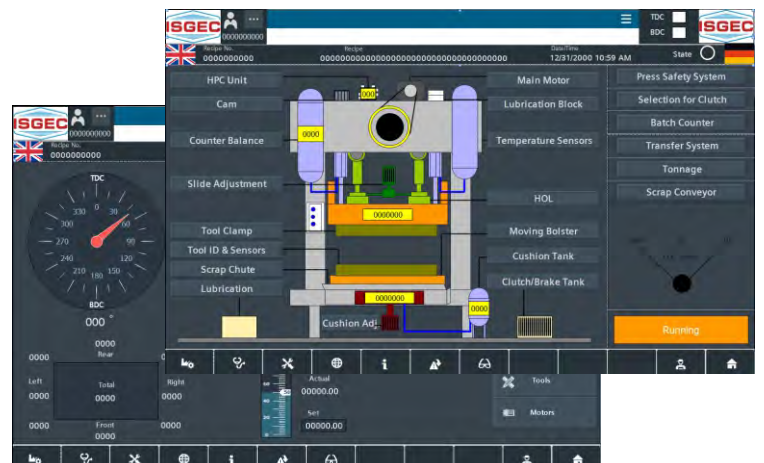


Ease of Operation

Programmable Logic Controller with user friendly Operator Interface has Operator Screens with Diagnostic feature, developed by constant improvements through feedback from Press users.

Hydraulic Overload Protection

Hydraulically operated fast acting Over Load Protection Mechanism mounted under each suspension senses the application of load beyond capacity of each suspension and thereby preventing damage to the Press and Dies.



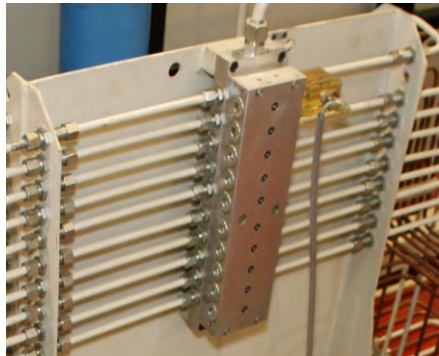


Safeties for Operators

- Dual Safety in Controls with monitoring.
- Dual Solenoid Valve for Clutch & Brake actuation.
- Anti Repeat Circuit with dual monitoring.
- Control Voltage 110V AC and 24V DC for Operator's Safety.
- Safety Interlocks as per International Standards.
- Under/Over Voltage & Single Phase Protection System.
- Emergency Stop Button on all uprights and top of the Press.
- Safety Blocks for safety of operator & maintenance staff.
- Photo Electric Safety Barriers.
- Two Hand Run Button Station.
- Flywheel Safety Guard.
- Presses conforming to CE / OSHA Safety regulations, on demand.

Reliability

- Failure Mode Effect Analysis of the Press & its control systems is done for safety, maintainability and reliability. Meets international bench mark for MTBF & MTTR.
- Modular sub-assemblies for easy access to reduce time required for preventive and other maintenance activities and to make the Press TPM friendly.
- All Standard Components (Bought Outs Parts, BOP) of reputed makes are used for reliability & easy availability in the market.
- Externally guided cylinder type Die Cushion with heavy duty bronze liner guiding.
- Latest design of Electrical, Hydraulic & Mechanical System as per IEC & ISO Standards.
- Dynamically Balanced Flywheel mounted on Quill eliminates thrust on Drive Shaft for fatigue free long life.



Centralised Lubrication System

Centralised Lubrication System for proper lubrication of all critical bush bearings and guides through monitoring and interlocks to give fault signals on HMI screen.

Quick Die Change – Optional

- Electrically driven Moving Bolster in Center to Front direction for quick & safe Die handling.
- Die Centering Slots on Bolster Plate for quick die location in the Center of the Press.
- Quick Die Change (QDC) accessories like Die Clamps, Die lifters are available for Fixed Bolsters.



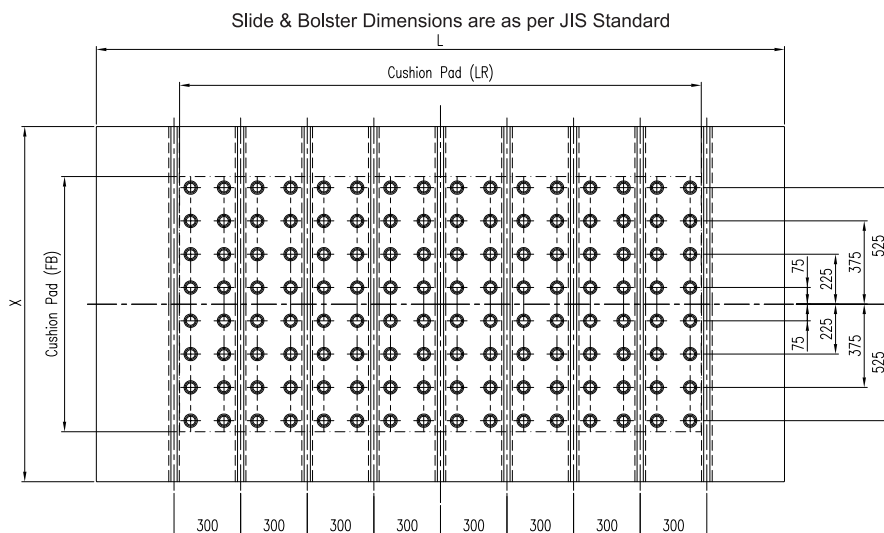


Description	Unit	315T	400T	500T	630T	800T	1000T	1250T
Model No.		MAG-2E-315	MAG-2E-400	MAG-2E-500	MAG-2E-630	MAG-2E-800	MAG-2E-1000	MAG-2E-1250
Maximum Capacity	kN	3150	4000	5000	6300	8000	10000	12500
	US ton	347	440	550	693	880	1100	1375
Rated Distance	mm	13	13	13	13	13	13	13
Suspension Points	no.	2	2	2	2	2	2	2
Speed (Variable)	spm	12-25	12-25	12-25	12-25	12-25	12-25	12-25
Strokes per Minute(Intermittent)	sspm	10	10	10	10	10	10	10
Available Work Energy per Stroke in Intermittent mode at Max. SPM	kJ	70/80/95	100/120	130/150	160/190	235	305	335
Stroke Length(Fixed)	mm	300/450/600	450/600	450/600	450/600	600	600	600
Shut height(SDAU)	mm	800/1100	800/1100	800/1100	1100/1400	1100/1400	1100/1400	1100/1400
Slide Adjustment (Motorised)	mm	200	300	300	300/400	400	400	400
Slide Face LRxFB (Alt1)	mm	2200x1300	2200x1300/1600	2200x1300/1600	2500x1300/1600	2500x1600/1900	2800x1600/1900	2800x1600/1900
Slide Face LRxFB (Alt2)	mm	2500x1300	2500x1300/1600	2500x1300/1600	2800x1300/1600	2800x1600/1900	3100x1600/1900	3100x1600/1900
Slide Face LRxFB (Alt3)	mm	2800x1300	2800x1300/1600	2800x1300/1600	3100x1300/1600	3100x1600/1900	3400x1600/1900	3400x1600/1900
Slide Face LRxFB (Alt4)	mm	3100x1300	3100x1300/1600	3100x1300/1600	3400x1300/1600	3400x1600/1900	3700x1600/1900	3700x1600/1900
Bolster Size – LRxFB (Alt1)	mm	2200x1300	2200x1600	2200x1600	2500x1600	2500x1900	2800x1900	2800x1900
Bolster Size – LRxFB (Alt2)	mm	2500x1300	2500x1600	2500x1600	2800x1600	2800x1900	3100x1900	3100x1900
Bolster Size LRxFB (Alt3)	mm	2800x1300	2800x1600	2800x1600	3100x1600	3100x1900	3400x1900	3400x1900
Bolster Size – LRxFB (Alt4)	mm	3100x1300	3100x1600	3100x1600	3400x1600	3400x1900	3700x1900	3700x1900
Main Motor Power	kW	37	45	55	75	90	110	132
	HP	50	60	75	100	120	150	180
Die Cushion Capacity *	kN	500	600	800	1000	1200	1600	1600
	US ton	55	66	88	110	132	176	176
Die Cushion Stroke (Fixed)	mm	120/160/220	160/220	160/220	160/220	220	220	220
Cushion Pad - LRxFB(Alt1)	mm	1750x850	1750x1150	1750x1150	2050x1150	2050x1450	2350x1450	2350x1450
Cushion Pad - LRxFB(Alt2)	mm	2050x850	2050x1150	2050x1150	2350x1150	2350x1450	2650x1450	2650x1450
Cushion Pad - LRxFB(Alt3)	mm	2350x850	2350x1150	2350x1150	2650x1150	2650x1450	2950x1450	2950x1450
Cushion Pad - LRxFB(Alt4)	mm	2650x850	2650x1150	2650x1150	2950x1150	2950x1450	3250x1450	3250x1450

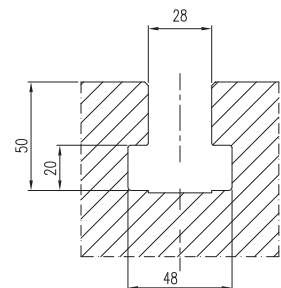
* Machines are manufactured as per S.I. units. Dimensions in FPS are approximate and given only for reference.

* Optional Features

Bolster T-Slot Details



T-Slot Size as per T-28 of ISO Standard



T-Slots, Cushion Pin Layout as per JIS, JIC & DIN can be given as per customer requirement on demand.

Standard Accessories

- Programmable Logic Controller
- Dual Check Safety Electrical Circuit
- Production Counters (Total, Batch) on HMI
- Hydraulic Overload Protection
- Motorised Slide Adjustment
- Variable Speed through AC Inverter
- LED Die Area Lights
- Centralized Lubrication system
- Fixed Bolster Plate on Bed
- User Friendly Touch Screen Interface
- Pneumatic Clutch & Brake upto 500T
- Portable Two Hand Operator Stand (Two)
- Safety Blocks
- Digital Crank Angle Indicator

Optional Accessories

- Quick Die Change system
- Moving Bolster (Center to Front Movement)
- Die Cushion
- Die Cushion with Stroke Adjustment
- Die Cushion with Hydraulic Shock Absorber
- Die Cushion Pin Lifting in Moving Bolster (Offline)
- Electronic Force Monitoring
- High response Hydraulic Overload System
- Anti Vibration Mounts
- Die Protection System
- Interfacing provision for Automation System
- Programmable Die Automation Pneumatic Valve
- Compliance with CE/OSHA Safety Standards
- Scrap Chute
- Wet or Hydraulic Clutch & Brake
- Photo Electric Safety Barriers
- Programmable Cam Switches
- Die Cushion Air Saving Valve
- Work Area Lights
- REACH 4.0 Enable Smart Control

4-Pt Suspension Press options available, if required.

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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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.