



**PRESSES**

MECHANICAL • HYDRAULIC • SERVO

*Transfer Presses*

*MATR Series*

630T - 3150T



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

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

**Presses for High Productivity**

**High Reliability • High Flexibility • Enhanced Die Life**



## Higher Productivity Solution



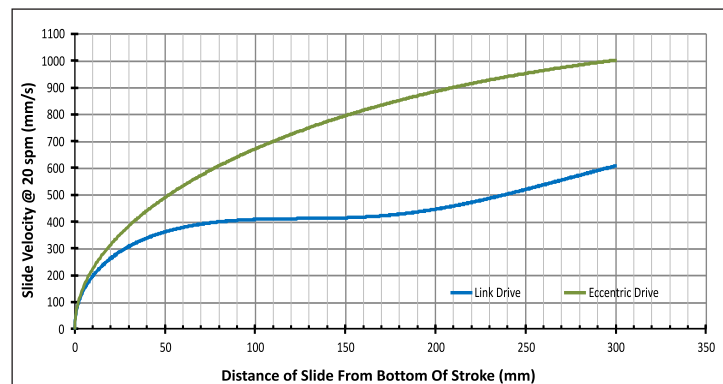
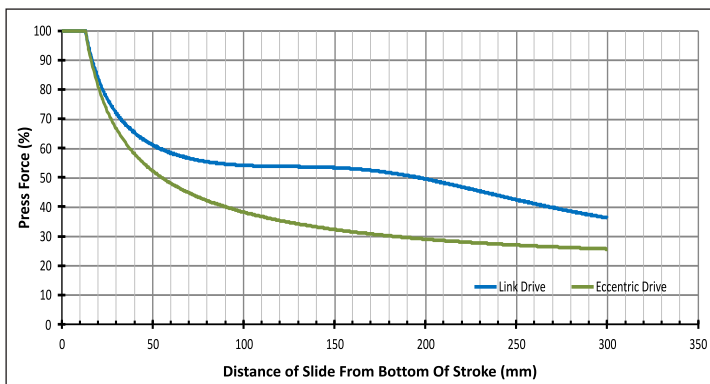
12500kN & 6300kN Link Drive Transfer Press with bolster size 4300mm x 1400mm & 15-30 SPM

- Optimum time availability for movement of transfer system while press running in continuous mode.
- Wide window opening permits feed of wider material offering flexibility in part production
- Productivity higher as compared to tandem line due to higher operating speeds



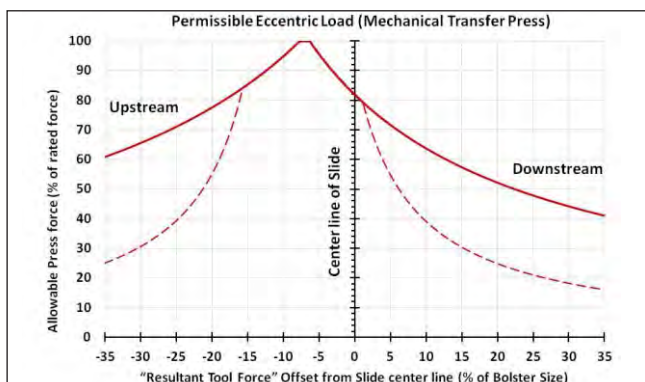
12500kN Transfer Press with bolster size 5500mm x 2500mm & 15-30 SPM

## Efficient Drawing at First Station with Link Drive Motion



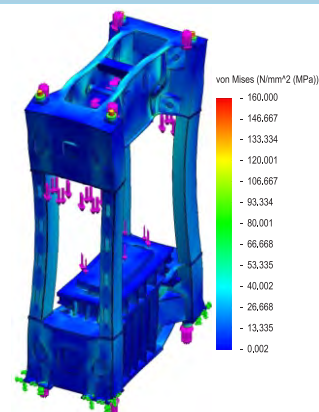
- Link Drive mechanism permits to work at low and constant speed during draw zone and at higher speed during idle (return) zone to improve quality of parts with higher productivity.
- In draw operations required on First station, link drive is particularly beneficial to reduce rejections & noise besides enhancing Die life.
- In Isgec design of Link Drive Mechanism in-line configuration of links at BDC enables smooth continuous motion under load with low acceleration.

## Optimal load bearing Capacity (Optional)



- Load bearing capacity optimized as per load requirements at different stamping stations. Due to draw operations required on first station, load bearing capacity is higher on upstream as compared to downstream.
- Widely spaced suspension points and extra-long gibs supplement high eccentric load bearing capability.
- Capable of forming High Strength Steel (On Demand)

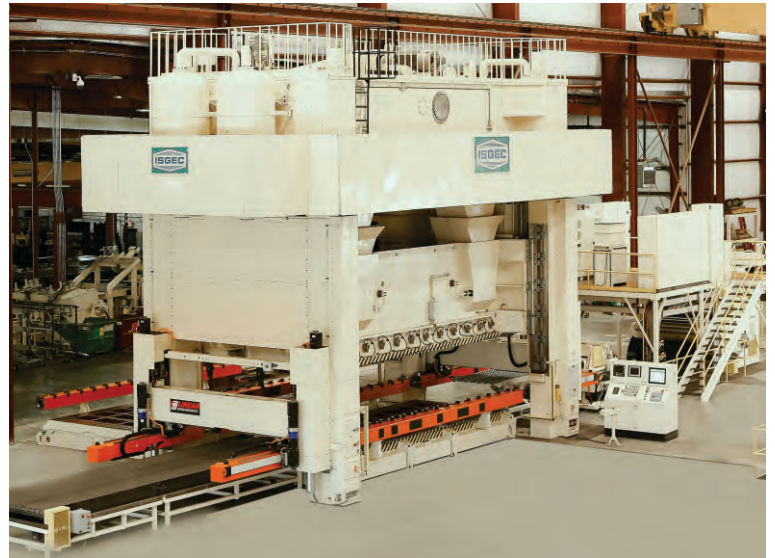
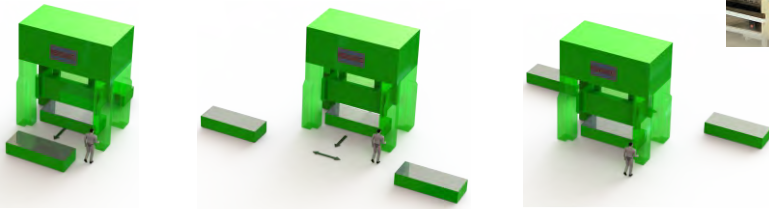
## Accurate Stampings from High Rigidity



- Finite Element Analysis (FEA) software is adopted to verify fatigue life of Press Structure and to enable required maximized rigidity.
- Structure is fabricated from tested Steel Plates and thermally stress relieved.
- Enhanced Die life from low deflection.

## Quick Die Change System

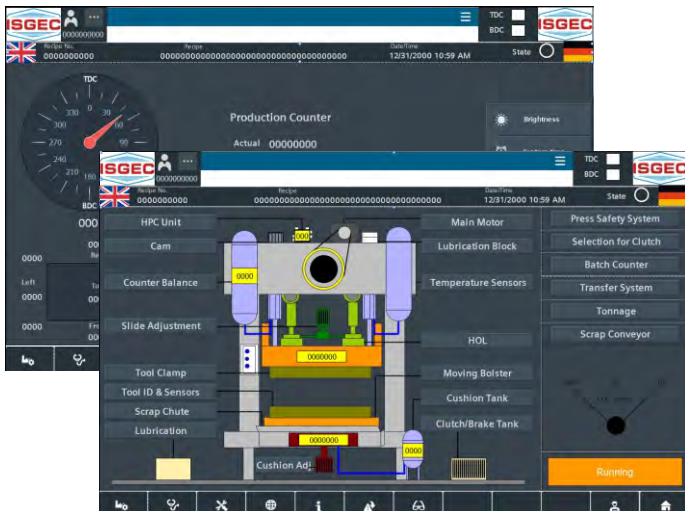
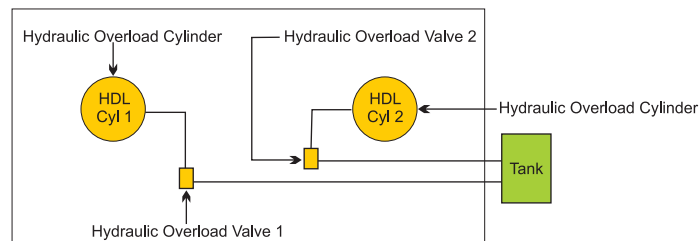
- Electrically driven Moving Bolsters in Centre to Front and Center to Back with alternative options of movement for Quick Die Change and higher productivity.
- Die Centering Slots on Bolster Plate for quick die location .
- T-Slots as per JIS, JIC & DIN depending upon user's requirement.
- Automatic or Semi Automatic Die Change feature available as optional.
- On demand 'Automatic' or 'Hydraulically operated, Manually positioned' Die clamps provided.



20000 kN Mechanical Transfer Press installed in Kentucky, USA  
Bolster Size 7600 mm x 2800 mm with 3-Axis Servo Transfer System

## High Response Hydraulic Overload System

- Separate Hydraulic valves for each side suspension points with separate adjustments senses the load beyond rated capacity. Rapid stoppage of press prevents damages to Dies.

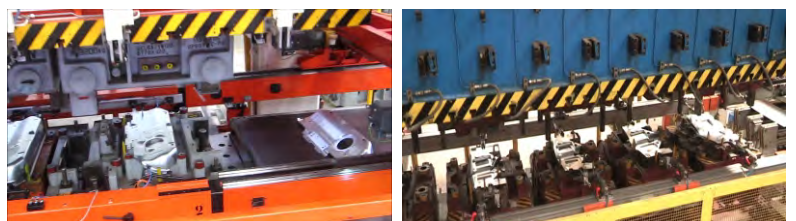


## Ease of Operation & Interface

- Programmable Logic Controller with user friendly Operator Interface has operator Screens. HMI (Human Machine Interface) with Diagnostic features developed by constant improvements through feedback from Press users.
- Hardware for reliable interface with Automation.
- Remote online diagnosis feature provided on demand.
- Complete Project Management including Interface with Automation & Dies provided.

## Signal to Transfer System

- Transfer System encoder directly connected with Drive Pinion for better Sensitivity & Vibration free transmission of signals
- Dual monitoring of Press and Transfer system





## Technical Specifications

### TWO POINT SUSPENSION ECCENTRIC DRIVE MECHANICAL PRESS – MATR 2E

Model No.		MATR2E-630	MATR2E-800	MATR2E-1000	MATR2E-1200
Maximum Capacity	kN US Ton	6300 693	8000 880	10000 1100	12000 1320
Rated Distance	mm	13    16	13    16	13    16	13    16
Energy at mean speed	kJ	110    140	140    170	170    200	200    240
Strokes Per Minute (Variable)	SPM	10 - 30	10 - 30	10 - 30	10 - 30
Stroke Length (Fixed)	mm	600	600	600	800/600
Shut Height (SDAU)	mm	1100    1400	1100    1400	1100    1400	1400
Slide Adjustment (Motorized)	mm	250	250	300	300
Slide & Bolster Face- LR X FB (Alt-1)	mm	3700 x 1600	4000 x 1900	4900 x 1900	4900 x 1900
Slide & Bolster Face- LR X FB (Alt-2)	mm	4000 x 1600	4300 x 1900	5200 x 1900	5200 x 1900
Slide & Bolster Face- LR X FB (Alt-3)	mm	4300 x 1600	4600 x 1900	5500 x 1900	5500 x 1900
Main Motor Power	kW hp	75    90 100    120	90    110 120    150	110    132 150    180	132    160 180    215
Die Cushion Capacity (Optional on 1st & 2nd stations*)	kN	As per requirement			
Maximum opening between Uprights (FB)	mm	2400	2700	2700	2700

### TWO POINT SUSPENSION LINK DRIVE MECHANICAL PRESS – MATR 2L

Model No.		MATR2L-630	MATR2L-800	MATR2L-1000	MATR2L-1200
Maximum Capacity	kN US Ton	6300 693	8000 880	10000 1100	12000 1320
Rated Distance	mm	13    16	13    16	13    16	13    16
Energy at mean speed	kJ	110    140	140    170	170    200	200    240
Strokes Per Minute (Variable)	SPM	10 - 30	10 - 30	10 - 30	10 - 30
Stroke Length (Fixed)	mm	800/900	800/900	900/1000	900/1000/1100
Shut Height (SDAU)	mm	1100    1400	1100    1400	1100    1400	1400
Slide Adjustment (Motorized)	mm	250	250	300	300
Slide & Bolster Face- LR X FB (Alt-1)	mm	3700 x 1600	4000 x 1900	4900 x 1900	4900 x 1900
Slide & Bolster Face- LR X FB (Alt-2)	mm	4000 x 1600	4300 x 1900	5200 x 1900	5200 x 1900
Slide & Bolster Face- LR X FB (Alt-3)	mm	4300 x 1600	4600 x 1900	5500 x 1900	5500 x 1900
Main Motor Power	kW hp	75    90 100    120	90    110 120    150	110    132 150    180	132    160 180    215
Die Cushion Capacity (Optional on 1st & 2nd stations*)	kN	As per requirement			
Maximum opening between Uprights (FB)	mm	2400	2700	2700	2700

Machines are manufactured as per SI Units  
 Customised Solutions can be offered on Demand  
 \*Optional Features



## Technical Specifications

### FOUR POINT SUSPENSION ECCENTRIC DRIVE MECHANICAL PRESS – MATR 4E

Model No.		MATR4E-630	MATR4E-800	MATR4E-1000	MATR4E-1250	MATR4E-1600	MATR4E-2000	MATR4E-2500	MATR4E-3150
Maximum Capacity	kN US Ton	6300 693	8000 880	10000 1100	12500 1375	16000 1760	20000 2200	25000 2750	31500 3465
Rated Distance	mm	13 : 16	13 : 16	13 : 16	13 : 16	13 : 16	13 : 16	13 : 16	13 : 16
Energy at mean speed	kJ	110 : 140	140 : 170	170 : 200	200 : 240	240 : 300	320 : 400	450 : 570	640 : 820
Strokes Per Minute (Variable)	SPM	10 - 30	10 - 30	10 - 30	10 - 30	10 - 30	10 - 25	10 - 25	10 - 25
Stroke Length (Fixed)	mm	800/600	800/600	800/600	800/650	800	800	800	800
Shut Height (SDAU)	mm	1100 : 1400	1100 : 1400	1100 : 1400	1400	1500	1500	1700	1700
Slide Adjustment (Motorized)	mm	250	250	300	300/275	400	400	400	400
Slide & Bolster Face- LR X FB (Alt-1)	mm	3700 x 1900	4000 x 2200	4600 x 2200	4900 x 2200	6100 x 2500	6100 x 2500	6700 x 2500	6700 x 2500
Slide & Bolster Face- LR X FB (Alt-2)	mm	4000 x 2200	4300 x 2200	4900 x 2200	5200 x 2200	6400 x 2500	6400 x 2500	7000 x 2750	7000 x 2800
Slide & Bolster Face- LR X FB (Alt-3)	mm	4300 x 2200	4600 x 2200	5200 x 2200	5500 x 2200	6700 x 2800	6700 x 2800	7600 x 3050	7600 x 3050
Slide & Bolster Face- LR X FB (Alt-4)	mm	x	x	x	5500 x 2500	x	x	x	x
Main Motor Power	kW hp	75 : 90 100 : 120	90 : 110 120 : 150	110 : 132 150 : 180	132 : 160 180 : 215	160 : 200 215 : 270	200 : 250 270 : 335	250 : 315 335 : 425	315 : 400 425 : 536
Die Cushion Capacity (Optional on 1st & 2nd stations*)	kN	As per requirement							
Maximum opening between Uprights FB (Alt-1)	mm	2700	3000	3000	3000	3300	3300	3300	3300
Maximum opening between Uprights FB (Alt-2)	mm	3000	3000	3000	3000	3300	3300	3600	3600
Maximum opening between Uprights FB (Alt-3)	mm	3000	3000	3000	3000	3600	3600	3900	3900
Maximum opening between Uprights FB (Alt-4)	mm	x	x	x	3300	x	x	x	x

### FOUR POINT SUSPENSION LINK DRIVE MECHANICAL PRESS – MATR 4L

Model No.		MATR4L-630	MATR4L-800	MATR4L-1000	MATR4L-1250	MATR4L-1600	MATR4L-2000	MATR4L-2500	MATR4L-3150
Maximum Capacity	kN US Ton	6300 693	8000 880	10000 1100	12500 1375	16000 1760	20000 2200	25000 2750	31500 3465
Rated Distance	mm	13 : 16	13 : 16	13 : 16	13 : 16	13 : 16	13 : 16	13 : 16	13 : 16
Energy at mean speed	kJ	110 : 140	140 : 170	170 : 200	200 : 240	240 : 300	320 : 400	450 : 570	570 : 720
Strokes Per Minute (Variable)	SPM	10 - 30	10 - 30	10 - 30	10 - 30	10 - 30	10 - 25	10 - 25	10 - 25
Stroke Length (Fixed)	mm	800	800	900	900	900	1000	1100/1000	1100/1000
Shut Height (SDAU)	mm	1100 : 1400	1100 : 1400	1100 : 1400	1400	1500	1500	1350/1700	1350/1700
Slide Adjustment (Motorized)	mm	250	250	300	300	400	400	400	400
Slide & Bolster Face- LR X FB (Alt-1)	mm	3700 x 2200	4000 x 2200	4600 x 2200	4900 x 2200	6100 x 2500	6100 x 2500	6700 x 2500	6700 x 2500
Slide & Bolster Face- LR X FB (Alt-2)	mm	4000 x 2200	4300 x 2200	4900 x 2200	5200 x 2200	6400 x 2500	6400 x 2500	7000 x 2750	7000 x 2800
Slide & Bolster Face- LR X FB (Alt-3)	mm	4300 x 2200	4600 x 2200	5200 x 2200	5500 x 2200	6700 x 2800	6700 x 2800	7600 x 3050	7600 x 3050
Main Motor Power	kW hp	75 : 90 100 : 120	90 : 110 120 : 150	110 : 132 150 : 180	132 : 160 180 : 215	160 : 200 215 : 270	200 : 250 270 : 335	250 : 315 335 : 425	315 : 400 425 : 536
Die Cushion Capacity (Optional on 1st & 2nd stations*)	kN	As per requirement							
Maximum opening between Uprights FB (Alt-1)	mm	3000	3000	3000	3000	3300	3300	3300	3300
Maximum opening between Uprights FB (Alt-2)	mm	3000	3000	3000	3000	3300	3300	3600	3600
Maximum opening between Uprights FB (Alt-3)	mm	3000	3000	3000	3000	3600	3600	3900	3900

## Standard Accessories

- Programmable Logic Controller (PLC)
- Dual Check safety electrical circuit
- Production Counters (Total Batch/Shift) on HMI
- Counter Balance Cylinder
- High Response Hydraulic Overload System
- Variable Speed through AC Inverter
- Motorized Slide Adjustment
- Centralized Re-circulating Automatic Oil Lubrication system
- User Friendly Touch Screen Interface
- Pneumatic Clutch & Brake till 1250T
- Emergency Stop buttons
- Moving Bolster (Center to Front/Back movement)
- LED Die Area lights
- Safety Guards on front & back
- Portable Two Hand Operator Stand
- Safety Blocks
- Digital Crank Angle Indicators (Display on HMI)
- Maintenance Tool Kit
- Maintenance Platform & Ladder
- Photoelectric guards on front and rear
- Main Motor Forward Reverse Facility
- Programmable Cam Switches

## Optional Accessories

- Die clamps for Quick Die Change
- Die Cushion
- Electronic Force Monitoring / Process Monitoring with Signature Analysis
- Anti Vibration Mounts
- Hydraulic Clutch & Brake below 1250T
- Automatic Die Change System
- Higher Hydraulic Overload Stroke
- Compliance with CE/OSHA Safety Standards
- Slide Locking Device
- Moving bolster with T-Track.
- Die Automation Control
- Scrap Chute with Interlocked opening covers
- Bearing Temperature Monitoring System
- Isgec Reach 4.0 enable Smart Control
- SCADA System

## Automation Solutions

- Destacker/Coil Feed Line
- 3-D-Electronic Transfer system
- Robotic Auto stacking of parts

## Press suitable to work with Automation Suppliers of Regional Choice

**Europe:** Dreher, AP&T, Norda

**Asia:** KDM, Daebong

# We also integrate and supply Automation System of Customer Choice

**North America:** Linear Automation

**South America:** Prody Tecnologia

## 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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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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**Sales Representatives:** Brazil • China • France • Germany • Hungary • Indonesia • Italy • Japan  
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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.