



**PRESSES**  
MECHANICAL & HYDRAULIC

## *Ring Frame Presses*

*GR Series*

110T - 300T



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

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

## **High Performance Sheet Metal Working**

**Rigidity • Precision • Reliability**



# RING FRAME PRESSES

## GR Series

### Features

Isgec Ring Frame Presses are designed for high rigidity & accuracy by using single straight-sided frames. These Frames are fabricated from tested quality Steel Plates, Die Penetration tested and Stress Relieved ensuring fatigue free long life.

Guiding (6-Point) Slide for better guiding to ensure high precision operation & longer tool life.

### Advantages

- IMPROVED DIE LIFE
- HIGH RIGIDITY

- HIGH ACCURACY
- EASY TO INTEGRATE WITH FEEDLINE EQUIPMENT

### Precise and Vibration Free Transmission

#### Crank Shaft

Forged from Normalized Alloy Carbon Steel, Ultrasonically Tested.

CAD analysis ensures elimination of stress concentrations and metal fatigues.



#### Gear

Gears of drive train machined to precision grade, conforming to DIN Grade 7 or AGMA 10 and better, for smooth torque transmission and vibration free operation.

#### Pinion

Forged Alloy Steel, Hardened & Tempered, Ultrasonically Tested, Accurately Machined and Ground.

#### Connecting Rod

Steel Casted, Normalized and Ultrasonically Tested.

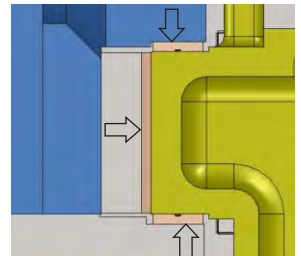
#### Flywheel

Dynamically balanced Flywheel for long life of bearings.



#### Accurate Slide & Guide

- Extra long six points guides to ensure accurate slide guiding.
- Non Ferrous Liners.
- Accurately machined on CNC Machines.



### Hydraulic Overload Protection

#### Protection for Press and Dies

Hydraulically operated fast acting Over Load protection mechanism mounted on slide for better performance thereby preventing damage to the Press and Dies.

### Motorized Slide Adjustment

Adjustment is driven by worm and worm wheel. Screw is machined on CNC centre for high accuracy and smooth profile.

Position is indicated on Mechanical indicator with an increment of 0.1 mm.



### Operator Control Station

User friendly operator panel with touch screen HMI offers ease in data feeding as well as in fault diagnostics.



# RING FRAME PRESSES

## GR Series



### Pneumatic Clutch & Brake Assembly

- Pneumatically operated Clutch and Brake for easy maintenance and service.
- Clutch & Brake controlled by Dual Solenoid Valve.

**Wet Clutch can be provided on demand**

### Pneumatic Die Cushion

- Piston type Pneumatic Die Cushion ensures Long life. It is Maintenance friendly and easy to remove & install.



### Lubrication System

- Automatic Grease Lubrication system lubricates Crank Shaft Bushes, Connecting Rod Bushes and Slide Guides.
- Oil Sump Lubrication for Main Gear Train for effective lubrication and heat dissipation.
- Lubrication is monitored through Progressive Lubrication Supply Line to give fault signals on HMI screen.

## Specifications

Model No.	Unit	GR-110T	GR-160T	GR-200T	GR-250T	GR-300T
Maximum Capacity	(kN)	1100	1600	2000	2500	3000
	(US Tons)	121	176	220	275	330
Rated Distance	(mm)	6	6	6	6	8
	(inch)	0.24	0.24	0.24	0.24	0.31
Speed (Fixed)	(SPM)	45	45	40	40	40
Speed (Variable)*#	(SPM)	30-60	30-60	25-50	25-50	25-50
Stroke Length (Fixed)	(mm)	180	200	200	250	250
	(inch)	7.1	7.9	7.9	9.8	9.8
Shut Height (s)	(mm)	350	500	550	600	600
	(inch)	13.8	19.7	21.7	23.6	23.6
Slide Adjustment	(mm)	80	120	120	120	125
	(inch)	3.1	4.7	4.7	4.7	4.9
Slide Face (a x b)	(mm)	625 x 500	700 x 580	1000 x 650	1100 x 700	1100 x 700
	(inch)	24.6 x 19.7	27.6 x 22.8	39.4 x 25.6	43.3x27.6	43.3 x 27.6
Bolster Size (c x d)	(mm)	1150 x 710	1250 x 800	1450 x 850	1450 x 950	1450 x 950
	(inch)	45.3 x 28	49.2 x 31.5	57.1 x 33.5	57.1 x 37.4	57.1 x 37.4
Bolster Thickness (f)	(mm)	115	140	160	160	160
	(inch)	4.5	5.5	6.3	6.3	6.3
Height of Bolster Surface from Floor (g) approx.	(mm)	900	900	1000	1200	1200
	(inch)	35.4	35.4	39.4	47.2	47.2
Main Motor Power	(kW)	11	15	15	18.5	22.5
Die Cushion Capacity at 7 kg/sq.cm.*	(kN)	63	100	140	140	140
Die Cushion Stroke Length	(mm)	90	100	100	125	125
	(inch)	3.5	3.9	3.9	4.9	4.9
Die Cushion Pad Area	(mm)	500 x 450	600 x 450	600 x 560	600 x 560	600 x 560
	(inch)	19.7 x 17.7	23.6 x 17.7	23.6 x 22	23.6 x 22	23.6 x 22
Side Opening (k x j)	(mm)	525 x 425	575 x 425	600 x 425	600 x 525	600 x 525
	(inch)	20.7 x 16.7	22.6 x 16.7	23.6 x 18.7	23.6 x 20.7	23.6 x 20.7
Overall Dimension (n x l x m)	(mm)	3300 x 1700 x 1750	3600 x 2000 x 1850	4200 x 2500 x 1750	4700 x 2800 x 1750	4700 x 2800 x 1750
	(inch)	129.9 x 66.9 x 68.9	141.7 x 78.7 x 72.8	165.3 x 98.4 x 68.9	185 x 110.2 x 68.9	185 x 110.2 x 68.9

\* Optional at extra cost.

# Single stroke working is recommended up to mid SPM only.

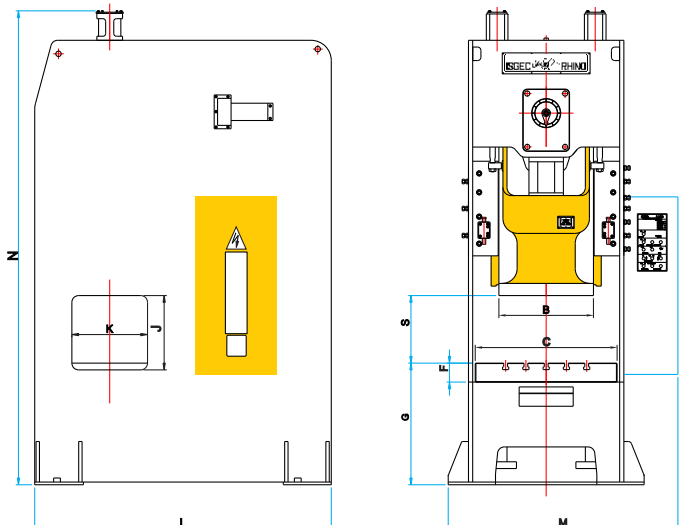
- Dimensions given in inches are approximate

### Standard Accessories

- Pneumatic Counter Balance Cylinders
- Hydraulic Overload Protection
- Motorized Slide Adjustment
- Automatic Forced Lubrication
- Operator Panel with PLC & HMI
- Pneumatic Clutch & Brake
- Emergency Stop Buttons
- Electronic Shut Height Indicator
- Two Hand Push Button Station
- Production Counter
- Anti-Repeat Safety Device
- Rotary Cam Limit Switches
- Die Area Light
- Power Socket
- Photo Electric Guards

### Optional Accessories

- Pneumatic Die Cushion
- Wet Clutch
- Variable Speed through AC Inverter
- Tonnage Monitor
- Quick Die Change System
- Anti Vibration Mounts
- Auto Coil Feeding System
- Misfeed Detection Socket
- Metallic Guards & Covers
- Air Outlet
- Mechanical Knock Out
- Safety Block



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