



**PRESSES**  
MECHANICAL & HYDRAULIC

## *Ring Frame Presses*

*GR Series*

110T - 300T



Safeties Confirm to:

CE

OSHA 1910.217

CSA Z142-10

NR-12

ISO 9001:2008

ISO 14001:2004

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) of Slide is centrally located for better resistance to eccentric loading and 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

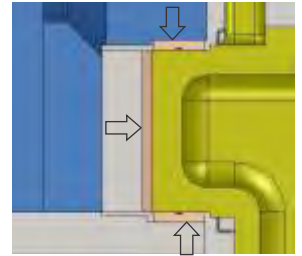
Forged Alloy Steel, Hardened & Tempered, Ultrasonically Tested, Accurately Machined and Ground.

#### Connecting Rod

Steel Casted, Normalized and Ultrasonically Tested.

#### Accurate Slide & Guide

- One piece full length box type gibs ensure accurate slide guiding.
- Non Ferrous Liners.
- Accurately machined on CNC Machines.
- Designed to take care of off-center loading.



### Hydraulic Overload Protection

#### Protection for Press and Dies

Hydraulically operated fast acting mechanism mounted below the adjustment screw senses application of load beyond the capacity on 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 Electro-Mechanical indicator with an increment of 0.1 mm.



### Lubrication System

Automatic Grease Lubrication system lubricates Crank Shaft Bushes, Connecting Rod Bushes and Slide Guides (6 point) and also gives fault signals on HMI.

Main Gear is dipped in oil sump for effective lubrication and heat dissipation.

Flywheel is manually grease lubricated.



# RING FRAME PRESSES

## GR Series



### Pneumatic Clutch & Brake Assembly

- Clutch & Brake controlled by Dual Solenoid Valve.
- Operating Air Pressure for Clutch and Brake 5.5 kg/sq.cm.
- Monitored Air Intake with Filter, Regulator and Lubricator.

- Air Reservoir provided with Safety Valve, Pressure Switch and Drain Cock.

### Pneumatic Die Cushion (Optional)

- Piston type

### Operator Control Station

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



**Wet Clutch can be provided on demand**

## 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	30	30
Speed (Variable)*	(SPM)	30-60	30-60	25-50	20-40	20-40
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
Stroke Down Adjustment Up (SDAU)	(inch)	13.8	19.7	21.7	23.6	23.6
Slide Adjustment	(mm)	80	120	125	125	125
	(inch)	3.1	4.7	4.9	4.9	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	1300 x 850	1300 x 950	1300 x 950
	(inch)	45.3 x 28	49.2 x 31.5	51.2 x 33.5	51.2 x 37.4	51.2 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)	80	80	100	125	125
	(inch)	3.1	3.1	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 475	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.

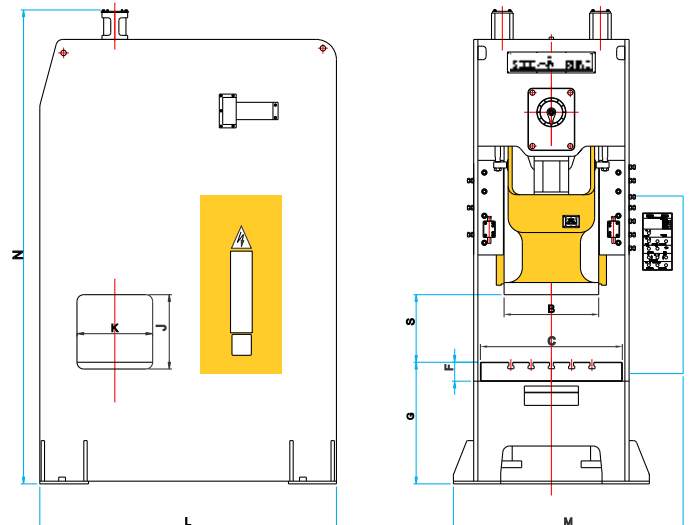
Dimensions given in inches are approximate

### Standard Accessories

- Hydraulic Overload Device
- Motorized Slide Adjustment
- Shut Height Indicator
- Automatic Grease Lubrication System
- Rotary Cam Limit Switches
- Production Counter
- Operating Mode : Inch-Single
- Stroke - Continuous Stroke
- Two Hand Push Button Station
- Operator Panel with PLC & MMI
- Anti-Repeat Safety Device

### Optional Accessories

- Variable Speed Drive
- Pneumatic Die Cushion
- Wet Clutch
- Photo-Electric Guards
- Mis Feed Detection
- Anti Vibration Mounts
- Mechanical Knockout
- Quick Die Change System
- Die Clamps
- Decoiler, Straightener and Feeder
- Air Outlet
- Power Socket
- Mesh Guards / Covers



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