

GL2 Series



C-Frame
Link Drive
Double Crank Power Presses



110.160.200.250. ton

GL2

C-Frame Link Drive Double Crank Power Presses



- Increase Productivity Near 40%
- Improve Stamping Quality
- Reduce Noise & Vibration
- Increase Operability

- Prolong Toolings' Life
- Minimize Frame Deflection
- Increase permissible Off-center Load
- Give Soft Touch to Press & Toolings
- Easy To Adapt Various Press Automations

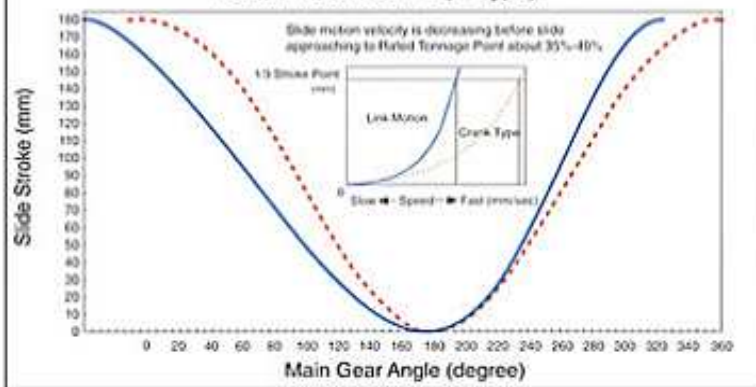
- High Performance Wet Type Clutch & Brake
- Extra Long 6-Point Centered Gibs
- Super Rigid Steel Frame
- High-performance Link Drive
- Multi-function Press Control

SPECIFICATIONS

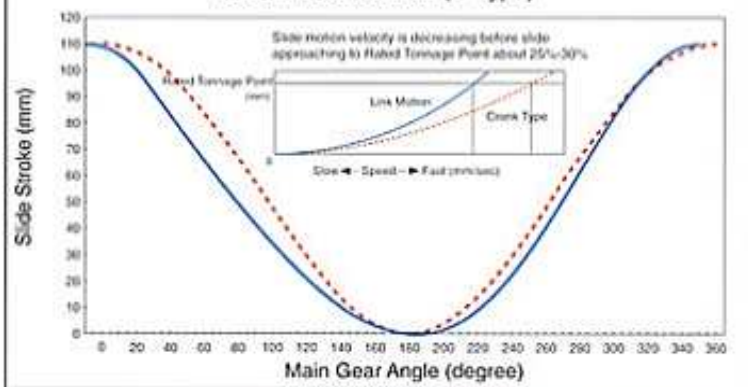
MODEL		GL2 - 110		GL2 - 160		GL2 - 200		GL2 - 250	
TYPE		B	D	B	D	B	D	B	D
Capacity	Tons	110		160		200		250	
Rated tonnage point (above B.D.C.)	mm	5		6		7		7	
Stroke length	mm	110	180	130	200	150	250	180	280
Strokes per minute	Fixed	S.P.M. 45		40		35		30	
	Variable	S.P.M. 50-100 35-65		40-80 30-50		35-70 25-40		30-60 20-35	
Die height (S.D.A.U.)	mm	400		450		550		550	
Maximum upper die weight	kg	800		1270		1470		1560	
Slide adjustment	mm	80		90		100		110	
Bolster area (L.R. x F.B.)	mm	1800 x 650		2000 x 760		2400 x 840		2700 x 900	
Bolster thickness	mm	130		150		170		170	
Slide area (L.R. x F.B.)	mm	1400 x 500		1600 x 550		1850 x 650		2100 x 700	
Main motor	Fixed	Hp x P 10 x 6		15 x 6		20 x 6		25 x 6	
	VS Motor	V.S. 15 x 4		V.S. 20 x 4		V.S. 25 x 4		V.S. 30 x 4	
Slide adjusting motor	Hp x P	1 x 4		1 x 4		2 x 4		2 x 4	
Air Pressure	Kg/cm ²	5							
Accuracy		JIS (CNS) 1st Class							
Die Cushion		2 - Pad - 2 - Cylinder							
Capacity	Tons	3.6 x 2		6.3 x 2		10 x 2		14 x 2	
Stroke	mm	70		70		80		100	
Air pressure	Kg/cm ²	6.5		7.2		6.75		9	
Pad area (L.R. x F.B.)	mm	350 x 235 x 2 sets		410 x 260 x 2 sets		540 x 350 x 2 sets		640 x 470 x 2 sets	

Die Cushion only for D-type

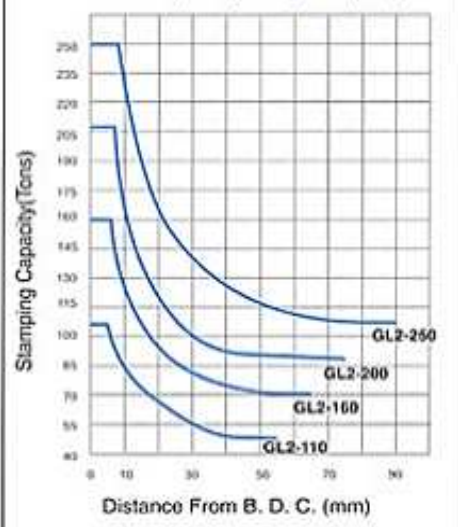
Slide Motion Curve (D-Type)



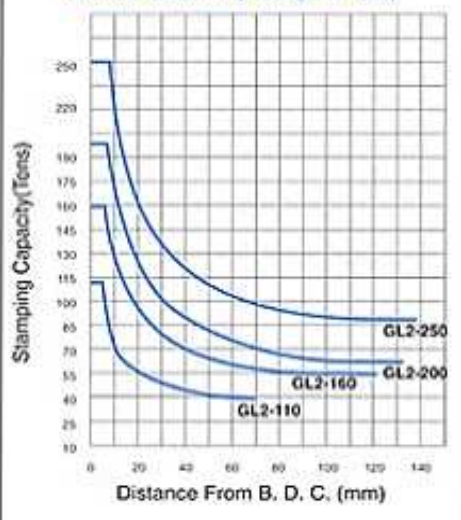
Slide Motion Curve (B-Type)



Stroke-Capacity Diagram (B)



Stroke-Capacity Diagram (D)

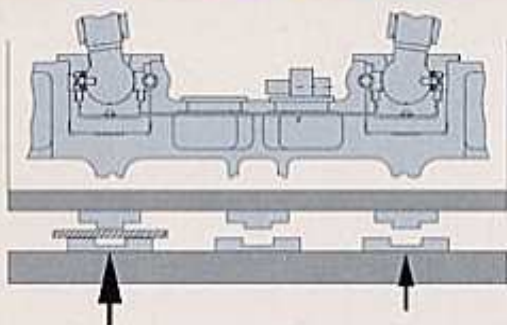


Link motion characteristic

A satisfactory slide down-stroke velocity can reduce the tool impact noise and vibration; a better working condition can be achieved.

In comparison with the traditional crank type presses, the productivity is increased nearly 20% up to 40% by link motion press.

Parallelism Maintained During Offset Loads



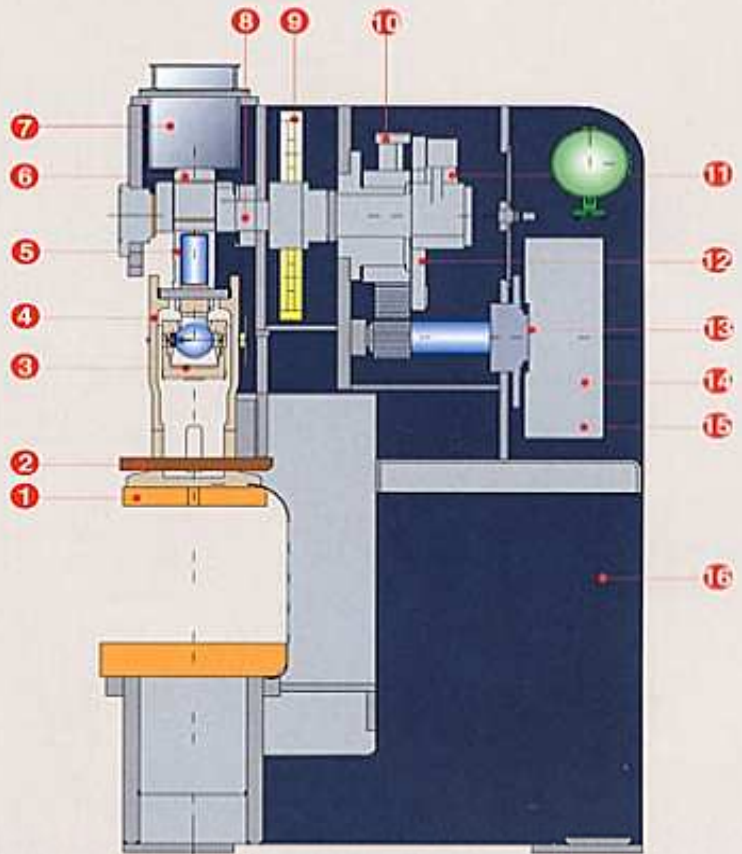
If unequal loads are applied across the slide, full oil pressure from the overload system is applied where required to retain the parallelism between slide plate and bolster for consistent quality of pressings and extend tooling life.

Super Rigid Steel Frame

The Chin Fong GL2 Series is designed to resist deflection, and provide accurate pressings and longer die life, even at full tonnage loads. The heavy, one-piece welded steel frame is designed to provide a stable base for the GL2 Series presses.



- | | | |
|---------------------|---------------------|------------------------|
| 1. Slide Plate | 7. Counter Balancer | 13. Pinion Drive Shaft |
| 2. Slide Knockout | 8. Crankshaft | 14. Wet Clutch & Brake |
| 3. H.L.O.P. Chamber | 9. Timing Gear | 15. Flywheel |
| 4. Slide | 10. Main Gear | 16. Frame |
| 5. Con-Rod | 11. Lever | |
| 6. Cap of Con-Rod | 12. Link | |



Micro-Processor Press Control System

MPC-3000

Main Operation Panel



Ready Status
Main Motor Status
Safety Light Curtain Status
Grounding Indicator

LCD Displaying Screen

Main Motor Power Switch

Q. D. C Operating Switches

Indicator for Crank Angle / SPM Display Ready Status

Main Power Switch

Selective Key Switch for Operating Modes

I Operation Status Monitoring

- 1- Motion detector monitor broken shaft, crankshaft, excessive wear of lining, engagement and disengagement of clutch and brake device.
- 2- Motor status (Forward / Reverse / Consumption / SPM) displayed on LCD Displaying Screen, with the setting function.
- 3- Dual-circuit protection for safety light curtain and overrun.
- 4- Panel-displayed operation modes and Error Messages with Trouble-shooting instruction.

II Electronic Angle Control

- 1- Panel setting cam ON/OFF angel from LCD Displaying Screen.
- 2- 6-spare-cams as standard, and increase of 16-spare-cams can be added as options without mechanical modifications
- 3- Brake Monitor is equipped with automatic slip-angle correction within a limited range against inaccurate TDC stop position caused by lining wear and change of slide speed.

III Counters

- 1- Total counter, Pre-Set counter, Chop counter, Maintenance counter, and Life Counter are all provided.
- 2- Setting figures and Status of counters all displayed from LCD Displaying Screen.

IV Provision of interface for peripheral equipment

- 1- Cam angle controlled misfeed detection circuits A1 & B1 can be set for ON/OFF, and A2 & B2 can be set for all-time detection. A and B port can be set individually.
- 2- RS-485 module is available for the telegraph-communication monitoring and controlling.

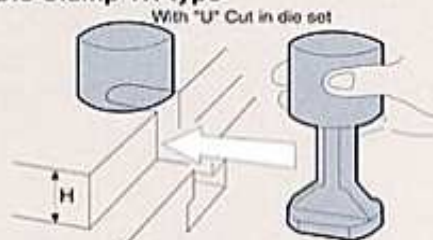
V Remote Monitoring & Control System

- 1- Simultaneously monitor up to 256 presses to improve production management.
- 2- Provide on-line Trouble-Shooting procedures with error messages.
- 3- Illustrate statistical reports of production efficiency and output.

(For reference only. Select the items below properly as needed.)

Quick Die Change System (Q. D. C. S.)

Die Clamp TX-type



Die Clamp TY-type



Option		Qty	Model	GL2-110	GL2-160	GL2-200	GL2-250
Die Clamp	Upper	TX-2 or TY-2	Clamping Force 2 tons/pc	8	8		
		TX-4 or TY-4	Clamping Force 4 tons/pc			8	8
		TX-6 or TY-6	Clamping Force 6 tons/pc				
	Lower	TX-2 or TY-2	Clamping Force 2 tons/pc	8	8		
		TX-4 or TY-4	Clamping Force 4 tons/pc			8	8
		TX-6 or TY-6	Clamping Force 6 tons/pc				
Die Lifter	DL28-600	Pay Load 1.4 tons/pc	4				
	DL28-700	Pay Load 1.5 tons/pc		4			
	DL28-800	Pay Load 1.6 tons/pc			4		
	DL28-900	Pay Load 1.8 tons/pc				4	
Die Arm	RC-700-600	Pay Load 600 kg/pc	4	4			
	RC-800-800	Pay Load 800 kg/pc			4		
	RC-900-900	Pay Load 900 kg/pc				4	
Hydraulic Power Unit			FP6308U			1	

BOLSTER

Fig. 1

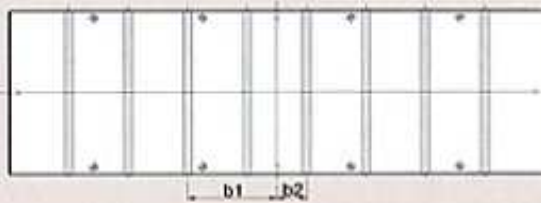


Fig. 2

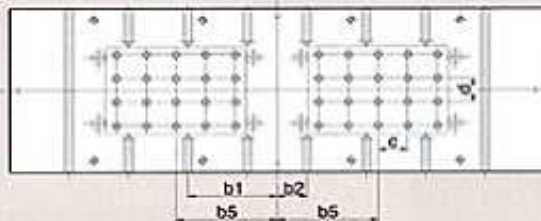


Fig. 3 (with "u"slot for die lifter)

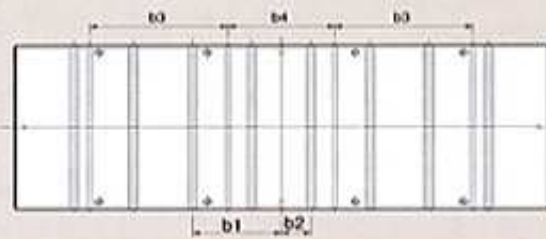
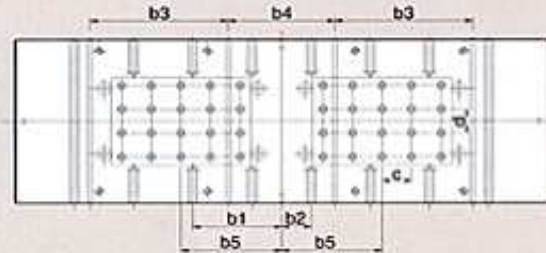


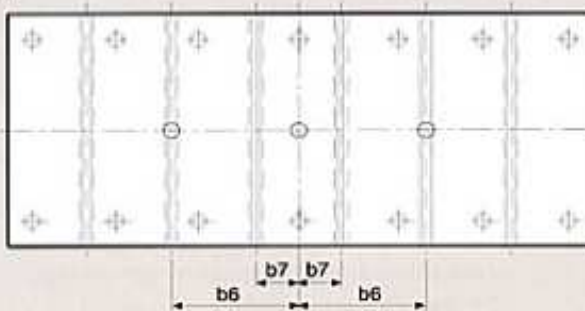
Fig. 4 (with "u"slot for die lifter)



unit: mm

MODEL	GL2-110	GL2-160	GL2-200	GL2-250
Bolster Area (LR x FB)	1800 x 650	2000 x 760	2400 x 840	2700 x 900
Type of T-Slot	A	A	B	B
No. of T-Slot	6	8	8	8
b1	375	375	375	450
b2	125	125	125	150
b3	320	520	710	680
b4	430	520	520	540
b5	255	415	455	510
Fig 2, Fig 4	No. of Pin Hole x Dia.	30 x $\phi 20^{+0.05}$	48 x $\phi 20^{+0.05}$	48 x $\phi 28^{+0.05}$
	c x d	75 x 100	75 x 75	100 x 100

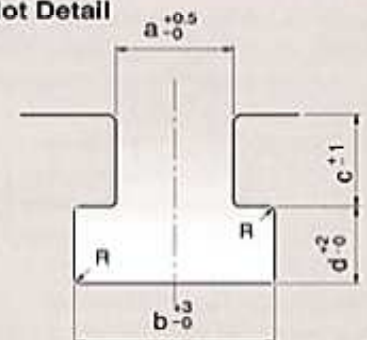
SLIDE PLATE



unit: mm

MODEL	GL2-110	GL2-160	GL2-200	GL2-250
Slide Plate Area (LR x FB)	1400 x 500	1600 x 550	1850 x 650	2100 x 700
Type of T-Slot	A	A	B	B
No. of T-Slot	4	6	6	6
b6	375	375	375	450
b7	125	125	125	150

T-Slot Detail



unit: mm

Dim.	Type	A	B
a		22	28
b		37	48
c		24	28
d		16	20
R		1	1

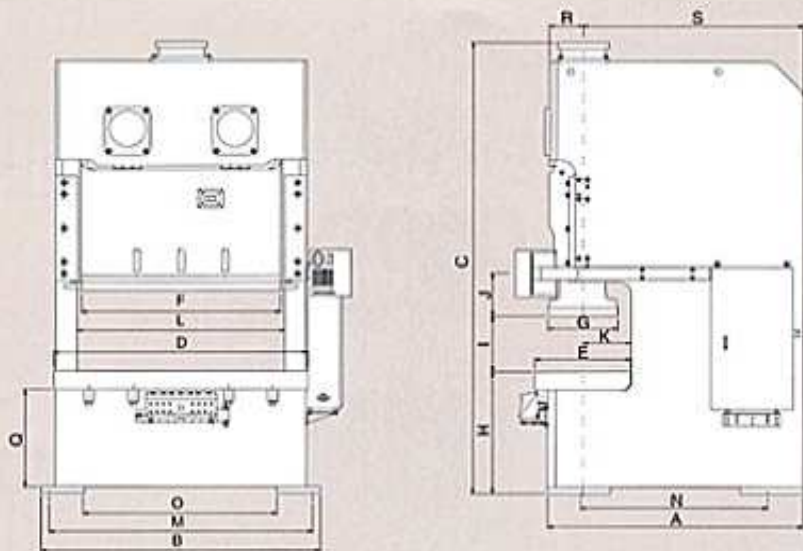
Standard Functions / Accessories

- Swivel Type 2-hand Pushbutton Panel
- Pendent Control Panel, MPC-3000
 - .Electronic Crank Angle LED Display
 - .Electronic S.P.M LED Display
 - .LCD type Press Status Monitor
- Operation Mode Selection
 - Off / Inching / Safety One Stroke / Continuous
- Hydraulic Overload Protector (H.O.L.P.)
- Overrun Detector (Brake Monitor)
- Power Shut-off Switch for Electrical Cabinet Door Opening
- Dual-coiled Solenoid Valve
- Motorized Slide Adjusting Device
- Digital Die Height Indicator (unit:0.1mm)
- Manual Grease Pump
- Total Counter, 6 digits
- Preset Counter, 6 digits
- Maintenance Counter, 6 digits
- Life Counter, 12 digits
- Electronic Rotary Cam Switch (6 spare channel)
- Air Ejector, 3/8", one channel
- Air Source Receptacle, 3/8", two channel
- Misfeed Detection Consent
- Power Receptacle (available only for single phase, 110V power source)

Optional Functions / Accessories

- Die Cushion
- Slide Knockout Device
- Motorized Grease Pump
- Safety Light Curtain
- Main Motor Reversing Circuit.
- Portable 2-hand Pushbutton T- Stand
- Safety Block with plug
- Dual Valve Solenoid with Detector
- Misfeed Detector
- Flywheel Brake
- Anti-vibration Rubber Pads
- Anti-vibration Press Mounts
- Anchor Bolts & Foundation Plates
- Die Room Light
- VS Main Motor
- Power Take-off Shaft
 - Crankshaft Front-end Extension
 - Left-hand-side Frame Extension (Feed Direction: Left to Right)
- Quick Die Change System
 - Upper
 - Lower Die Clamps
 - Die Lifters
 - Die Arms
- Automatic Feed Equipment
 - NC Straightener Feed c/w Uncoiler (3 in 1)
 - NC Roller Feeder
 - Straightener c/w Uncoiler (2 in 1)
- Remote Monitor & Control System

OUTLINE DIMENSIONS



unit: mm

MODEL	GL2-110		GL2-160		GL2-200		GL2-250	
TYPE	B	D	B	D	S	D	B	D
A	1870		2140		2295		2765	
B	2000		2200		2620		3000	
C	3045		3525		4020		4230	
D	1800		2000		2400		2700	
E	650		760		840		900	
F	1400		1600		1850		2100	
G	500		550		650		700	
H	830		990		1070		1100	
I	400		450		500		550	
J	110	180	130	220	150	250	170	280
K	330		385		425		455	
L	1470		1640		1980		2130	
M	1900		2080		2460		2800	
N	1420		1580		1950		2415	
O	1360		1520		1820		2200	
P	1780		1980		2320		2590	
Q	658		750		780		880	
R	218		240		300		335	
S	1612		1860		2035		2390	



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