

# ST1

## Straight Side Single Crank Precision Presses



© The contour of upgraded model is only for reference.

**ST1 Straight Side Single Crank Precision Presses**  
**STL1 Straight Side Single Crank Link Drive Presses**  
 80. 110. 160. 200. 260. 300 ton



Mechanical power press manufacturer

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**INNOVATION, SERVICE, COMMITMENT**



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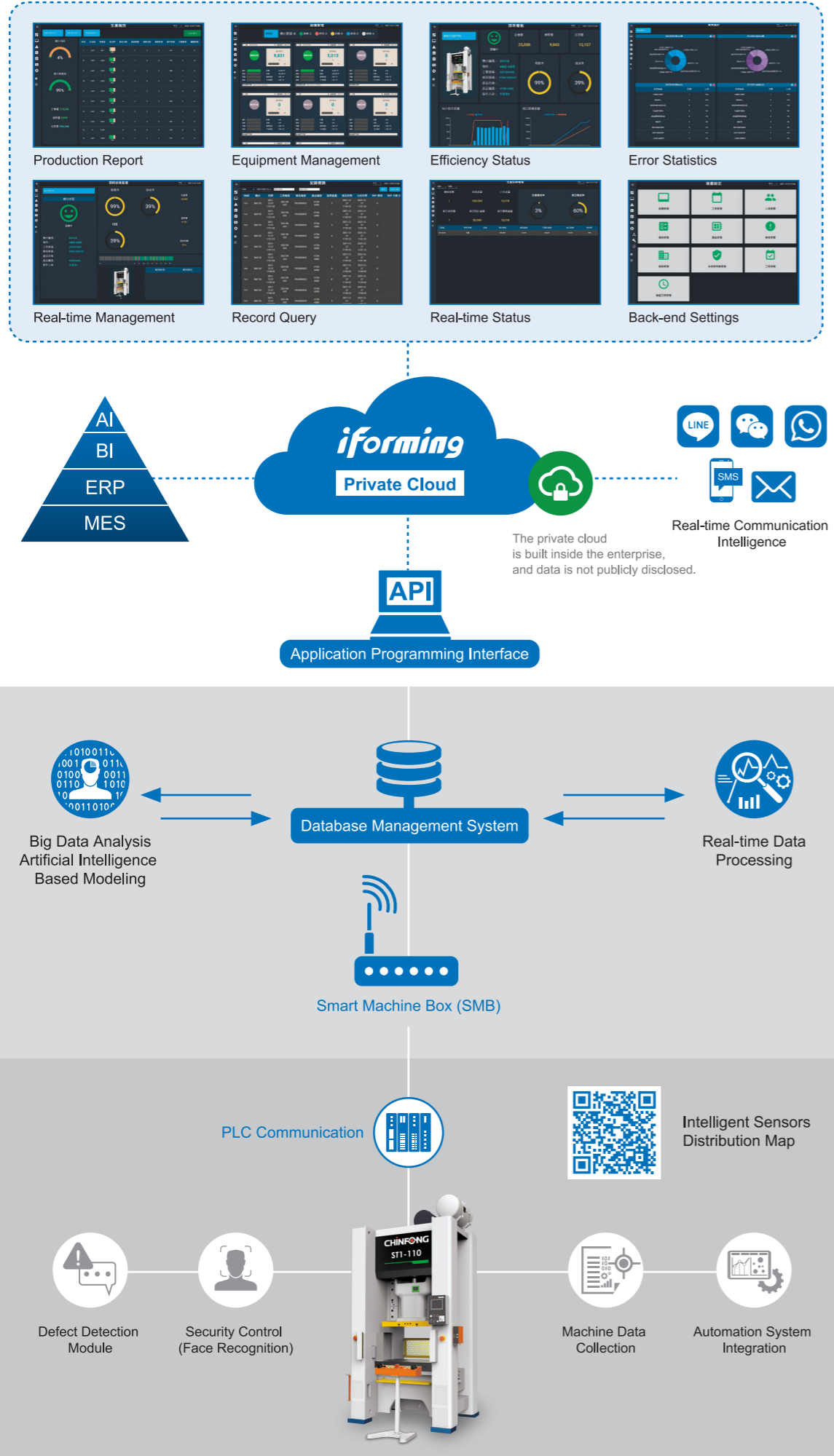
### iForming Intelligent Monitoring System

Data-Driven Decision

Agile Production

Real Time Management

Smart Networking



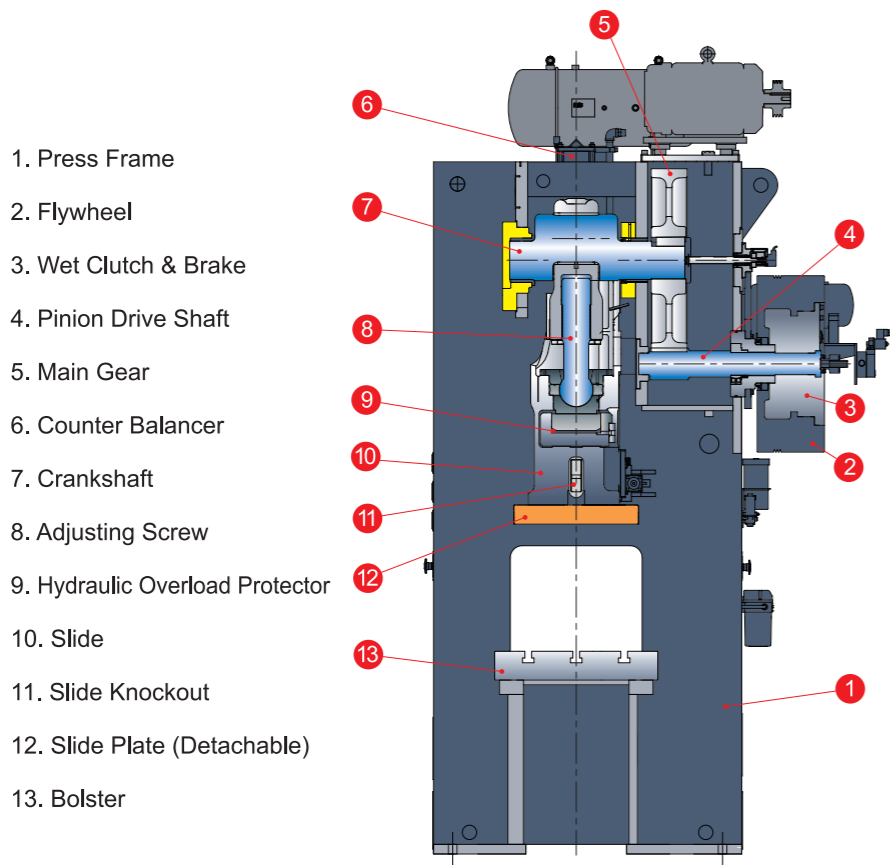
### Feature introduction

- High Precision Stamping Solution
- High Driving Torque Wet Clutch & Brake
- Reduced Noise & Vibration
- User-Friendly Operator Controls
- Box Type 6-point Gibs
- Reduced Angular Deflection
- Ultra Rigid Straight Side Frame
- Minimal Frame Deflection
- Minimum Total Clearance
- Easy Adaptation Of Various Press
- Electronic Crank Angle Indicator
- HMI Operation Panel

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### Specification

Model	ST1-80			ST1-110			ST1-160			ST1-200			ST1-260			ST1-300			
Type	S	H	L	S	H	L	S	H	L	S	H	L	S	H	L	S	XL		
Capacity	Ton			80			110			160			200			260		300	
Rated tonnage point (above B.D.C.)	mm	5	3.2	5	5	3.2	5	6	4	6	6	4	6	6	4	6	6	6	
Stroke length	mm	100	60	150	110	70	180	130	80	200	150	100	200	180	100	250	180	300	
Strokes per minute	Fixed Speed	S.P.M	80	100	60	70	90	50	60	80	45	50	65	35	45	55	30	45	30
	Variable Speed	S.P.M	50-100	65-140	40-75	45-90	60-130	30-65	35-70	50-100	20-50	35-70	45-95	20-50	30-60	35-75	20-40	30-50	20-35
Die height (S.D.A.U.)	mm	355	375	330	385	405	350	435	460	400	475	500	450	485	525	450	610	550	
Slide area (L.R. x F.B.)	mm	560x460			650x520			700x580			850x650			920x700			920x700		
Bolster area (L.R. x F.B.)	A type	mm	780x600			900x680			1000x760			1150x820			1300x840			1300x840	
	B type	mm	950x600			1050x680			1200x760			1300x820			1400x840			1400x840	
Bolster thickness	mm	100			120			150			160			180			200		
Side opening (L.R. x H)	mm	450x460			550x500			600x560			700x610			750x660			750x700		
Slide adjustment	mm	80			90			100			110			120			120		
Maximum upper die weight	kg	345			450			540			800			800			800		
Main motor	HpxP	10x4			15x4			20x4			20x4			25x4			30x4		
Slide adjusting motor	kWxP	0.4x4			0.4x4			0.75x4			0.75x4			1.5x4			1.5x4		
Working height	mm	830			845			915			1020			1120			1140		



### High Driving Torque Wet Clutch & Brake

Superior Performance

Noise Reduction

Improved Efficiency

Dust-free Operation

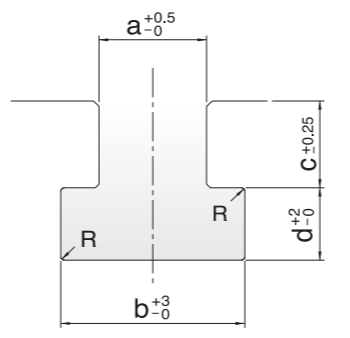
Low Inertia

Prolong Lifespan

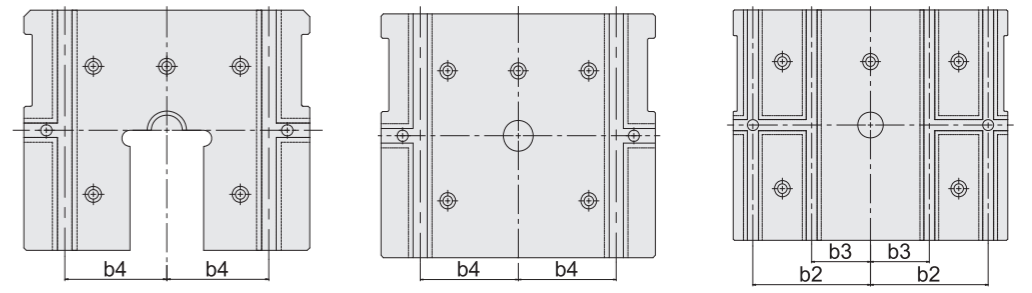
High Torque

Less Maintenance Cost

### T-Slot Detail



### Slide Plate



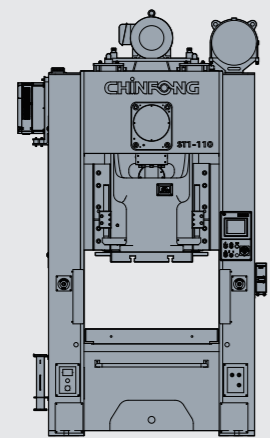
unit: mm

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

Model	ST1-80	ST1-110	ST1-160	ST1-200	ST1-260	ST1-300
Slide Plate Area (L.R. x F.B.)	560x460	650x520	700x580	850x650	920x700	920x700
Type of T-Slot	A	B	B	B	B	B
Shank Hole Dia.	Ø 50	Ø 50	Ø 65	Ø 65	Ø 65	Ø 65
b2	-	-	300	300	300	300
b3	-	-	150	150	150	150
b4	150	150	-	-	-	-

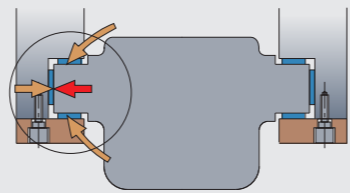
### Ultra Rigid Straight Side Frame

The CHIN FONG ST1 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 fully stress relieved and stands solid for challenging stamping applications.



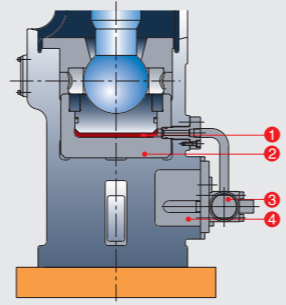
### Box Type 6-point Gibs

One-piece, full-length, box type gibs assure slide guiding precision. Force is delivered vertically, minimizing lateral thrust and, consequently, reducing off-center loading and friction in the gibs.



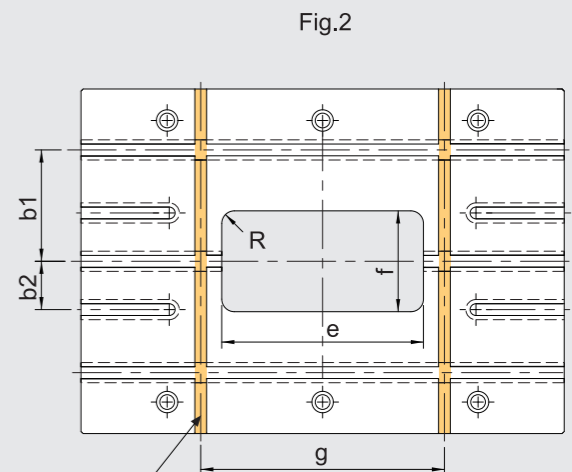
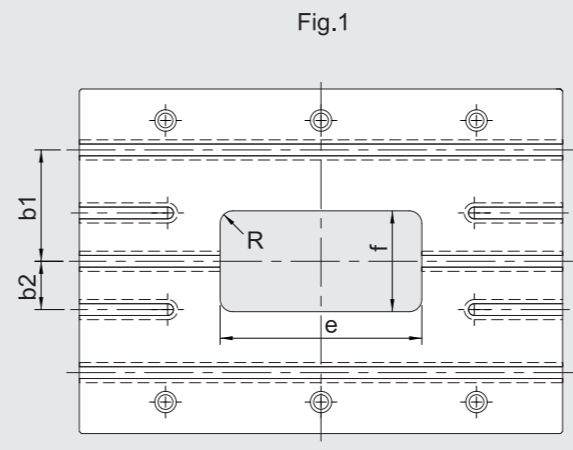
### Highly Responsive Hydraulic Overload Protector (H.O.L.P.)

1. Piston
2. Hydraulic Overload Protector Cylinder
3. H. O. L. P.
4. Oil Tank



Chin Fong's fast response H.O.L.P. will relieve the pressure of a tonnage overload in milliseconds, causing the press to stop simultaneously. Press and toolings can therefore be protected effectively. Hydraulic pressure of the system can be rebuilt by pushing the reset button. Then, normal operation can be resumed by inching the slide to T.D.C position.

### Bolster

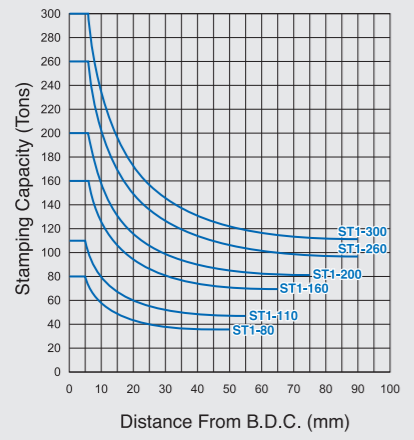


with "U" slot for die lifter

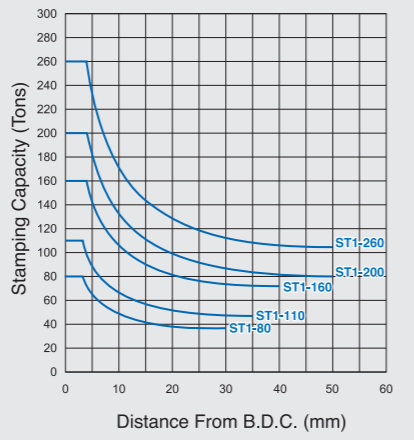
unit: mm

Model	ST1-80	ST1-110	ST1-160	ST1-200	ST1-260	ST1-300
Type of T-Slot	A	B	B	B	B	B
No. of T-Slot	3	3	3	5	5	5
b1	150	200	225	265	300	300
b2	-	-	-	115	150	150
exf	360x180	400x200	440x220	480x240	520x260	520x260
R	30	30	30	30	30	30
g	480	480	520	550	650	650

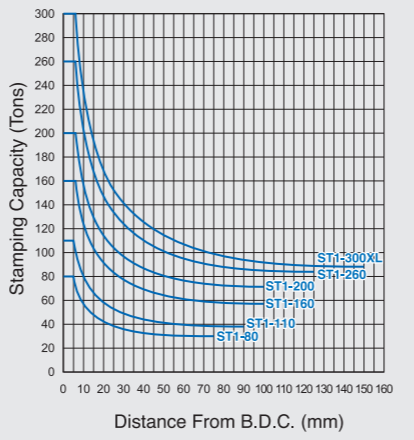
### Stroke-Capacity Curve (S)



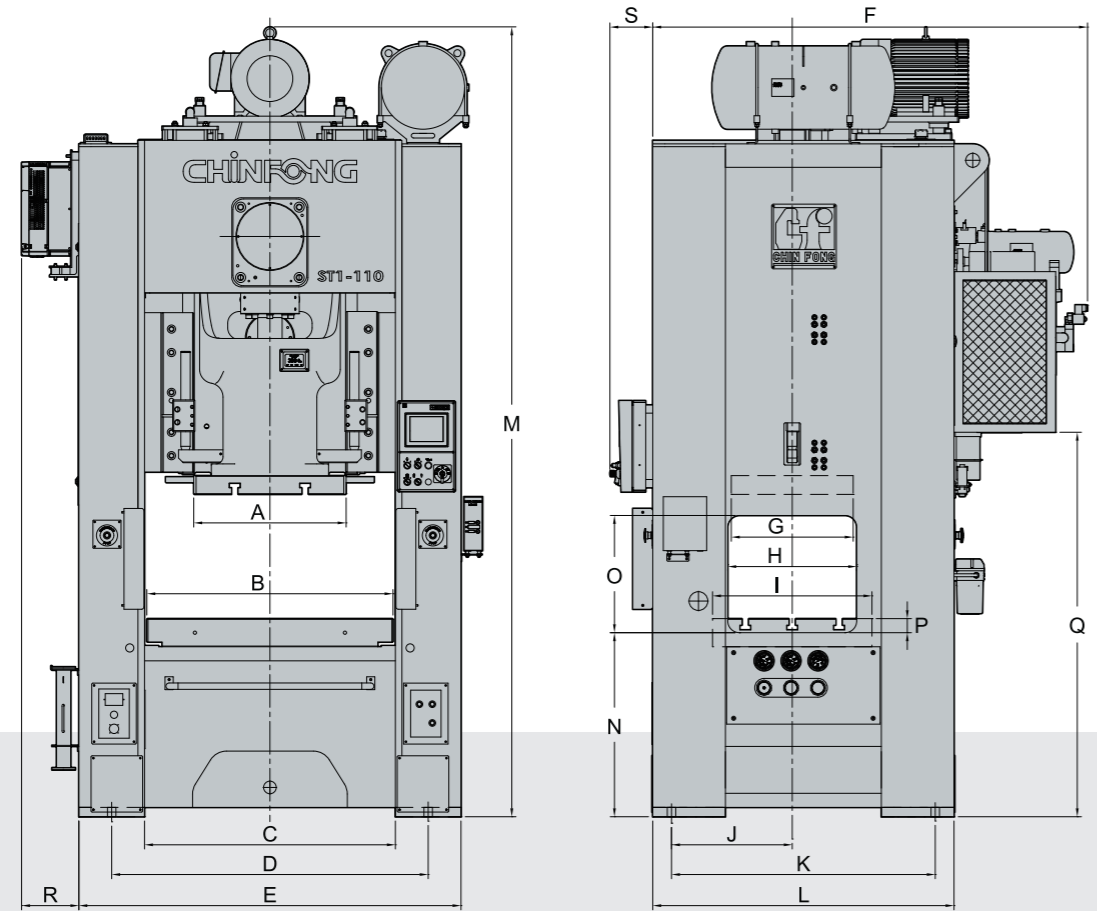
### Stroke-Capacity Curve (H)



### Stroke-Capacity Curve (L)



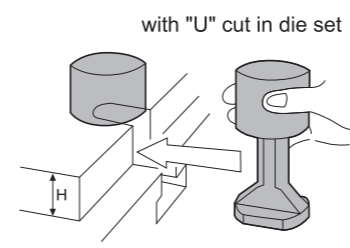
## Outline Dimensions



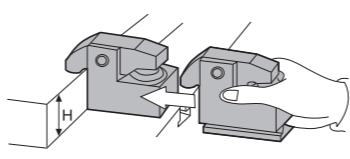
Model	ST1-80			ST1-110			ST1-160			ST1-200			ST1-260			ST1-300		
Type	S	H	L	S	H	L	S	H	L	S	H	L	S	H	L	S	H	L
A	560			650			700			850			920			920		
B	Type A	780	900	1000	1150	1300	1300											
	Type B	950	1050	1200	1300	1400	1400											
C	Type A	820	940	1050	1200	1350	1350											
	Type B	970	1070	1220	1320	1420	1420											
D	Type A	1100	1220	1410	1560	1710	1750											
	Type B	1250	1350	1580	1680	1780	1820											
E	Type A	1380	1500	1760	1910	2060	2150											
	Type B	1530	1630	1930	2030	2130	2220											
F	1730			1860			2160			2295			2490			2655		
G	460			520			580			650			700			700		
H	450			550			600			700			750			750		
I	600			680			760			820			840			840		
J	465			515			540			620			695			795		
K	985			1125			1305			1440			1635			1805		
L	1145			1285			1465			1600			1795			1965		
M	3090			3430			3820			4190			4630			5075		
N	770			785			855			960			1060			1080		
O	460			500			560			610			660			700		
P	60			60			60			60			60			60		
Q	1495			1640			1725			1930			2152			2420		
R	120			250			250			120			120			315		
S	190			190			190			190			190			190		

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

Die Clamp TX-type



Die Clamp TY-type



Die plate thickness, H, to be specified

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

Option	Qty	Model	ST1-80		ST1-110		ST1-160		ST1-200		ST1-260		ST1-300	
			S	H	L	S	H	L	S	H	L	S	H	L
Die Clamp	Upper	TX-4 or TY-4	Clamping Force 4 tons/pc		4	4								
		TX-6 or TY-6	Clamping Force 6 tons/pc				4	4	6	6				
Die Clamp	Lower	TX-4 or TY-4	Clamping Force 4 tons/pc		4	4	4							
		TX-6 or TY-6	Clamping Force 6 tons/pc					4	6	6				
Die Lifter	DL28-500	Pay Load 720 kg/pc												
	DL28-600	Pay Load 880 kg/pc		2	2									
	DL28-700	Pay Load 1040 kg/pc				2								
Die Lifter	DL28-800	Pay Load 1200 kg/pc					2	2	2					
	RC-700-600	Pay Load 600 kg/pc		2	2									
Die Arm	RC-800-800	Pay Load 800 kg/pc				2								
	RC-900-1600	Pay Load 1600 kg/pc						2	2	2				
Hydraulic Power Unit FP6308U			1											

### Standard Functions / Accessories

- Portable 2-hand Pushbutton T-stand
- Control System (PLC + HMI Operation Panel)
- Electronic Crank Angle Display
- Electronic SPM Display
- LCD Type Press Status Monitor
- Operation Mode Selection
- Hydraulic Overload Protector (H.O.L.P.)
- Overrun Detector
- Door Interlocking Power Isolation Switch
- Dual-coiled Solenoid Valve
- Motorized Slide Adjustment
- Main Motor Reversing Circuit
- Electronic Die Height Indicator (Unit:0.1mm)
- Motorized Grease Lubrication Device
- Total Counter, 6 Digits
- Preset Counter, 6 Digits
- Maintenance Counter, 4 Digits (Unit:10K)
- Life Counter 10 Digits
- Electronic Rotary Cam Switch (6 Spare Channel)
- Air Ejector, 3/8"
- Air Source Receptacle, 3/8"
- Misfeed Detection Receptacle
- Power Receptacle (Single Phase, 110V / 220V Power Source Wiring by User)
- Rear Safety Guard

### Optional Functions / Accessories

- Upper Slide Knockout Device
- Safety Block with Plug
- Dual-coiled Solenoid Valve with Detector
- Scrap Chopper Counter, 3 Digits
- Flywheel Brake
- Tonnage Monitor Safety Device (HMI Display)
- Automatic Adjust Electronic Die Height Indicator
- iForming Intelligent Monitoring System
- Quick Die Change System
- Anti-Vibration Press Mounts
- Die Area Light
- Foot Switch
- Fixed Type Operation Stand
- Remote Service