



# 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

# ST1

## Straight Side Single Crank Precision Presses

### iForming Intelligent Monitoring System

Data-Driven Decision

Agile Production

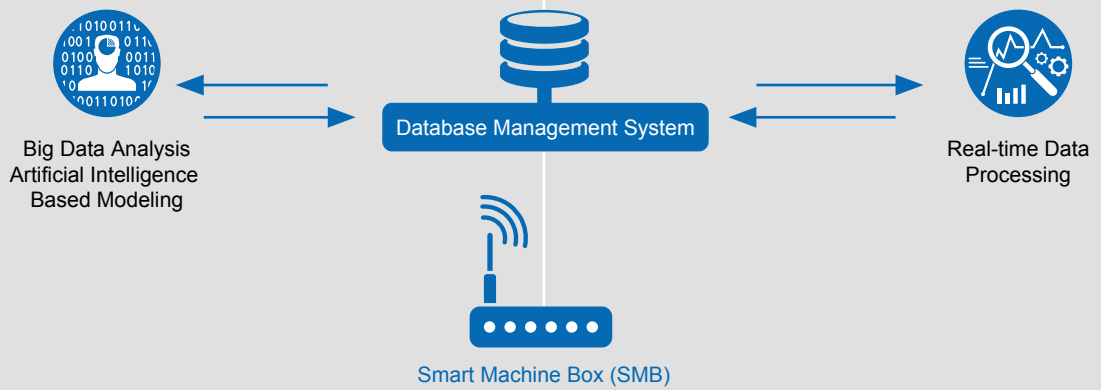
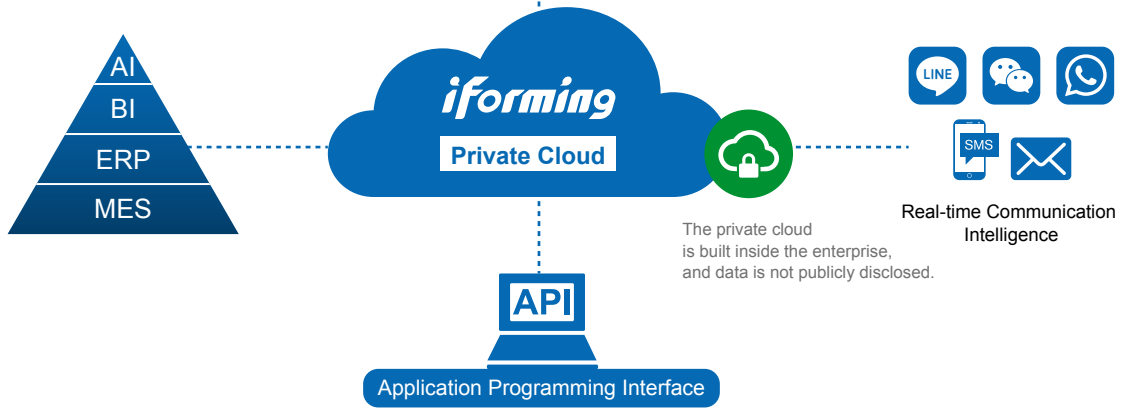
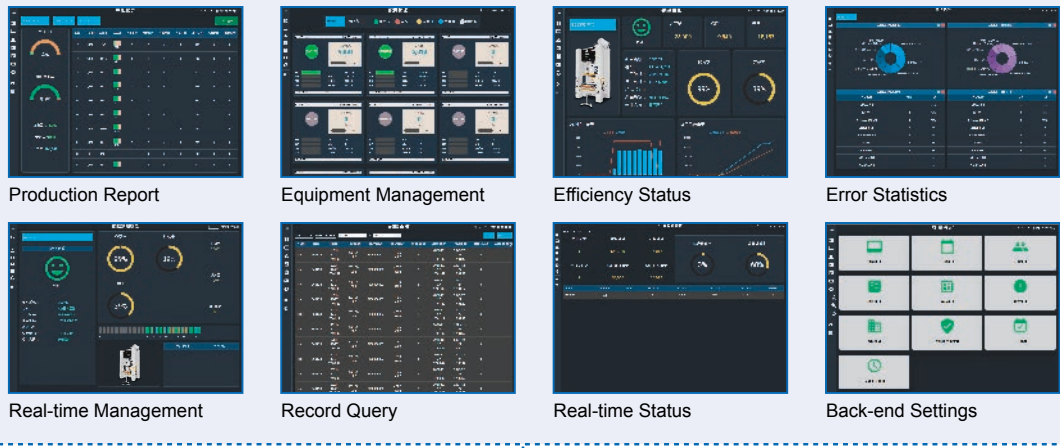
Real Time Management

Smart Networking

Application Layer

Network Layer

Physical / Sensing Layer





## Feature introduction

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

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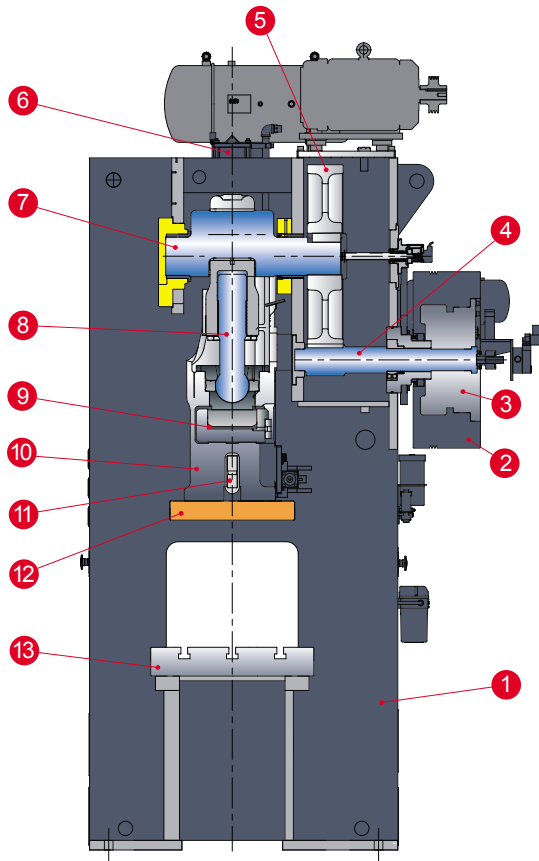
## Specification

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		590x460			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	

# ST1

Straight Side Single Crank Precision Presses

1. Press Frame
2. Flywheel
3. Wet Clutch & Brake
4. Pinion Drive Shaft
5. Main Gear
6. Counter Balancer
7. Crankshaft
8. Adjusting Screw
9. Hydraulic Overload Protector
10. Slide
11. Slide Knockout
12. Slide Plate (Detachable)
13. Bolster

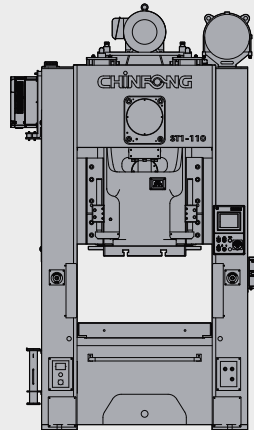


### High Driving Torque Wet Clutch & Brake

Superior Performance	Noise Reduction
Improved Efficiency	Dust-free Operation
Low Inertia	Prolong Lifespan
High Torque	Less Maintenance Cost

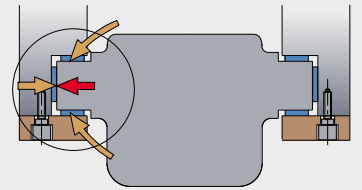
### Ultra Rigid Straight Side Frame

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.



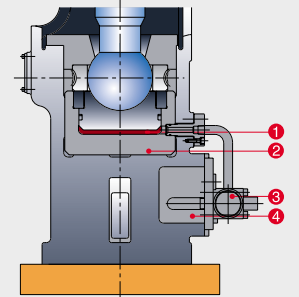
### Box Type 6-point Gibs

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.



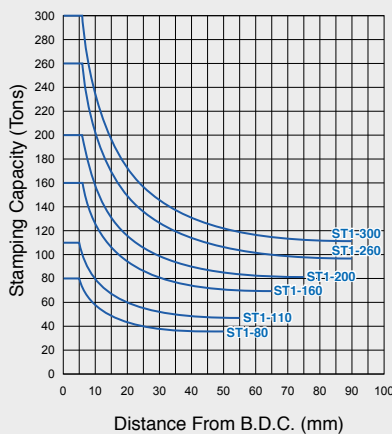
### Highly Responsive Hydraulic Overload Protector (H.O.L.P.)

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

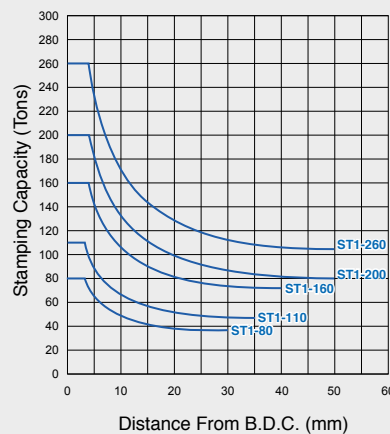


Chin Fong's fast response H.O.L.P. will relieve the pressure of a tonnage overload in milliseconds, causing the press to stop simultaneously. Press and toolings can therefore be protected effectively. Hydraulic pressure of the system can be rebuilt by pushing the reset button. Then, normal operation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

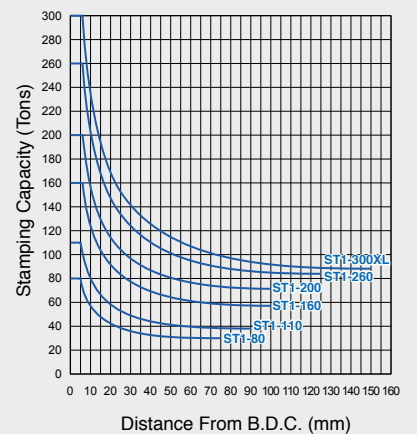
### Stroke-Capacity Curve (S)



### Stroke-Capacity Curve (H)

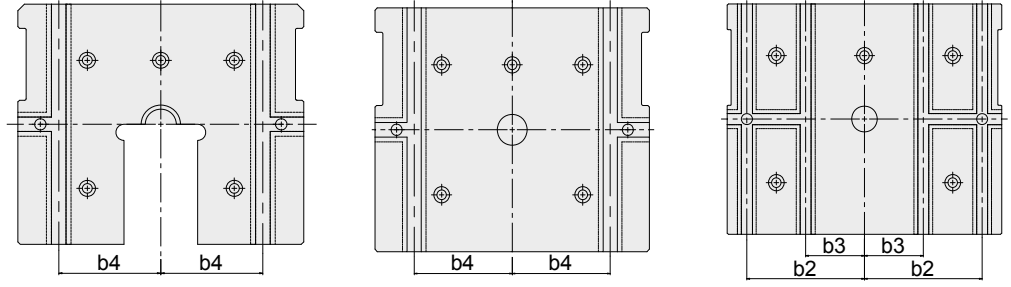
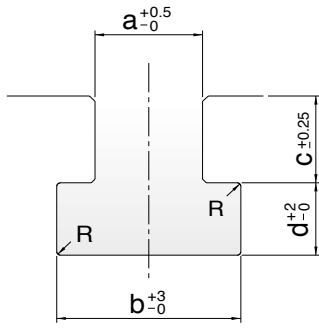


### Stroke-Capacity Curve (L)



## T-Slot Detail

## Slide Plate



unit: mm

unit: mm

Dim.	Type	unit: mm	
		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	-	-	-	-

## Bolster

Fig.1

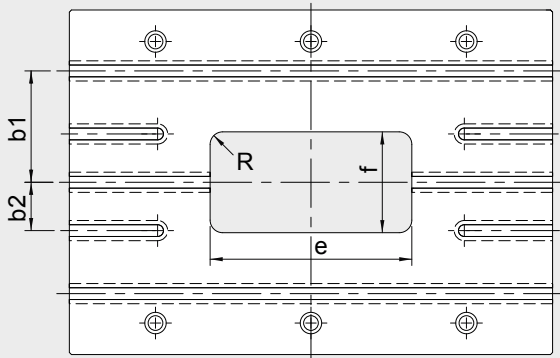
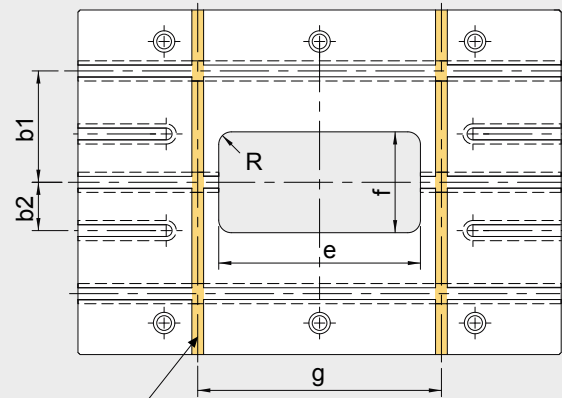


Fig.2



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	420	480	520	580	620	620



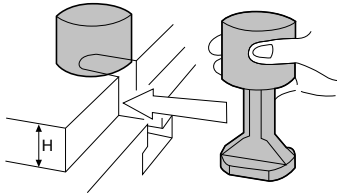


## Quick Die Change System ( Q. D. C. S. )

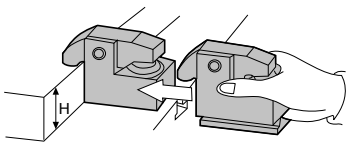
For reference only. Select the items below properly as needed.

### Die Clamp TX-type

with "U" cut in die set



### Die Clamp TY-type



Die plate thickness, H, to be specified

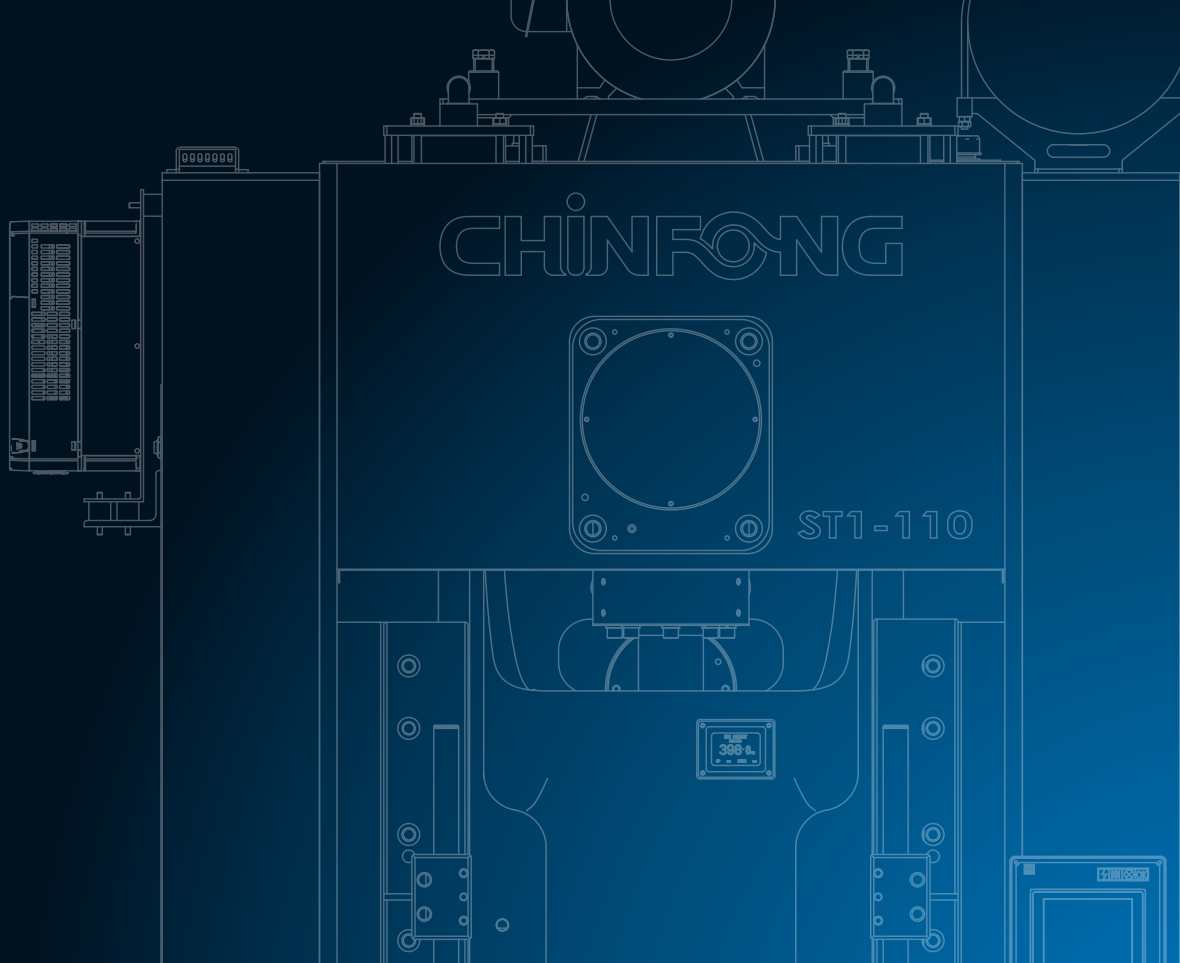
Option			Model	ST1-80		ST1-110		ST1-160		ST1-200		ST1-260		ST1-300	
				S	H	L	S	H	L	S	H	L	S	H	L
Die Clamp	Upper	TX-4 or TY-4	Clamping Force 4 tons/pc			4	4								
		TX-6 or TY-6	Clamping Force 6 tons/pc					4	4	6	6				
	Lower	TX-4 or TY-4	Clamping Force 4 tons/pc			4	4	4							
		TX-6 or TY-6	Clamping 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							
		DL28-800	Pay Load 1200 kg/pc						2	2	2				
Die Arm		RC-700-600	Pay Load 600 kg/pc			2	2								
		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
  - Off / Inching / Safety One Stroke / Continuous
- 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



## INNOVATION, SERVICE, COMMITMENT



Mechanical power press manufacturer

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