

STAMTEC®

METAL STAMPING & FORMING EQUIPMENT

ST1

**Straight Side Single Crank
Precision Presses**



80 . 110 . 160 . 200 . 260 . 300 tons



Introduction

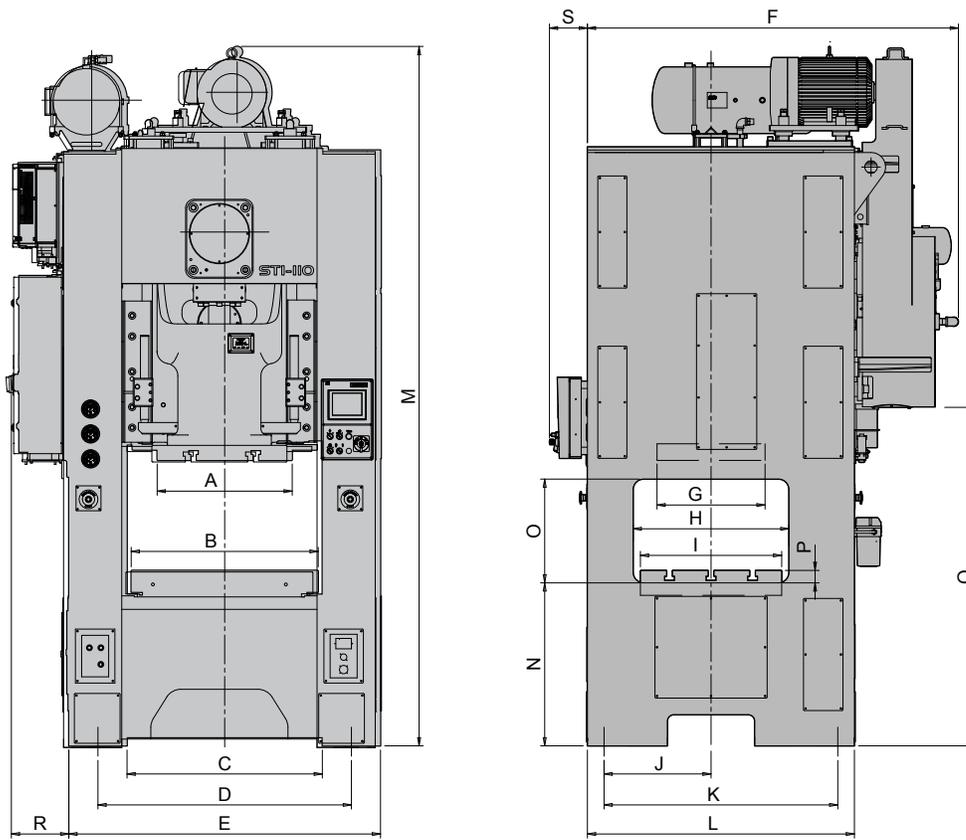
- High Precision Stamping Solution
- Reduced Noise & Vibration
- Reduced Angular Deflection
- Minimal Frame Deflection
- Resistant To Off-Center Loading
- Versatile Design for Various Applications
- High Torque Wet Clutch & Brake
- Box Type 6-point Gibs
- Ultra Rigid Steel Frame
- Minimum Total Clearance
- User-Friendly Operator Controls

Standard Features / Accessories

- Portable 2-Hand Pushbutton T-stand
- Operation Mode Selection (Off / Inch / Timed Inch / Single Stroke / Continuous)
- Hydraulic Overload Protector (H.O.L.P.)
- Overrun Detector
- Door Interlocking Power Isolation Switch
- Die Block Interlocked with Safety Circuit
- OmniLink 5100-MPC Press Control [see page 7]
- Flywheel Brake
- Dual-Coiled Solenoid Valve
- Motorized Slide Adjustment
- Main Motor Reversing Circuit
- Die Height Indicator (Unit: 0.1mm)
- Motorized Grease Lubrication
- Programmable Air Ejector, 3/8"
- Air Source Receptacle, 3/8"

Optional Features / Accessories

- Pneumatic Die Cushion
- Upper Slide Knockout Device
- Dual-Coiled Solenoid Valve with Detector
- Tonnage Monitor
- Light Curtains
- Quick Die Change System
- Anti-Vibration Press Mounts
- Die Area Light
- Press Mounted Operation Stand
- Press Controls available from Link, Wintriss, Mitsubishi, Allen-Bradley, Siemens, etc.



Outline Dimensions

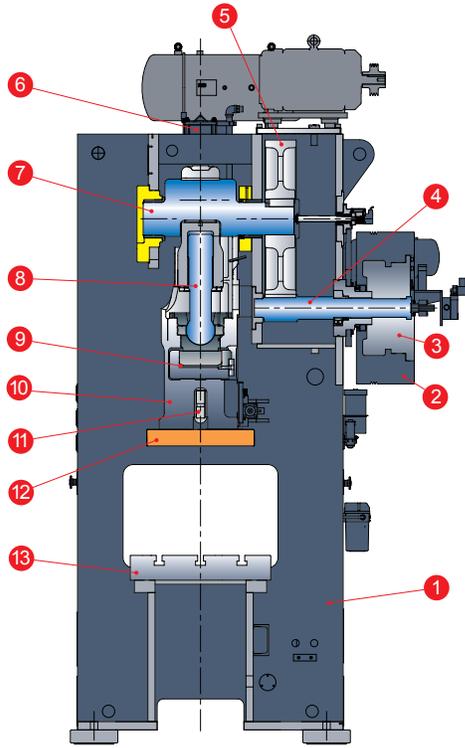
Model		ST1-80			ST1-110			ST1-160			ST1-200			ST1-260			ST1-300	
Type		S	H	L	S	H	L	S	H	L	S	H	L	S	H	L	S	XL
A	in. (mm)	22.05 (560)	25.59 (650)	27.56 (700)	33.47 (850)	36.22 (920)	36.22 (920)											
B	Type A in. (mm)	30.71 (780)	35.43 (900)	39.37 (1000)	45.28 (1150)	51.18 (1300)	51.18 (1300)											
	Type B in. (mm)	39.37 (1000)	45.28 (1150)	49.21 (1250)	55.12 (1400)	61.02 (1550)	61.02 (1550)											
C	Type A in. (mm)	32.28 (820)	37.01 (940)	41.34 (1050)	47.24 (1200)	53.15 (1350)	53.15 (1350)											
	Type B in. (mm)	40.16 (1020)	46.06 (1170)	50.00 (1270)	55.91 (1420)	61.81 (1570)	61.81 (1570)											
D	Type A in. (mm)	43.31 (1100)	48.03 (1220)	55.51 (1410)	61.42 (1560)	67.13 (1705)	67.13 (1705)											
	Type B in. (mm)	51.18 (1300)	57.09 (1450)	64.17 (1630)	70.08 (1780)	75.79 (1925)	75.79 (1925)											
E	Type A in. (mm)	54.33 (1380)	59.06 (1500)	69.29 (1760)	75.20 (1910)	81.10 (2060)	81.10 (2060)											
	Type B in. (mm)	62.21 (1580)	68.11 (1730)	77.95 (1980)	83.86 (2130)	89.76 (2280)	89.76 (2280)											
F	in. (mm)	70.09 (1780)	75.59 (1920)	82.68 (2100)	88.58 (2250)	96.46 (2450)	96.46 (2450)											
G	in. (mm)	18.11 (460)	20.47 (520)	22.84 (580)	25.59 (650)	27.56 (700)	27.56 (700)											
H	in. (mm)	25.59 (650)	29.53 (750)	31.50 (800)	35.43 (900)	37.40 (950)	37.40 (950)											
I	in. (mm)	23.62 (600)	26.77 (680)	29.92 (760)	32.28 (820)	33.07 (840)	33.07 (840)											
J	in. (mm)	17.72 (450)	20.28 (515)	21.26 (540)	24.41 (620)	27.36 (695)	27.36 (695)											
K	in. (mm)	38.78 (985)	44.29 (1125)	51.38 (1305)	56.69 (1440)	64.37 (1635)	64.37 (1635)											
L	in. (mm)	45.08 (1145)	50.59 (1285)	57.68 (1465)	62.99 (1600)	70.67 (1795)	70.67 (1795)											
M	in. (mm)	123.23 (3130)	134.65 (3420)	148.82 (3780)	165.35 (4200)	181.89 (4620)	181.89 (4620)											
N	in. (mm)	30.32 (770)	30.91 (785)	33.66 (855)	37.80 (960)	41.73 (1060)	41.73 (1060)											
O	in. (mm)	18.11 (460)	19.69 (500)	22.05 (560)	24.02 (610)	25.98 (660)	25.98 (660)											
P	in. (mm)	2.36 (60)	2.36 (60)	2.36 (60)	2.36 (60)	2.36 (60)	2.36 (60)											
Q	in. (mm)	57.09 (1450)	64.17 (1630)	67.72 (1720)	75.59 (1920)	84.25 (2140)	84.25 (2140)											
R	in. (mm)	11.02 (280)	11.02 (280)	11.02 (280)	11.02 (280)	11.02 (280)	11.02 (280)											
S	in. (mm)	7.48 (190)	7.48 (190)	7.48 (190)	7.48 (190)	7.48 (190)	7.48 (190)											

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	88.19			121.25			176.37			220.46			286.6			330.69		
Rated tonnage point (above B.D.C.)	in.	0.20	0.13	0.20	0.20	0.13	0.20	0.24	0.16	0.24	0.24	0.16	0.24	0.24	0.16	0.24	0.24	0.24	
Stroke length	in.	3.94	2.36	5.91	4.33	2.76	7.09	5.12	3.15	7.78	5.91	3.94	7.87	7.09	3.94	9.84	7.09	11.81	
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	30-70	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.)	in.	13.98	14.76	12.99	15.16	15.95	13.78	17.13	18.11	15.75	18.7	19.69	17.72	19.1	20.67	17.72	24.02	21.65	
Slide area (L.R. x F.B.)	in.	22.05 x 18.11			25.59 x 20.47			27.56 x 22.84			33.47 x 25.59			36.22 x 27.56			36.22 x 27.56		
Bolster area (L.R. x F.B.)	A type	in.	30.71 x 23.62			35.43 x 26.77			39.37 x 29.92			45.28 x 32.28			51.18 x 33.07			51.18 x 33.07	
	B type	in.	39.37 x 23.62			45.28 x 26.77			49.21 x 29.92			55.12 x 32.28			61.02 x 33.07			61.02 x 33.07	
Bolster thickness	in.	3.94			4.72			5.91			6.30			7.090			7.87		
Slide opening (L.R. x H)	in.	25.59 x 18.11			29.53 x 19.69			31.50 x 22.05			35.43 x 24.02			37.40 x 25.98			37.40 x 25.98		
Slide adjustment	in.	3.15			3.54			3.94			4.33			4.72			4.72		
Maximum upper die weight	lbs.	760.60			992.08			1190.5			1763.7			1763.7			1763.70		
Main motor	Hp x P	10 x 4			15 x 4			20 x 4			20 x 4			25 x 4			30 x 4		
Slide adjusting motor	kW x P	0.4 x 4			0.4 x 4			0.75 x 4			0.75 x 4			1.5 x 4			1.5 x 4		
Working height	in.	32.68			33.27			36.02			40.16			44.10			44.10		
Die Cushion		D3-300-70			D4-350-80			D5-400-80			D6-400-100			D7-550-100			D7-550-100		
Capacity	Ton	6.95			8.82			11.02			15.43			15.43			15.43		
Stroke	in.	2.76			3.15			3.15			3.94			3.94			3.94		
Pad area (L.R. x F.B.)	in.	16.14 x 10.24			19.69 x 11.81			21.26 x 13.78			25.20 x 18.50			27.56 x 20.47			27.56 x 20.47		

Metric 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	30-70	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	560 x 460			650 x 520			700 x 580			850 x 650			920 x 700			920 x 700		
Bolster area (L.R. x F.B.)	A type	mm	780 x 600			900 x 680			1000 x 760			1150 x 820			1300 x 840			1300 x 840	
	B type	mm	1000 x 600			1150 x 680			1250 x 760			1400 x 820			1550 x 840			1550 x 840	
Bolster thickness	mm	100			120			150			160			180			200		
Slide opening (L.R. x H)	mm	650 x 460			750 x 500			800 x 560			900 x 610			950 x 660			950 x 700		
Slide adjustment	mm	80			90			100			110			120			120		
Maximum upper die weight	kg	345			450			540			800			800			800		
Main motor	Hp x P	10 x 4			15 x 4			20 x 4			20 x 4			25 x 4			30 x 4		
Slide adjusting motor	kW x P	0.4 x 4			0.4 x 4			0.75 x 4			0.75 x 4			1.5 x 4			1.5 x 4		
Working height	mm	830			845			915			1020			1120			1120		
Die Cushion		D3-300-70			D4-350-80			D5-400-80			D6-400-100			D7-550-100			D7-550-100		
Capacity	Ton	6.3			8			10			14			14			14		
Stroke	mm	70			80			80			100			100			100		
Pad area (L.R. x F.B.)	mm	410 x 260			500 x 300			540 x 350			640 x 470			700 x 520			700 x 520		

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

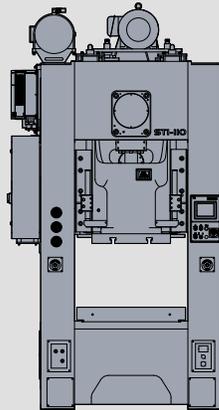


High Driving Torque Wet Clutch & Brake

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

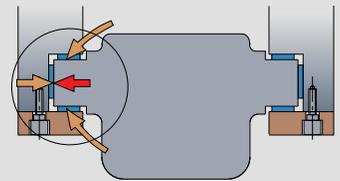
Ultra Rigid Steel Frame

The Stamtec ST1 Series is designed to resist deflection, and provide accurate stampings 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.



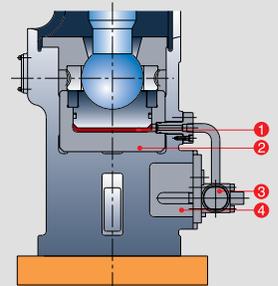
Box Type 6-point Gibs

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.



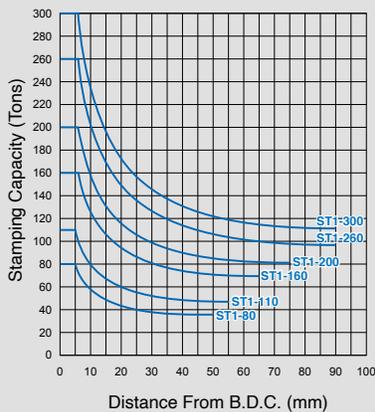
Highly Responsive Hydraulic Overload Protector (H.O.L.P.)

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

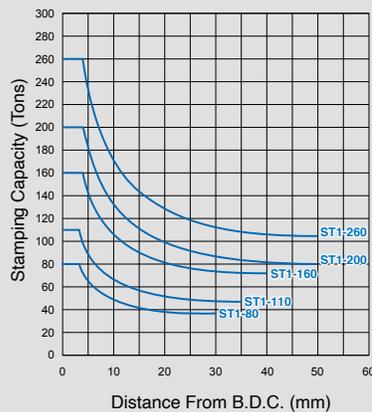


Stamtec's fast response H.O.L.P. will relieve the pressure of a tonnage overload in milliseconds, causing the press to stop immediately. Press and toolings can therefore be protected effectively. Hydraulic pressure of the system can be restored by pressing the reset button. Then, normal operation can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

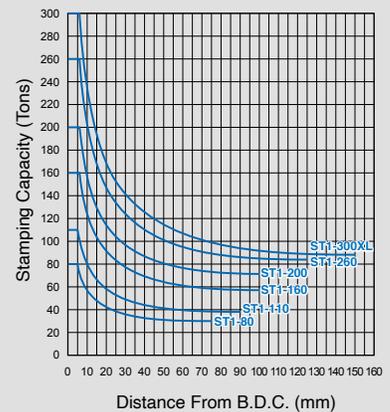
Tonnage Curve (S)



Tonnage Curve (H)



Tonnage Curve (L)



OmniLink 5100-MPC Press Controls [Standard Equipment]

Color touch screen displays all system information in English or Spanish and provides easy settings and selections for control configuration, PLS, die protection, counters, etc.

Job storage and recall to provide quick, consistent set-ups.

Four (4) Die Protection/Process Monitoring inputs located in the Operator Terminal. Nine monitoring modes are available for each die protection input.

Four (4), (eight optional) programmable limit switch outputs are available to sequence and time automation with the press.

56 control inputs and 8 sets of dual-tracking safety control inputs (many of which are configurable) for superb performance and diagnostics.

Outputs for clutch and brake, as well as optional output relays configurable for specific functions related to lube systems, motor controls, hydraulic overloads, flywheel brakes, automation, etc.

Screens to display the state of every input and output, lube system diagnostics, OIT diagnostics, configuration memory, and an event log with date, time and reason for the last 256 stops.

Stopping time performance (brake) monitor, motion detection, clutch engagement time monitor.

Stroking modes - Off, Inch, Automatic Timed Inch, Setup / Stop Time Test, Single Stroke (Cycle), and Continuous. (Optional modes - Automatic Single Stroke (Cycle), Maintained Continuous, and Continuous on Demand).

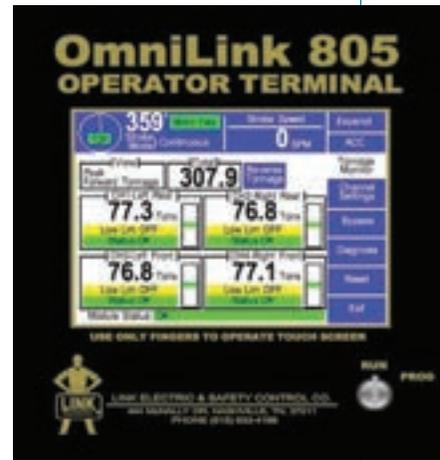
Automatic Top Stop Compensation for use with variable speed presses.

Four (4) nine-digit counters for stroke, parts, batch, and quality.

Superior safety with powerful diversely redundant cross-checked dual micro-processor logic systems.

Lasting value with rugged modular design and Link technical support.

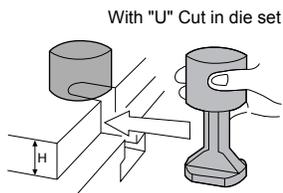
Stamtec presses can be CUSTOMIZED with your choice of press controls from:



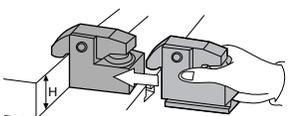
Quick Die Change System (Q. D. C. S.)

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

Die Clamp TX-type



Die Clamp TY-type



Die plate thickness, H, to be specified

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	S
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	4	4					
	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	4	4					
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											



NORTH AMERICAN HEADQUARTERS
Manchester, TN | www.stamtec.com



As one of the largest press builders in the world, Stamtec has been providing dependable, high-performance metal stamping presses for more than 40 years in North America and 70 years worldwide. We also provide fully integrated press production systems including servo coil-feeding lines, transfer systems, quick die change systems, etc. Our 72,000 sq. ft. sales, service, logistics, and assembly facility in Tennessee is home not only to North America's largest inventory of new presses and spare parts, but also our most important asset - our people. Our staff of engineering, sales, service, and support personnel are here to serve you in the most timely and professional manner. Please contact us any time for a free professional consultation about your press production needs. We'd welcome the opportunity to help you!



Gap Frame Presses



Straight Side Presses



Servo Presses



Forging Presses



Coil Feeding & Handling Systems

STAMTEC®

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