

Straight Side Mechanical Presses

S2



165 . 220 . 330 . 440 . 660 . 880 - 3300 tons

S2 SERIES

Straight Side Mechanical Presses

Durable

Reliable

Versatile



STRAIGHT SIDE MECHANICAL PRESSES

Tough, durable Stamtec straight side presses deliver high performance for diversified stamping requirements in hand-fed, progressive and transfer die operations. Built to your exact specifications, or available in several standard models from 150 tons and up, Stamtec presses can also be integrated with automation to achieve the efficiency and productivity required to compete in today's demanding manufacturing environment.

Let Stamtec's experienced team help you make a wise decision in choosing the right stamping equipment for your operation!



STANDARD Features

- **Eddy-current or Variable Frequency Drive:** either type is available per customer preference.
- **Hydraulic Overload Protection:** unique dual-valve system protects both sides of the press from overload conditions.
- **Wet or Air Clutch and Brake:** either separated or combination type based on the specific application and press construction.
- **Micro-processor-based press control system:** user-friendly functionality, and compliance with global or local requirements for safety and operability.

OPTIONAL Features

- **Customized press and automation / monitoring controls:** using well-known brands such as Mitsubishi, Siemens, Allen Bradley, Wintriss, Link, etc.
- **Custom Specifications:** (e.g. bed size, stroke length, die height, etc.)
- **Link Motion:** Helps produce better-formed parts at higher production rates.
- **Hydraulic Clutch:** based on application requirements and customer preference.
- **Quick Die Change Systems:** Hydraulic die clamps, lifters, rollers, and bolster extensions.
- **Rolling Bolsters:** Assist handling, loading, and transporting of large or difficult to handle dies
- **Die Cushions:** Based on customer requirements.

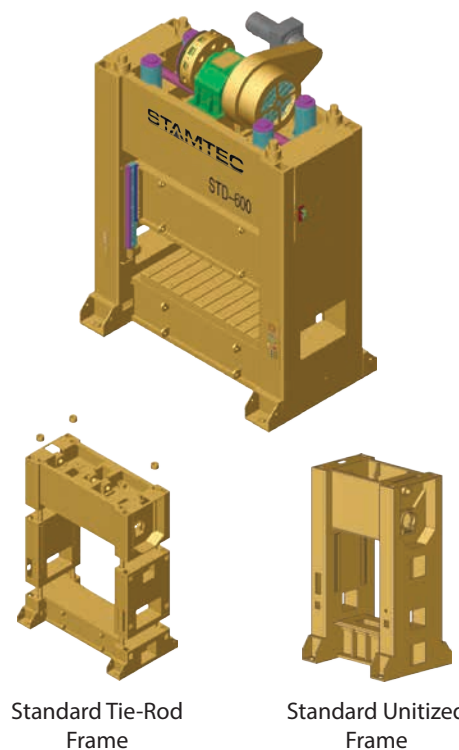
S2 SERIES SPECIFICATIONS

		S2-165	S2-220	S2-330	S2-440	S2-660	S2-880 — S2-3300
Capacity	US Tons	165	220	330	440	660	Quoted Upon Request
	Metric Tons	149	200	300	400	600	
Speed	SPM	60 ~ 120	50 ~ 120	30 ~ 60	25 ~ 50	25 ~ 45	
Rated Tonnage Point ABDC	Inch	0.236	0.236	0.275	0.275	0.51	
	mm	6	6	7	7	13	
Stroke Length	Inch	5.91	6.30	10.04	12	13.98	
	mm	150	160	255	305	355	
Die Height, Bolster to Slide (SDAU)	Inch	15.75	19.70	26	30	33.98	
	mm	400	500	660	762	863	
Slide Adjustment	Inch	5.91	6.3	8.27	9.84	10	
	mm	150	160	210	250	254	
Slide Area (L - R x F - B)	Inch	60 x 42	72 x 48	96 x 50	120 x 55	144 x 55.11	
	mm	1524 x 1066	1828 x 1219	2440 x 1270	3084 x 1397	3660 x 1400	
Bolster Area (L - R x F - B)	Inch	60 x 42	72 x 48	96 x 50	120 x 55	144 x 55.11	
	mm	1524 x 1066	1828 x 1219	2440 x 1270	3048 x 1397	3660 x 1400	
Bolster Thickness	Inch	5.91	6.3	7.09	7.87	7.87	
	mm	150	160	180	200	200	
Working Height (Floor to top of Bolster)	Inch	37	39.37	39.37	37.4	39.37	
	mm	939	1000	1000	950	1000	
Opening in Side Frames (F - B x H)	Inch	25 x 17.70	31.50 x 19.70	39.37 x 27.56	47.24 x 31.50	50 x 31.50	
	mm	635 x 450	800 x 500	1000 x 700	1200 x 800	1270 x 800	

S2 SERIES

RIGID, BOX SECTION, ALL-STEEL FRAMES:

Stamtec rugged press frames are rigid, box type fabricated steel structures put through rigorous FEA (Finite Element Analysis) prior to manufacturing, and are designed for exceptional strength to properly resist deflection, torsion and vibration. This rigidity assures continued alignment of components even under heavy load, provides greater stamping accuracy, and helps extend die life. When required or specified, tie rod construction is employed to permit disassembly and reassembly. In smaller presses the frame components are welded together instead of tie-rod constructed, to form a single-piece unitized frame. Large window openings are provided to permit coil or transfer feeding across most or all of front to back dimension of the bed. The massive bed is built to a standard of no more than .0015" deflection per foot of bed length left to right and front to back, with a full-capacity load symmetrically distributed over 2/3 of the bed area. By providing superior compressive strength, and maximum resistance to deflection, torsion, and vibration, the Stamtec's press frame helps you produce precision stampings with minimum die wear.

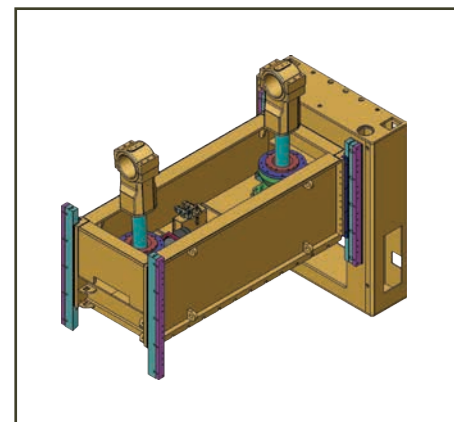


BOX-TYPE SLIDE:

The Stamtec slide is a rigid, box type structure, fully thermal stress relieved, and built to a standard of no more than .0015" deflection per foot with the load symmetrically distributed over 2/3 of the slide area. The slide is guided by exceptionally long eight point gibbing for maximum control and accuracy. The adjustable gib-liners are of a nickel bronze alloy, ground for smooth finish and accurate fit. The ways are finished ground or machined for precision alignment to insure greater parts accuracy and longer die life. The slide is counterbalanced by one or two air cylinders, as required by the slide size. These are adjustable, air pressure cylinders, and can be set to properly compensate for the weight of the upper die. Stamtec's slide design an construction provides maximum strength to resist deflection and torsion.

EIGHT POINT FOUR WAY GIBS:

Stamtec's precise 8-point gibbing provides for accurate guiding of the slide throughout the stroke. Extra long gibs keep the slide fully contained at all points of stroke and slide adjustment. This feature, in conjunction with the rigid box type slide, results in maintenance of parallelism to the bed. Simple gib adjustment mechanisms allow for quick and easy alignment and setting of clearances.

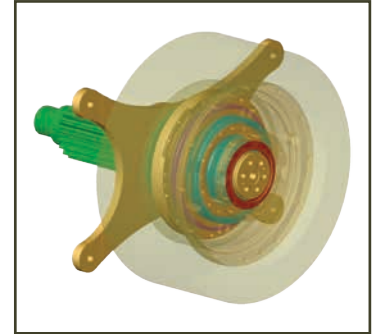


CLUTCH AND BRAKE:

Many clutch and brake options are available, and are selected based on the application and budget:

- independent air friction clutch and brake
- combination air friction clutch and brake
- hydraulic clutch and brake
- wet clutch and brake

All units are designed to operate in a fail-safe mode. Should either electric or air supply fail, the clutch will disengage and the brake will engage.

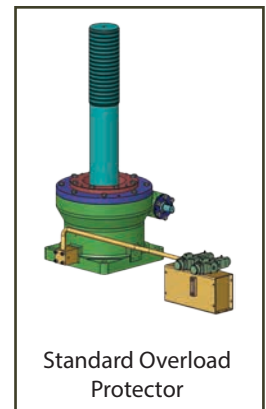


MAIN MOTOR DRIVES:

Stamtec straight side presses are equipped with a compact eddy current variable speed drive or A/C variable frequency drive to permit adjusting the press speed infinitely within its range for optimum tuning of the die, material, feed length, automation, and parts removal.

HYDRAULIC OVERLOAD SYSTEM:

Highly responsive with an immediate oil dump feature and a unique dual-valve pressure switch arrangement, Stamtec fast-acting H.O.L.P. relieves the pressure of a tonnage overload in milliseconds, and helps protect both press and tooling. If an overload occurs, even on just one side of the press, oil pressure in the cylinder is released and simultaneously, the press stops. This reliable system can be quickly and easily reset by inching the slide back to top dead center, which automatically reactivates the pump, builds up the hydraulic pressure to the pre-overload setting, and resets the press control to allow resumption of normal operation.



RECIRCULATING OIL LUBRICATION SYSTEM:

All anti-friction bearings, sleeve bushings and gibs are lubricated by a sequencing self-monitoring re-circulating oil lubrication system which is interlocked with the press emergency stop circuit. Low oil level, loss of oil flow or pressure, or excessive oil flow or pressure at any of the monitoring points, causes the press to stop, and a fault message is recorded and displayed on the operator interface for easy troubleshooting. Drive train lubrication is provided by an oil bath and spray system.

ROBUST DRIVE TRAIN SYSTEMS

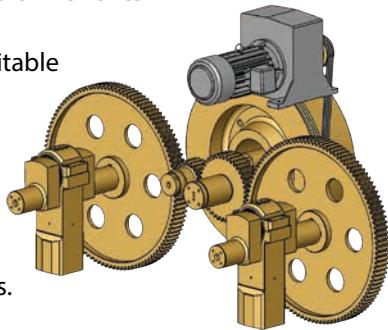
The gears on Stamtec presses are hardened and precision ground for quiet, vibration-free performance and long life. Pinions are typically machined to alloy shaft forgings to eliminate the keyed joint which requires a larger than otherwise necessary shaft diameter. Crankshafts are machined and precision ground from high carbon steel forgings, and normalized to eliminate harmful stress concentrations. Main and crankshaft bearing surfaces are manufactured from alloys chosen based on the specific application. Flywheel, driveshaft and intermediate shafts run in anti friction or spherical roller bearings. All materials are selected to provide superior strength, performance, and wear resistance characteristics.

DRIVE ARRANGEMENTS TO MEET DIVERSIFIED STAMPING NEEDS

Stamtec presses employ a variety of drive arrangements depending on application requirements including type of work (blanking, drawing, forming), type and size of dies, parts material specifications, production volumes required, etc.

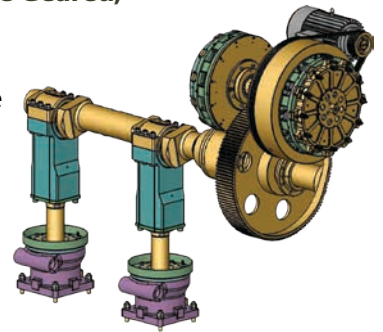
Single-Geared, Opposed, Counter-Rotating, Crankshafts

This arrangement is suitable for smaller tonnage presses with slide areas that are relatively long L-R vs. F-B, and capacities typically not exceeding 500 tons.



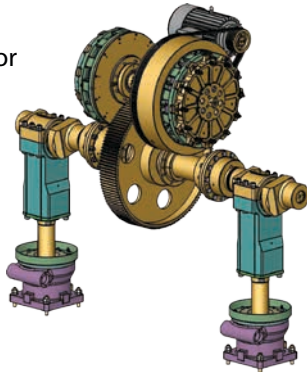
Single-Geared or Double Geared, Single-End Drive

This arrangement is suitable for blanking, forming and medium depth drawing on presses with relatively small L-R dimensions of slide, typically lower than 300 tons capacity.



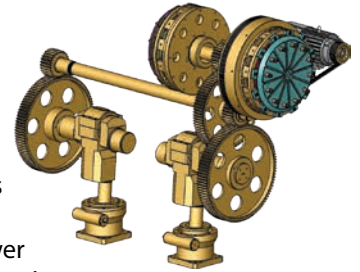
Single-Geared or Doubled-Geared, Center Drive

This arrangement is suitable for heavy blanking, forming and medium depth drawing at higher speeds on presses with larger L to R dimensions of slide. Press tonnage would usually be from 200 tons up to 600 tons.



Single-Geared or Double Geared, Twin-End Drive

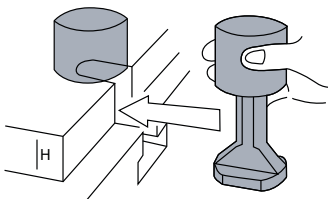
This arrangement may be necessary for heavier duty stamping on presses when larger L to R dimension of slide, longer strokes, and higher tonnage rating points are required. These types of drive systems run at the slower speeds often required for complex forming and drawing operations. Press capacity can be up to 3000 tons.



QUICK DIE CHANGE SYSTEM (Q.D.C.)

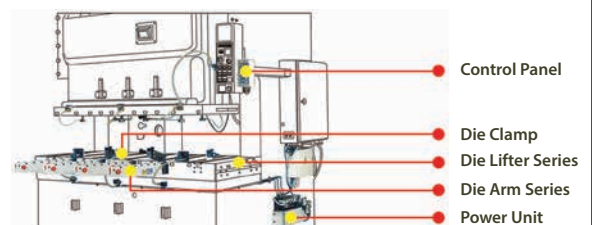
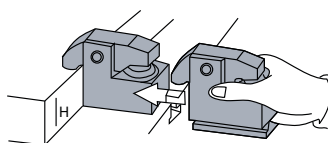
Die Clamp TX-type

With "U" Cut in die set



Die Clamp TY-type

Die plate thickness, H, to be specified



Press Controls

OmniLink 5100-APC (standard equipment)

Model 806, 10.4" 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.

1000 Job storage and recall to provide quick, consistent set-ups.

Eight (8) Die Protection/Process Monitoring inputs (up to 80 available optionally) located in the Operator Terminal. Nine monitoring modes are available for each die protection input.

Eight (8), programmable limit switch outputs (up to 96 available optionally) 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 with 56 additional inputs available.

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.

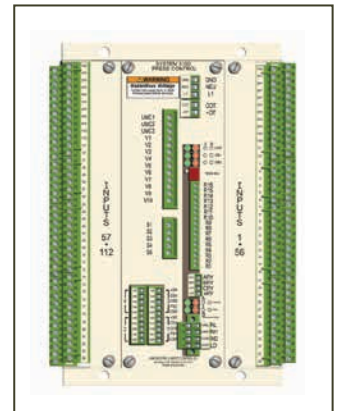
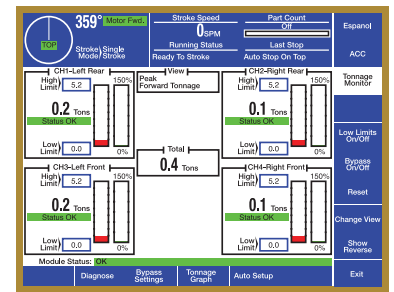
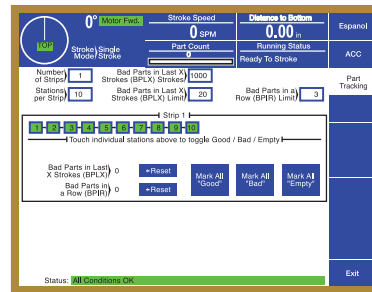
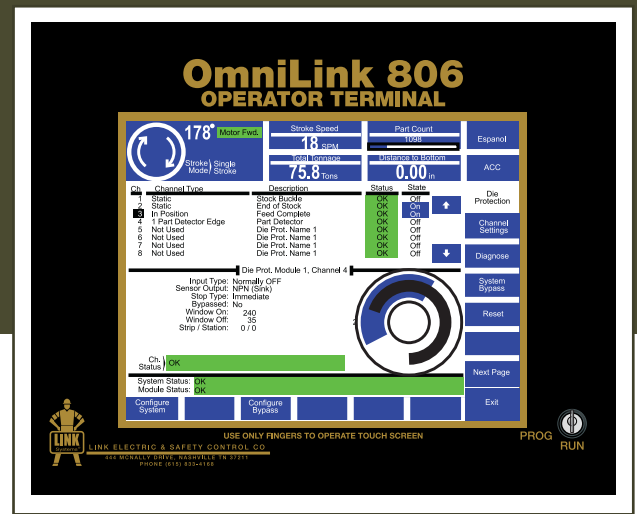
Stroking Modes- Off, Inch, Automatic Timed Inch, Setup/StopTime Test, Single Stroke (Cycle), and Continuous. (Optional modes- ,Automatic Single Stroke (Cycle), Maintained Continuous, and Continuous on Demand) (ALL STANDARD).

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.



OPTIONAL Press Controls

from manufacturers including:

WINTRISS®

SIEMENS

MITSUBISHI
ELECTRIC



Rockwell
Automation

Allen-Bradley



STAMTEC®

METAL STAMPING & FORMING EQUIPMENT

Stamtec has been providing dependable, affordably priced metal stamping presses for almost 30 years in the North American market, and 60 years worldwide through our parent company Chin Fong. 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. So, tap into our global strength, and grow with us as we grow with you!



GAP FRAME PRESSES

1-POINT AND 2-POINT



STRAIGHT SIDE PRESSES

1-POINT, 2-POINT AND 4-POINT



SERVO PRESSES

1-POINT AND 2-POINT
GAP AND STRAIGHT SIDE



FORGING PRESSES

WARM / HOT AND COLD



COIL FEEDING & HANDLING SYSTEMS

STAMTEC®

METAL STAMPING & FORMING EQUIPMENT

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