

PLASTIC ASSEMBLY MACHINERY & TOOLING



TX120 SERVO VIBRATION WELDER

SPEC SHEET

- Proven electro-mechanical drive head
- 5 kW Servo-driven, ball-screw actuated lift table capable of 5000 lb of force and +/- 0.001" accuracy
- Servo-actuated lift table with closed-loop internal encoder mounted to high precision linear bearings
- Intuitively programmed, user-friendly HMI touch screen interface with help screens for most functions
- Programmable upper and lower limits for weld time(s) and/or final collapse distance
- Welded steel frame construction tuned for maximum isolation of vibration

- Dual weld time and pressure settings for mid-cycle modification of weld parameters
- Auto table and upper tool weight sensing with auto tune for finding resonant frequency
- Auto contact point set with deceleration prior to part contact
- Multiple job storage with additional job storage download and upload capability via USB
- Standard programmable upper tool vacuum and part sensing I/O, expandable for additional signaling
- 200 Hz to 240 Hz operation with peak to peak amplitude up to 0.070"



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Vibration welding produces a side-to-side scrubbing motion of low frequency energy, but it's the high amplitude that creates frictional heat at the interface of the parts.

Vibration welders are capable of very high pressures and have the ability to join very large components without the use of conventional adhesives or mechanical fasteners.

SYSTEM OVERVIEW

ToolTex Vibration Welder features ultra-heavy construction. The Servo-driven ball-screw actuated lift table is both rugged and precise with a capacity of 5000 lb of force and +/- 0.001" accuracy. Its welded steel frame construction is tuned for maximum isolation of vibration. This welder is ideal for welding engineered resins including elastomers and high fill content materials requiring hermetic seal.

It's no coincidence the Injection Molding industry is switching from hydraulic presses to clean, quiet, precise, durable, and cost efficient servo-actuated presses. Early adopters in that industry clearly outpaced the competition by being able to produce complex parts more efficiently. ToolTex's Model TX120, Servo-Actuated Vibration Welding system allows you the same opportunity to simply make better plastic products — at less cost.

HIGHLIGHTS

- · Quiet operation
- · Sliding access door with optional viewing window
- Recessed light curtain guarding at operator interface with one-touch cycle start and emergency stop
- · Alarm history screen with programmable password protection
- Compact and robust design
- Large, safety interlocked rear access door
- No hydraulics for cleaner, quieter energy efficient operation
- Internal LED work light with unmistakable red light indicating faults or limit violation

CAPACITY

• 120 lb upper tool weight with capability for multipart welding

OPTIONS

• Ethernet capable

Need help with vibration welding applications?

Contact us for more information.





