



**'Vortex' G-Series**  
Servo Spin Welder



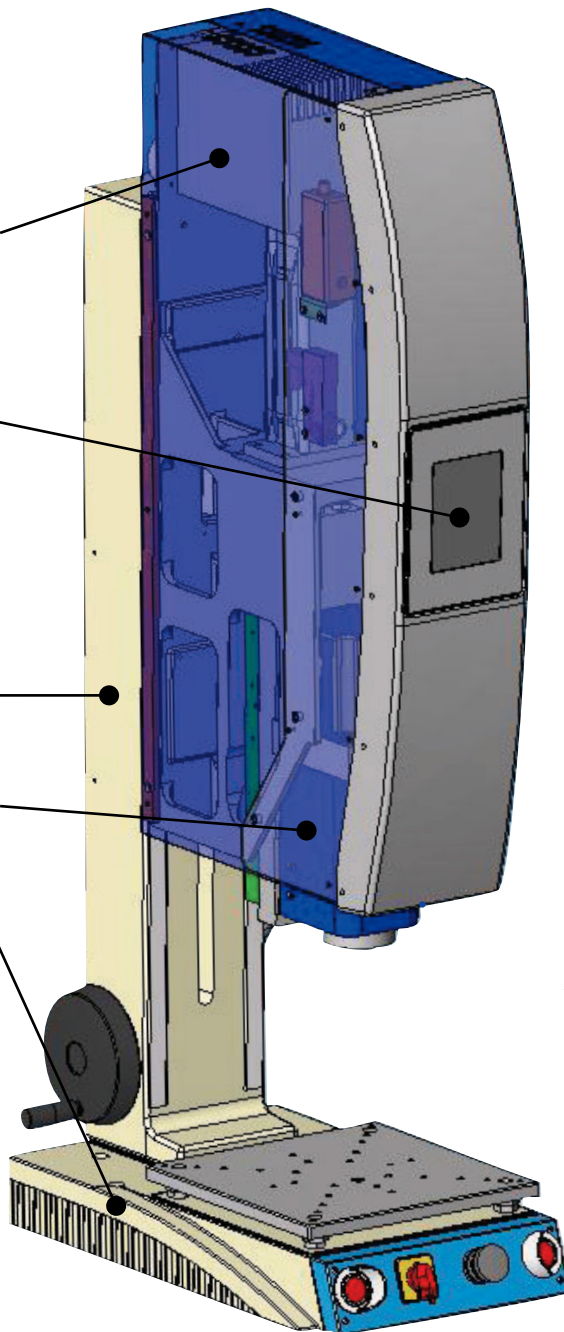
IDEAS - ACTIONS - RESULTS

# 'Vortex' G-Series Servo Spin Welder



## Technical Description:

- Fully integrated power supply, controls, and operator interface
- Pneumatic actuated press with 4" (100mm) stroke
- Proportional pressure control for precise force adjustments
- 5.7" (145mm) color touch-screen HMI with intuitive graphical screen format with password protection
- Linear Voltage Displacement Transducer (LVDT) provides weld-by-depth control
- Standard on-board data logging for the previous 50 cycles
  - True process monitoring with high/low alarm limits for final angle, collapse travel, total travel and weld time
- Rigid square column with 17" (430mm) height adjustment
- Storage for (16) tool recipes
- Servo controlled spin axis motor: 2Hp (1.5kW) programmable speed - 5000RPM maximum
- Heavy-duty cast machine base with integrated start buttons
- Reset-able and lifetime cycle counters
- Manual mode provides complete pneumatic and servo control to dramatically simplify the set-up process
- Easy automation integration
- Four weld modes available (Dynamic or Static Triggering):
  - **Orientation mode:** which controls final part position within +/- 1.0 degree
  - **Distance modes:**
    - *Collapse travel*, controls weld joint displacement
    - *Total travel*, controls the final part height
  - **Time mode:** which controls weld duration



- Two operation modes:
  - 'Standard' mode, operator loads the components into the upper and lower tooling
  - 'Part Pickup' mode, operator loads all components into the lower nesting
- Utility requirements
  - Electrical supply: 200-240VAC, 3 phase, 50/60 Hz, 10 Amp
  - Compressed air supply: 80psi clean, dry, non-lubricated air

## Options:

- 'Stage II' Ethernet data collection package
- Upper tool vacuum or air pressure for part retention
- Vortex models G3 and G5 provide gear-reduction high-torque capability for large part/surface area applications
- Part presence sensing
- Adjustable height 'ErgoStation' powered work surface
- Extol Rotary Indexer system integration

## Machine Dimensions:

- Width 14" (355 mm)
- Depth 23" (585 mm)
- Maximum height 61.5" (1560 mm)
- Maximum work window (no tooling) 19.5" (495 mm)
- Weight 425 lbs. (195 kg)

## Warranty:

The Extol Vortex G-Series Spin-Welders are warranted to be free from defects in materials and workmanship for 2-years.



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