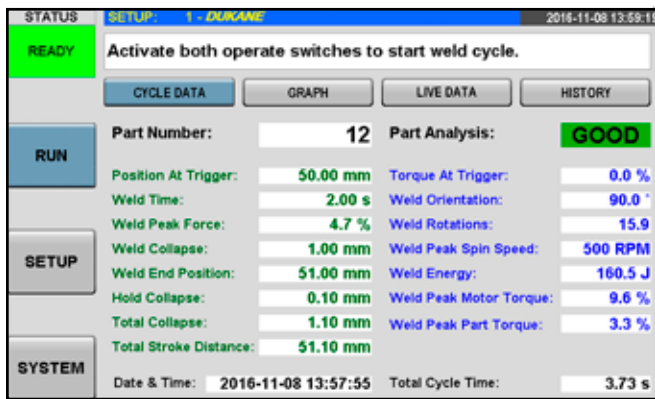


ServoWeld™ Plus Spin Welder SSW800, SSW3000, SSW4000



HMI touch screen with intuitive menu controls

ServoWeld™ Plus Spin Welder is an all-electric press system utilizing two servo motors to provide precise control and accuracy for welding assemblies with circular weld joints. By utilizing state of the art servo controls, this equipment provides unmatched angular orientation and overall assembly height consistency. It features a technologically advanced, touch-enabled HMI with an intuitive menu structure to control and monitor the welding process.



Features of ServoWeld™ Plus:

- **Melt-Match®** mode can be enabled during the weld phase, in which the motion of the vertical axis is coordinated with that of the spin axis to match the rate of melt of the material being welded.
- Servo spin axis with angular resolution of 0.1 degree and servo vertical actuator (Z axis) with positioning resolution of .0004 in. (0.01mm).
- Weld initiation methods include spin torque, vertical position and an external signal.
- Weld methods include collapse distance, position (absolute distance), energy, and peak spin torque (all weld methods can be used with or without spin orientation).
- Post-weld methods include dynamic hold, static hold or a combination of both.
- Built-in capability to support the following features eliminates the need for an external PLC or HMI when configured as semi-automated work cells:
 - Fixture clamps
 - Part presence sensors
 - Remote operation with setup switching
 - Light curtains



Graphical representation of weld process

Advanced HMI Features:

- An integral 175 mm, high-resolution color touch screen user interface with an intuitive menu structure.
- Onboard storage of up to 64 setup recipes.
- Onboard storage of weld cycle data and graphs.
- Programmable upper and lower limits for advanced process control.
- Password protected interface for setup safety.

ServoWeld™ Plus Spin Welder

Advanced HMI Features: (continued)

- Menus available in multiple languages.
- Import and export of setups and data via USB port.
- Cycle data output to external devices using OPC UA, Modbus TCP, or FTP standard (RS-232 optional).

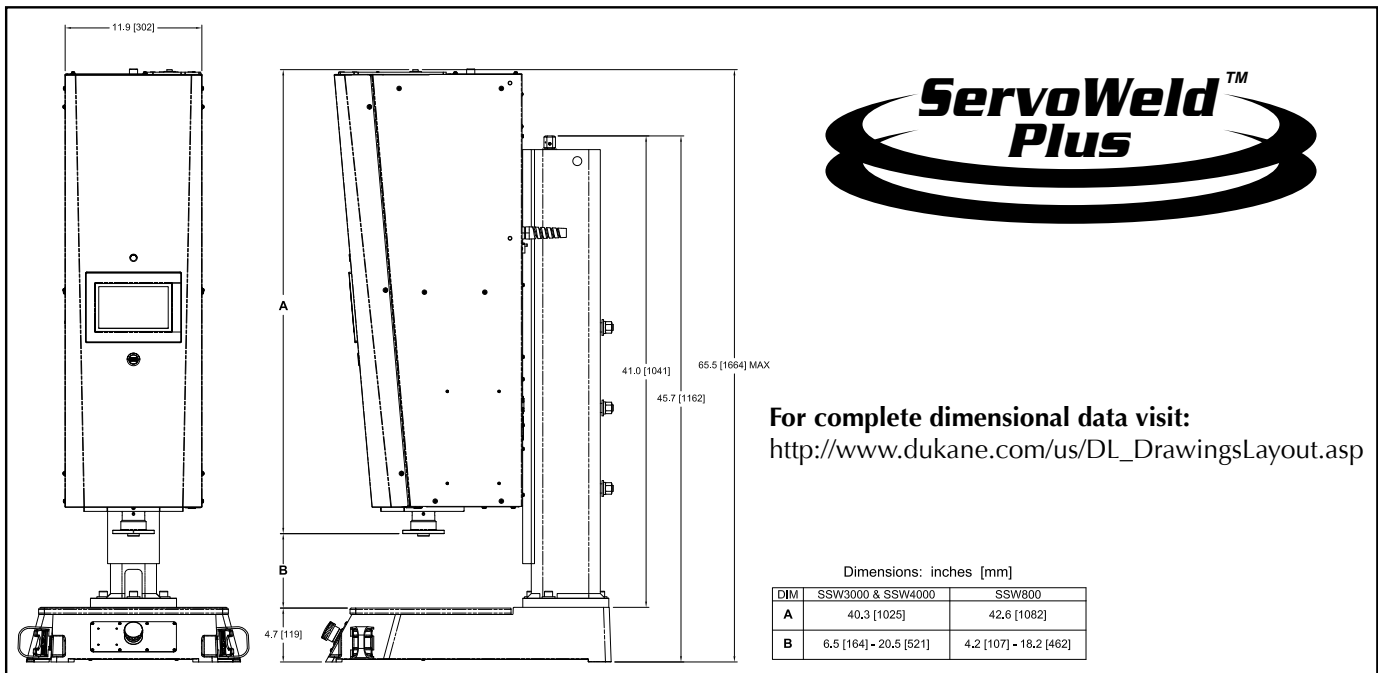
Mechanical Features:

- Extra-rigid, steel rectangular tube column with negligible deflection.
- 5.0 inch (127 mm) stroke for great versatility.
- 8.5 inch (215 mm) throat depth.
- Programmable Top of Stroke position to reduce vertical stroke and cycle time.

- Automation connectors for interfacing with custom machinery.
- Optical cycle activation switches.
- Ergonomic base with steel ground plate.

Optional items:

- Spin tool vacuum system for part retention.
- Remote HMI.
- Available “less base” or “less base and column” for incorporation into automation.
- Configurable for customized work cells, semi-automated or fully automated manufacturing environments.



MACHINE SPECIFICATIONS				
PARAMETER		MODEL		
		SSW800	SSW3000	SSW4000
Max. Spin Speed	RPM	800	3000	4000
Max. Spin Torque	ft.*lb. (Nm)	59 (80)	16 (21)	9 (12)
Max. Spin Power	HP (kW)	5.3 (4)		
Spin Drive Type		Geared	Direct	
Max. Vertical Speed	in./s (mm/s)	5.9 (150)	5.9 (150)	4.9 (125)
Max. Vertical Force	lb. (N)	600 (2600)	500 (2200)	350 (1500)
Stroke	in. (mm)	5.0 (127)		
Throat Depth	in. (mm)	8.5 (215)		
Max. Vertical Clearance	in. (mm)	16.9 (429)*	20.2 (513)*	
Height Adjustment Range	in. (mm)	14 (355)		
Power Requirements		200-240 VAC, 50/60 Hz, 20 A, single phase		
Weight (complete system)	lb. (kg)	415 (189)	390 (177)	380 (173)
Weld Joint Diameters (guidelines only)	in. (mm)	4-7 (100-180)	0.5-4 (12-100)	<2 (<50)

Note: All specifications are subject to change without notice. Please consult Dukane for any updated information.

[*] Optional column risers are available to increase Max. Vertical Clearance

