

Butt Welding Machine Model ST

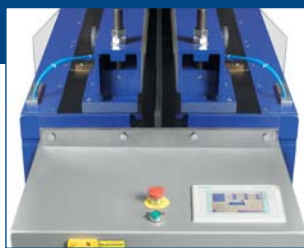


The Butt Welding Machines, model ST shines through highest quality standards and operator friendly control features. As is standard with all **WEGENER International**, the construction of the ST model butt welders is based on a heavy duty welded steel machine frame with integrated, task conforming and precisely machined welding tables. The composite construction of the welding tables guarantees precision butt welds without misalignments even at permanent usage of the machine at maximum capacity.

This proven design concept and the patented, maintenance free mechanical force synchronization (parallel travel mechanism) of the welding tables are the ideal prerequisites for quality assured welding in accordance with DVS 2208-1.



Butt Welding Machine Model ST



Control system with 5.7" full graphics touch screen



Lower position of the height adjustable clamping beams



Upper position of the height adjustable clamping beams



Ergonomic cleaning of the heating element clamping beams

Included in the base machine is a Siemens PLC out of S7 series with 5.7" graphic touch screen panel. The operator can enter the material and geometry specific parameters 'pressures-times-temperature' on a easily understandable screen. The appropriate welding pressures are controlled with a proportional valve. Optionally, the machine can be equipped with a property dataset (parameter), based on the DVS parameters after entering the material, plate thickness and plate length the machine automatically determines the required time for welding, force, temperature and these values for each welding set and used.

A window 'fault' clearly explains any possible operating related problems thus easing trouble shooting.

Technical Data	ST 225	ST 325	ST 425
Machine length (mm):	3,550	4,550	5,550
Machine width (mm):	800	800	800
Machine height (mm):	1,100	1,100	1,100
Total weight approx. (kg)**:	2,150	2,700	3,300
Max. working width (mm):	2,050	3,050	4,050
Weldable sheet thickness (mm):			
PE [0,15 N/mm ²]	3 to 25	3 to 25	3 to 25
PP [0,10 N/mm ²]	3 to 25	3 to 25	3 to 25
PVDF [0,10 N/mm ²]	3 to 25	3 to 25	3 to 25
PVC-C [0,50 N/mm ²]	3 to 7.50	3 to 7.50	3 to 7.50
PVC-U [0,60 N/mm ²]	3 to 6.25	3 to 6.25	3 to 6.25
Min. channel cross section inside dimension (W x H in mm) *:	310 x 230	310 x 230	310 x 230
Min. cylinder diameter (mm)*:	380	380	380
Power supply standard:	230 V 1N/PE 50/60 Hz		
Power supply with option height adjustable clamping beams:	230/400 V 3N/PE 50/60 Hz		
Power consumption standard (kW):	2.5	3.5	4.5
Power consumption with option height adjustable clamping beams (kW):	4.5	6.5	8.5
Compressed air connection (bar):	8	8	8
Clamping force (at 8 bar in kN):	15.4	28	37.5
Min. Table force (N):	600	700	700
Max. Table force (at 8 bar in kN):	7.7	11.5	15.5
Heating element standard (W x H in mm) Teflon coated, T _{max} = 260 °C:	15 x 50	15 x 50	15 x 50
Heating element (W x H in mm) with option height adjustable clamping beams Teflon coated, T _{max} = 260 °C:	20 x 80	20 x 80	20 x 80

	ST 225	ST 325	ST 425
Different Working Width (m)	2	3	4
Drive System	Pneumatics		
<ul style="list-style-type: none"> Patented mechanical synchronization of the working tables; a novelty to achieve a homogeneous application of pressure in the weld seam area Process forces regulated via proportional valve 			
Control / HMI	Siemens S7 control system with 5.7" full graphics touch screen		
Machine Features	<ul style="list-style-type: none"> Machine design based on a sturdy welded framework construction. All of the machine's components are matched to the relevant load case to ensure the top quality welding of plastics Welding tables in composite construction to eliminate torsion stresses and provide stiffness Pneumatics equipped with maintenance friendly valve clusters of the latest generation Integrated and highly dynamic electronic heating element temperature control Flexibility to end or stop the process times during the welding cycle Robust and in the clamping bar integrated non-rotating clamping feet High quantity of decoupled and anti-twist protected clamping feet in order to match perfectly to each sheet length Highly flexible suspension of clamping feet for secure fixation of sheet adjacent to the welding area Interpretation of the max. machines forces on an 8 bar compressed air supply Ergonomic cleaning position for the heating sword Ergonomic working table height 		
Options	<ul style="list-style-type: none"> Height adjustable clamping beams - two steps to process sheet thicknesses ≤ 25 mm (PE/PP); twin-wall-sheets up to 58 mm Extension arms Automatic locking of clamping beams Material property dataset (parameter) with automated choice of specific welding pressure, temperature and times Storage option for product-specific parameter sets (20 pcs.) 		
Special welding lengths up to 6 m			



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