



DSH 015



DSP 250



DS WIRE BUTT WELDING MACHINES

Precise and tensile wire connections for crafts, mass production & industry

DSH
DSF
DSP
DST

High-strength, reproducible welded connections without filler material for steel, copper, aluminum, and brass—from mobile workstations to automated series production. (Other materials available on request)

- High-strength butt and T-joints / - Reproducible quality / - Scalable from manual to fully automatic /
- Made in Germany – over 100 years of experience

TYPICAL APPLICATIONS

- Round and rectangular wire, profiles, tubes
- Butt and T-joint connections
- Wire drawing mills (FE + NE)
- Coil-to-coil joints
- Grids, grates, frames
- Copper, aluminum, brass conductors
- Tools, screws, drills, threading tools
- Structural steel and black-and-white joints
- Wire products: brackets, eyelets, rings, hooks, chain links

TECHNOLOGY AND EQUIPMENT

- High-strength joints
- Manual, semi-automatic, or automatic tensioning systems
- Post-annealing device as standard for low-alloy steels
- Expandable with automatic annealing temperature control (IR pyrometer)
- Flexible parameter adjustment depending on application
- Precise guidance for exact alignment

FROM INDIVIDUAL WORKSTATIONS TO SERIES PRODUCTION

- Mobile and stationary systems
- Table machines for fine wires, small series, and repairs
- Production machines for high quantities
- Can be automated from DSP 080 (IoT readiness)
- Integration into production lines and automated manufacturing concepts possible




WHY DS?

- Over 100 years of experience
- Over 20,000 machines on the market
- Worldwide service and dealer network
- Spare parts quickly available
- 2-year warranty
- Extremely easy to operate
- Reproducible quality

YOUR ADVANTAGES WITH DSP WIRE BUTT WELDING MACHINES

- Secure joints:** High-strength welded joints
- Reproducible quality:** Storage of welding parameters for consistent results
- Easy operation:** also suitable for single and small series
- High productivity:** series production with automatable systems from DSP 080
- Flexible use:** round and rectangular wire, profiles and tubes (other geometries on request)
- Future-proof:** quickly available spare parts, service, retrofit and worldwide dealer network

THE DS PORTFOLIO – THREE LINES FOR EVERY APPLICATION

		
DSH / DSF 015 - 160 Manual wire butt welding - compact and flexible	DST 100 - 120 Precise T-welding solutions for wire connections	DSP 080 - 250 High performance for series production
Tabletop and mobile machines	Specially designed for T-joint connections	For high production volumes or high-strength individual connections
Drawing lines Coil-to-coil connections Small series Individual production	High positioning accuracy Small series	Partially to fully automatable Highest requirements IoT readiness
Easy operation	For wire products, grids, grates, and frames	Multi-pulse welding for low heat build-up and better welding with large cross-sections
Ideal for drawing lines, wire processing, and prototypes	Reproducible T- and line welds	Ideal for industrial applications

OVERVIEW OF THE MACHINES:

DSH/DSF 015-160 – MANUAL WIRE BUTT WELDING

Compact machines for individual parts, repairs, and flexible small-batch production

THE FE VARIANT FOR STEEL MATERIALS:

Machine type			DSH 015 FE	DSH 025 FE ¹ DSF 025 FE ²	DSH 035 FE ¹ DSF 035 FE ²	DSH 070 FE ¹ DSF 070 FE ²	DSH 090 FE ¹ DSF 090 FE ²	DSH 130 FE	DSH 160 FE	
Welding range (min. - max.)			min. - max.	min. - max.	min. - max.	min. - max.	min. - max.	min. - max.	min. - max.	
WIRE FOR ROUND MATERIAL										
		mm	0,15 - 1,5	0,4 - 2,5	0,5 - 3,5	0,8 - 7	1,5 - 9	4 - 13	5 - 16	
Stainless steel		mm	0,15 - 1	0,4 - 2	0,5 - 3	0,8 - 6	1,5 - 8	4 - 12	5 - 14	
WIRE FOR FLAT MATERIAL										
Steel	Min. material thickness	mm	upon request				0,8	0,8	1	1
	Max. material thickness	mm					37	37	55	55
	ratio width/ thickness max.	mm ²					40	40	40	40
	cross section min.-max.						1 - 39	1,8 - 64	13 - 133	20 - 201
Stainless steel	Min. material thickness	mm	upon request				0,8	0,8	1	1
	Max. material thickness	mm					37	37	55	55
	ratio width/ thickness max.						40	40	40	40
	cross section min.-max.	mm ²					1 - 28	1,8 - 50	13 - 113	20 - 154
Clamping device			manual	¹ manual ² manual + foot pedal	¹ manual ² manual + foot pedal	¹ manual ² manual + foot pedal	¹ manual ² manual + foot pedal	manual	manual	

THE NE VARIANT FOR NON-FERROUS MATERIALS AND STAINLESS STEEL: COPPER, ALUMINUM AND BRASS

Machine type			DSH 015 NE	DSH 025 NE ¹ DSF 025 NE ²	DSH 035 NE ¹ DSF 035 NE ²	DSH 070 NE ¹ DSF 070 NE ²	DSH 090 NE ¹ DSF 090 NE ²	DSH 130 NE	DSH 160 NE	
Welding range (min. - max.)			min. - max.	min. - max.	min. - max.	min. - max.	min. - max.	min. - max.	min. - max.	
WIRE FOR ROUND MATERIAL										
Copper		mm	0,4 - 0,8	0,5 - 1,8	0,6 - 2,5	1 - 4	1,5 - 5	3 - 9	5 - 11	
Aluminium and brass		mm	0,5 - 1	0,8 - 2	0,8 - 3	1 - 6	2 - 8	4 - 12	6 - 14	
WIRE FOR FLAT MATERIAL										
steel	Min. material thickness	mm	upon request				1	1	1	1
	Max. material thickness	mm					10	13	18	22
	ratio width/ thickness max.	mm ²					8	8,0	5	5
	cross section min.-max.						1 - 13	1,8 - 20	7,1 - 64	20 - 95
Stainless steel	Min. material thickness	mm	upon request				1	1	1	1
	Max. material thickness	mm					17	22	34	40
	ratio width/ thickness max.						10	10	10	10
	cross section min.-max.	mm ²					1 - 28	3,1 - 50	13 - 113	28 - 154
Clamping device			manual	¹ manual ² manual + foot pedal	¹ manual ² manual + foot pedal	¹ manual ² manual + foot pedal	¹ manual ² manual + foot pedal	manual	manual	



DST 120

DST 100-120 – T-WELDING SOLUTIONS

Precise machines for T-joint connections for wire products and frames (line welding also possible)

WIRE

Machine type		DST 100	DST 120
Welding range		min. - max.	min. - max.
WIRE WELDING RANGE			
Steel wire	mm	2 - 10	3 - 12
in continuous operation	mm	2 - 8	3 - 10

DSP 080-250 – SERIES PRODUCTION AND SINGLE JOINTS OF THE HIGHEST QUALITY

High-performance systems for automated wire butt welding processes.

WIRE STEEL

Machine type		DSP 080	DSP 100	DSP 120	DSP 180	DSP 250
Welding area		min. - max.	min. - max.	min. - max.	min. - max.	min. - max.
WELDING AREA Ø						
Steel Wire	mm	1,5 - 8	2 - 10	3 - 12	6 - 18	7 - 25
Stainless steel Wire	mm	1,5 - 8	2 - 10	3 - 12	6 - 16	7 - 20
Copper Wire	mm	1,5 - 5	3 - 9	5 - 11	6 - 13	7 - 16
Aluminium and brass wire	mm	2,0 - 8	4 - 12	6 - 14	6 - 16	7 - 20
WELDING RANGE: RECTANGULAR CROSS-SECTIONS						
Material thickness	mm	Steel 1 - 7 Copper 1 - 5 Brass / Alum. 1	Steel 1 - 9 Copper 1 - 8,5 Brass / Alum. 1	Steel 1 - 10 Copper 1 - 10 Brass / Alum. 1	Steel 1,5 - 22 Copper 1,5 - 11,6 Brass / Alum. 1,5 - 14,5	Steel 2 - 22 Copper 2 - 14 Brass / Alum. 2 - 18
Material width	mm	Steel 1,8 - 37 Copper 1,2 - 37 Brass / Alum. 1,7 - 37	Steel 55 Copper 2,6 - 55 Brass / Alum. 3,6 - 55	Steel 55 Copper 22 - 55 Brass / Alum. 5,3	Steel 68 Copper 5,3 - 70 Brass / Alum. 5,3 - 70	Steel 68 Copper 6 - 70 Brass / Alum. 6 - 70
Width-to-thickness ratio (max.)		Steel 1:4 Copper 1:8 Brass / Alum. 1:10	Steel 1:4 Copper 1:5 Brass / Alum. 1:10	Steel 1:4 Copper 1:5 Brass / Alum. 1:10	Steel 1:4 Copper 1:5 Brass / Alum. 1:5	Steel 1:4 Copper 1:5 Brass / Alum. 1:10
Min. cross-section	mm ²	Steel 1,8 Copper 1,8 Brass / Alum. 3,1	Steel 4 Copper 7,1 Brass / Alum. 13	Steel 8 Copper 20 Brass / Alum. 28	Steel 13 Copper 28 Brass / Alum. 28	Steel 38 Copper 38 Brass / Alum. 38
Max. cross-section		Steel 50 Copper 20 Brass / Alum. 50	Steel 80 Copper 64 Brass / Alum. 113	Steel 110 Copper 95 Brass / Alum. 154	Steel 254 Copper 135 Brass / Alum. 200	Steel 490 Copper 200 Brass / Alum. 315
Max. cross-section under continuous operation	mm	Steel 28 Copper 12 Brass / Alum. 28	Steel 50 Copper 40 Brass / Alum. 70	Steel 80 Copper 64 Brass / Alum. 110	Steel 200 Copper 93 Brass / Alum. 144	Steel 254 Copper 130 Brass / Alum. 220