

- A6 VEC motor for a reliable and consistent wire feed.

- Easy to use, with accurate positioning on the joint. Choose between manual slides or the joystick-controlled, motor-operated cross slide.

- Flux and wire handling and MIG/MAG welding, both for single and twin welding.

The A6S Arc Master includes basic equipment for flux and wire handling while A6S G Master is a robust welding head for fully automatic gas-metal arc welding, the MIG/MAG method.

Motor-operated cross slides is a way to a more efficient welding equipment. With automatic joint tracking equipment the system is fully controlled. There are several options to choose between to suit a variety of applications for flux handling.

Process controller

With PEH electronic control equipment, you can quickly and accurately programme in all welding parameters before welding commences. No running-in for adjustments is necessary. The feedback system gives you a high and consistent welding quality from start to finish. You save time and material - two very important factors in welding economy.



A6S ARC MASTER basic version with manual slide, a complete welding head with easy-to-use 4-axis positioning on the joint.



PEH an advanced control unit with numerous features:
 · Presetting of all welding parameters
 · Constant current (CA) or constant wire speed (CW)
 · Programming via menus

By investing in efficient and well proven submerged arc welding equipment - profitability and productivity are sure to increase. A6S Arc Master offers flexibility, operational reliability and performance which are - second to none.

The A6 Arc Master is the unique multifeatured basic unit of ESAB's automatic welding programme. A comprehensive component and module system and a series of standard automatics make it easy to specify exactly the customized welding equipment you need for your production requirements.

Technical Data

Welding methods

Submerged arc welding for solid, strip and tubular wires. Accessories for carbon arc gouging.

Welding current and wire dimensions

Submerged arc welding DC or AC max 1500 A

· A6 feed unit LD

wire feed speed SAW	0.4-8 m/min
wire, single	1.6-4.0 mm
wire, twin	2x1.2-2x2.5 mm
tubular wire, single	1.6-4.0 mm

· A6 feed unit HD

wire feed speed	0.2-4.0 m/min
wire, single	3.0-6.0 mm
wire, twin	2x2.0-2x3.0 mm
tubular wire, single	3.0-4.0 mm

Types of joints

Butt and vertical or horizontal fillet welds.

Wire reels

Optional steel or plastic wire reel attached to welding head max 30 kg wire or strip

Flux hopper

Standard type, volume 10 l
 See also accessories for spec applications.

Positioning, angular

Circular slide, crank operated ± 180°
 Straightener ± 45°

Weights

A6S ARC MASTER	
· Feed unit excluding slide, flux and wire equipment, and PEH	16 kg
· Basic version, manual slides	64 kg
· Basic version, motor-operated cross slide with joystick control	80 kg
· Basic version, with GMD	108 kg

Operating voltage 42 V. 50-60Hz

Dimensional drawing, see separate publication.



A6S TWIN MASTER for highly productive fillet or butt welding, also on light-gauge material. See accessories for Light Twin from 1.2 mm wires and Heavy Twin for wires 2.0-3.0 mm



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ESAB reserve the right to alter specifications without notice.

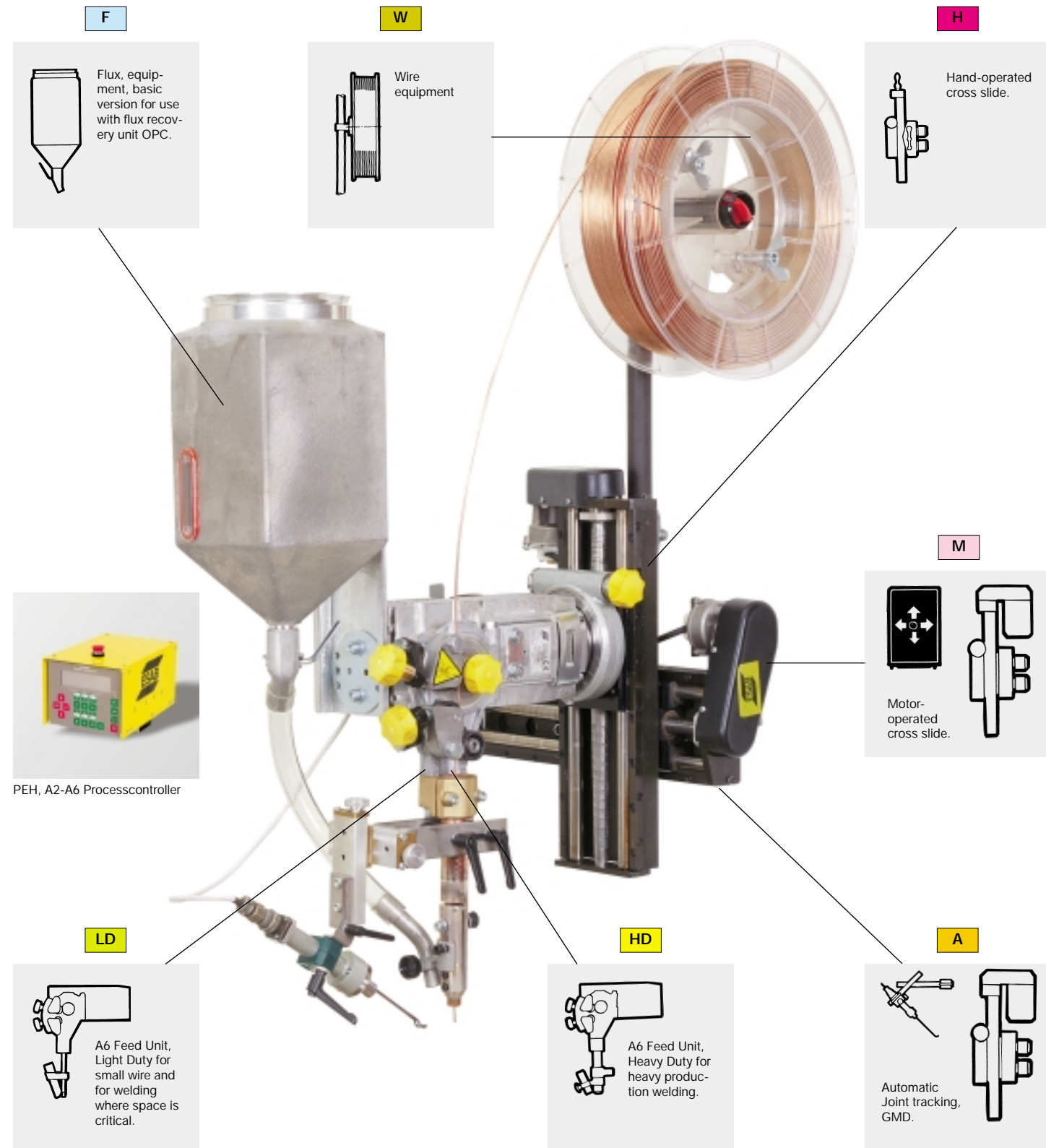
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A6S Arc Master

a complete system for automatic submerged arc welding

By investing in efficient and well proven submerged arc welding equipment – profitability and productivity are sure to increase. A6S Arc Master offers flexibility,

operational reliability and performance which are – second to none.



Build-up your standard welding head for your welding needs in this way

Basic modules

Depending on your welding procedures start with the LD or HD feed unit, and then add the head with the equipment needed for positioning and tracking. The flux equipment must be used with the flux system you select from the list of accessories, and the wire feed equipment to suit the type of reel. With the help of the table below, you can now find the order number for your complete A6S Arc Master, with or without control box PEH for DC or AC welding. Accessories and the possible combinations are shown in the right-hand section of the table with descriptions and order numbers given above.

LD
A6 Feed Unit, Light Duty for small wire and for welding where space is critical. Basic module with capacity for:
• single wire 1.6-4.0 mm
• twin wire 2x1.2-2.0 mm
• tubular wire 1.6-4.0 mm
Complete excl feed roller and tip
Order No. 0456 560 880

HD
A6 Feed Unit, Heavy Duty for heavy production welding. Basic module with capacity for:
• single wire 3.0-6.0 mm
• twin wire 2x2.0-3.0 mm
• tubular wire 3.0-4.0 mm
• strip cladding 0.5x30-100 mm strip
• carbon arc gouging 8.0-12.7 mm carbon electrodes
Complete excl feed roller and jaw
Order No. 0456 560 900

H
Hand-operated cross slide for positioning and joint tracking including:
• A6 linear slide 210 mm* (2 pcs) 0154 465 881
• A6 circular slide 0671 171 580
• insulator (4 pcs) 0278 300 180

M
Motor-operated cross slide with joystick control, including:
• A6 servo slide range 300 mm* (2 pcs) 0334 333 884
• A6 circular slide 0671 171 580
• A6 PAK, control box 0417 587 880
• cable, 2m (2 pcs) 0417 310 887

• insulator (4 pcs) 0278 300 180
* Other lengths to orders, two required for a cross

A
Automatic joint tracking GMD, including:
• A6 servo slide range 300 mm* (2 pcs) 0334 333 884
• A6 circular slide 0671 171 580
• A6 GMD 0417 142 880
• cable, 2m (2 pcs) 0417 310 887
• insulator (4 pcs) 0278 300 180
*Other lengths to order

F
Flux equipment, basic version for use with flux recovery unit OPC, including:
• flux tank 10 l 0147 649 881
• bracket 0148 487 881

W
Wire equipment bracket for attachment to welding head, including:
• brake hub 0146 967 880
• bracket, bent (B) for manual slide 0147 328 880
• bracket, straight (S) for servo slide 0334 318 880

Accessories

A large assortment of accessories and peripheral equipment make up the A6 welding heads to the universal automatic welder. Utilize the opportunities offered by submerged arc welding with A6 accessories for single wire, twin arc and cladding with strip or tubular wires. An efficient flux handling unit is an important peripheral of a complete welding station. For further information, ask for our special product brochures on flux handling equipment.

1 Contact tips D20, M12x30, single wire
Wire 1.6 mm 0154 623 008
2.0 mm 0154 623 007
2.5 mm 0154 623 006
3.0 mm 0154 623 005
4.0 mm 0154 623 003

2 Contact jaws D35, single wire
Wire 3.0 mm 0265 900 880
4.0 mm 0265 900 882
5.0 mm 0265 900 883
6.0 mm 0265 900 884

Feed rollers, single wire
Wire 1.6 mm 0218 510 281
2.0 mm 0218 510 282
2.5 mm 0218 510 283
3.0 mm 0218 510 298
4.0 mm 0218 510 286
5.0 mm 0218 510 287
6.0 mm 0218 510 288

Knurled rollers for tubular wires
Feed roller 1.2-1.6 mm 0146 024 880
Feed roller 2.0-4.0 mm 0146 024 881
Pressure roller 1.2-1.6 mm 0146 025 880
Pressure roller 2.0-4.0 mm 0146 025 881
Shaft stud for knurled pressure roller 0212 901 101

3 Fine wire straightener
Single wire 1.6-2.5 mm 0332 565 880

4 Contact equipment Light Twin Arc
Complete 0334 291 888

Contact tips Light Twin Arc (two required)
Wire 2x1.2 mm 0153 501 005
2x1.6 mm 0153 501 007
2x2.0 mm 0153 501 009

5 Contact equipment Heavy Twin Arc
Complete 0334 291 889

Contact jaws, Heavy Twin Arc
Wire 2x2.0 mm 0265 902 881
2x2.5-3.0 mm 0265 902 880

Feed rollers Light/Heavy Twin Arc
Wire 2x1.2 mm 0218 522 486
2x1.6 mm 0218 522 488
2x2.0 mm 0218 522 484
2x2.5 mm 0218 522 480
2x3.0 mm 0218 522 481

Knurled roller for tubular Twin Arc
Feed roller 2.0-4.0 mm 0148 772 880
Pressure roller 2.0-4.0 mm 0218 524 580

NOTE: For extra wire reels and brake hubs, see module (W).

6 Extras for strip cladding
0.5x30-100 mm 0155 972 880
Wire reel, steel 0416 492 880
Suction nozzle, flux 0156 025 001
Real holder 0417 636 880

7 Extras for carbon arc gouging
Carbon electrodes 8.0-12.7 mm 0153 592 880
VEC-motor, 312:1 to be used for carbon arc gouging 0145 063 905

8 Pilot lamps
Light-bulb
○ for contact tube D20 0153 143 886
● for contact tube D35 0153 143 885
Pilot lamps
Laser diode
○ for contact tube D20 0457 788 880
● for contact tube D35 0457 788 884

9 Central flux funnel
○ for contact tube D20 0145 221 881
● for contact tube D35 0254 900 880
Insert extended 0254 900 301

10 Flux equipment
OPC flux recovery unit, basic version 0148 140 880

Choose your standard automatic from A6S Arc Master module combination and build it up with accessories to suit your needs.

	Automatic welder S without controlbox PEH and PAK	Automatic welder S compl incl controlbox PEH	1	2	3	4	5	6	7	8	9	10	
LD	H	F	W(B)	0456 560 880	0456 565 880	●	●	●	●	○	○	○	
				0456 560 881	0456 565 880	●	●	●	●	○	○	○	
				0456 560 882	0456 565 882	●	●	●	●	○	○	○	
				0456 560 883	0456 565 884	●	●	●	●	○	○	○	
				0456 560 884	0456 565 885	●	●	●	●	○	○	○	
	M	F	W	0456 560 885	0456 565 886	●	●	●	●	○	○	○	○
				0456 560 886	0456 565 887	●	●	●	●	○	○	○	○
				0456 560 887	0456 565 888	●	●	●	●	○	○	○	○
				0456 560 888	0456 565 889	●	●	●	●	○	○	○	○
				0456 560 889	0456 565 890	●	●	●	●	○	○	○	○
A	F	W	0456 560 891	0456 565 891	●	●	●	●	○	○	○	○	
			0456 560 892	0456 565 892	●	●	●	●	○	○	○	○	
			0456 560 893	0456 565 893	●	●	●	●	○	○	○	○	
			0456 560 900	0456 565 900	●	●	●	●	○	○	○	○	
			0456 560 901	0456 565 900	●	●	●	●	○	○	○	○	
HD	H	F	W(B)	0456 560 902	0456 565 902	●	●	●	●	○	○	○	
				0456 560 903	0456 565 904	●	●	●	●	○	○	○	
				0456 560 904	0456 565 905	●	●	●	●	○	○	○	
				0456 560 905	0456 565 906	●	●	●	●	○	○	○	
				0456 560 906	0456 565 907	●	●	●	●	○	○	○	
	M	F	W	0456 560 907	0456 565 908	●	●	●	●	○	○	○	
				0456 560 908	0456 565 909	●	●	●	●	○	○	○	
				0456 560 909	0456 565 910	●	●	●	●	○	○	○	
				0456 560 911	0456 565 911	●	●	●	●	○	○	○	
				0456 560 912	0456 565 912	●	●	●	●	○	○	○	
A	F	W	0456 560 913	0456 565 913	●	●	●	●	○	○	○		
					●	●	●	●	○	○	○		



Beam - travelling carriage
The beam-travelling carriage can be used together with the complete A6S Arc Master. The carriage is developed to be used on a standard I-profil IPE 300. When demands for a straight and smooth welding motion the machined track, produced by ESAB can be used. The travelling speed will be controlled by the control box PEH. The carriage can even be moved by hand. See separat leaflet XA000919XX.