

ABICAR welding tractors

The long-distance co-pilots
for manual welders



Flexible and efficient

Costs, time and quality optimally coordinated



Flexible and efficient

No more physically demanding manual welding

Welding long components or even circumferential seams means an enormous physical strain for every manual welder. The forced position causes fatigue, and reworking is necessary after each stop to avoid quality defects. ABICAR welding tractors from ABICOR BINZEL are a semi-automated solution to these challenges. They enable manufacturing companies to offer more health and safety protection and at the same time guarantee precise welding seams over longer distances. Rework is reduced considerably and productivity is increased significantly. The bottom line is that ABICAR welding tractors enable cost savings of up to 60% per year!

Guaranteed consistent quality

In periods when high quality is required in the shortest possible time at the lowest possible cost, welders inevitably reach their limits. The ABICAR welding tractors take over the physically demanding work and guide the welding torch smoothly and evenly

so that the welding process proceeds perfectly without interruptions. No matter how long the welding seam is. The welder observes the process and adjusts the welding torch position without effort, if necessary, while the tractor is in motion. As a long distance co-pilot, the ABICAR welding tractor from ABICOR BINZEL in combination with the appropriate welding torch guarantees consistent quality of the weld seam throughout.

The alternative for fully automated systems

Instead of investing expensively in a completely automated system or portal solution, the ABICAR welding tractors are a cost-effective alternative. Some manufacturing companies do not want to or cannot convert their entire production. The ABICAR welding tractors from ABICOR BINZEL represent a comparatively low investment – with full control over the process at all times.

Easy to use A benefit for production and construction site

ABICAR welding tractors are ideal for welding longitudinal and circumferential seams.



Easy to use

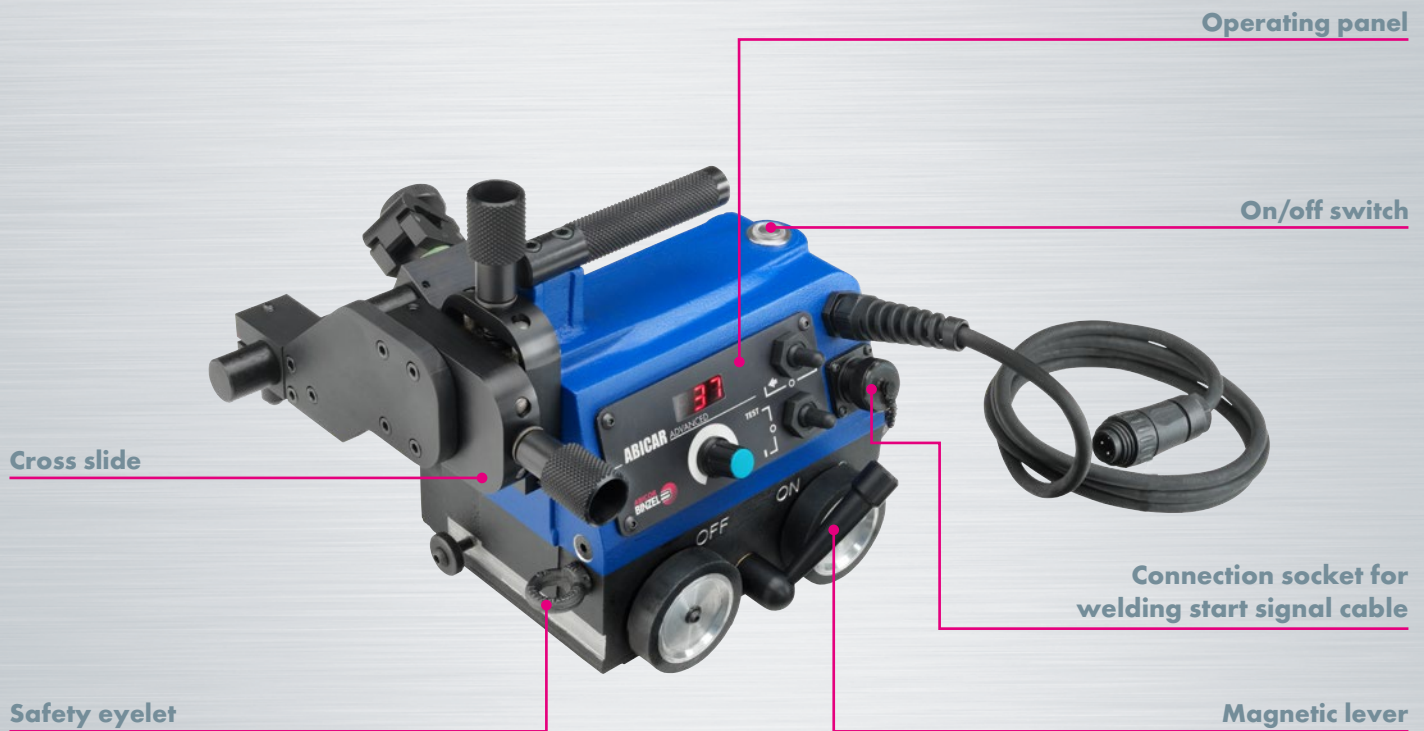
Arguments that speak for themselves.

The ABICAR welding tractors are the first step into automation and offer numerous advantages compared to classic manual welding:

- **High profitability:** Fast, efficient production in time allows for more orders and higher quantities
- **Optimum seam quality:** Excellent welding seams on long components and circumferential seams with more than 60% duty cycle
- **Guaranteed occupational health and safety:** Physical strain on welders during long seams is reduced to a minimum
- **Increased productivity:** Every metre is welded at a consistently high speed and without interruption
- **Easy handling:** Manual welding torches can be easily clamped into the torch mount, the torch clamp is suitable for all manual welding torches from ABICOR BINZEL
- **Premium quality:** ABICAR welding tractors including accessories meet the high quality standards of ABICOR BINZEL

ABICAR ADVANCED

The robust welding tractor for standard welding tasks



Compact and lightweight

This device is the ideal welding tractor for horizontal and vertical fillet welds. It is easy to operate and weighs only 8 kg.

- **Optimum process control** due to adjustable speed during operation
- **4-axis torch adjustment** for flexible positioning of the torch before starting, suitable for torch necks up to 25 mm diameter
- **Adjustable speed** of up to 1,100 mm/min

- **Practical additional functions** such as automatic start/stop
- **Compatible with guide rails** if required for the welding task
- **Open connection** to the wire feed unit, which can be individually adjusted

Technical data

Type:	Fillet welding tractor
Weight:	8 kg
Dimensions (LxWxH):	265x259x240 mm
Speed:	
– Horizontal:	0 – 110 cm/min
– Vertical:	0 – 100 cm/min
Prepared for:	Double torch applications
– Open connection side:	For two wire feed units
Circumferential seams:	Weldable (min. r = 1000 mm)
Magnet:	Permanent
Voltage:	115 – 230 V
Min. component thickness:	4 mm
Ground clearance:	4 mm

Possible welding positions:	– PA/1F/1G
	– PB/2F
	– PC/2G
	– PD/4F
	– PE/4G

ABICAR 1200 PRO

Programmable welding tractor for the toughest requirements



Defies dust and dirt

Perfect weld seams in constant quality under the most adverse conditions for technical equipment are no problem for the ABICAR 1200 PRO.

- **Programmable welding modes** for continuous welding, total weld length, groove filling and oscillating pattern
- **Clear display** showing real speed, cross dwell time, pendulum length and oscillating speed
- **4-axis torch adjustment** for flexible positioning of the torch before start-up

- **Adjustable speed** of up to 1,200 mm/min
- **Practical additional functions** such as auto start/stop and controllable groove filling
- **Open connection** to the wire feed unit, which can be individually adjusted
- **Optional oscillating unit** with a wide range of options, also programmed by the tractor control system

Technical data

Type:	Programmable welding tractor for fillet welds and butt welds	Magnet:	Permanent
Weight:	14 kg	Voltage:	115 - 230 V
Dimensions (LxWxH):	401 x 372 x 236 mm	Min. component thickness:	5 mm
Speed:		Ground clearance:	5 mm
- Horizontal:	0 - 120 cm/min	Limit switch:	On both sides
- Vertical:	0 - 110 cm/min	Possible welding positions:	- PA/1F/1G
Prepared for:	Double torch applications		- PB/2F
- Double torch mount:	Available		- PC/2G
- Welding start cable:	Prepared		- PD/4F
Circumferential welds:	Circumferential welding (min. r = 1500 mm)		- PE/4G
			- PF/3F/3G with oscillator

Optional oscillating unit for ABICAR 1200 PRO



Technical data

Type:	Oscillating unit
Weight:	3 kg
Dimensions (LxWxH):	90 x 175 x 95 mm
Max. pendulum width:	11°/1 - 30 mm @ r = 150 mm (1% - 100%)
Oscillation speed:	7 - 164 U/min (1% - 100%) @ osc. amplitude of 10 mm
Dwell time:	0 - 5 s
Max. torque:	5 Nm
Delivery:	With cable support
Access:	Full parameter access via welding tractor

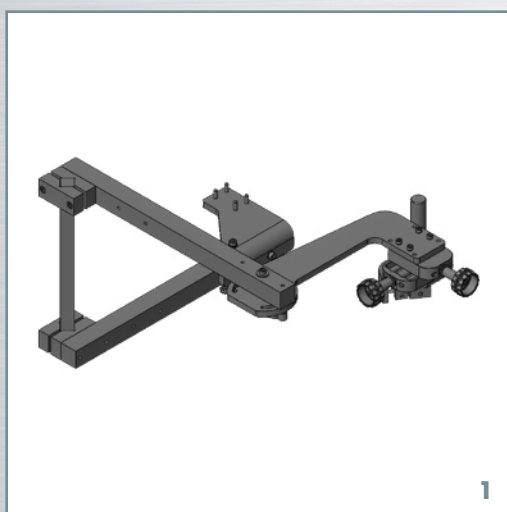
**Which ABICAR welding tractor is the right one?
Find the right solution here for your applications and
reliable, consistent quality.**

Find out
more at:



Functions	ABICAR ADVANCED	ABICAR 1200 PRO
Max. drive speed	110 cm/min	120 cm/min
Upward welding	✓	✓
Overhead welding	✗	✓ (with accessories)
Stitch welding	✗	✓
Oscillating	✗	✓ (with accessories)
Welding with two torches	✓ (with accessories)	✓ (with accessories)
Programmable weld length	✗	✓
Program memory	✗	✓
Guide rail available	✓	✓

Optimally matched Additional mechanical components



ABICAR ADVANCED

Optional

Pos.	Description	PU	Part no.
1	Double torch mounting	1	522.0192.1
2	Wheel, stainless steel	4	522.0194.4
3	Cable support	1	522.0193.1
4	Guide arm for outer edges	2	522.0190.2
5	Torch clamp, 22 - 35 mm	1	522.0208.1

Spare parts

Pos.	Description	PU	Part no.
6	Guide arm, standard	2	522.0189.2
7	Knurled screw	2	522.0191.2
8	Wheel, rubberised	4	522.0195.4
9	Torch clamp, 16 - 22 mm	1	522.0209.1
10	Insulating sleeve	1	522.0205.1

ABICAR 1200 PRO

Optional

Pos.	Description	PU	Part no.
3	Cable support	1	522.0193.1
4	Guide arm for outer edges	2	522.0197.2
11	Wheel, stainless steel	4	522.0200.4

Spare parts

Pos.	Description	PU	Part no.
6	Guide arm, standard	2	522.0196.2
7	Knurled screw	4	522.0199.4
8	Wheel, rubberised	4	522.0201.4

Order overview



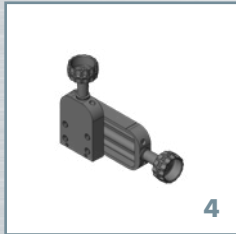
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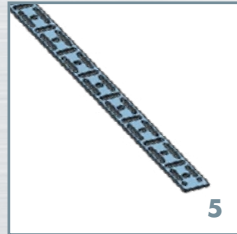
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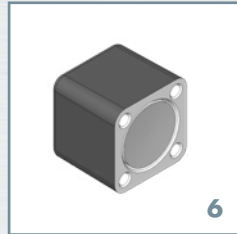
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4



5



6



7



8

ABICAR ADVANCED and ABICAR 1200 PRO

Pos.	Description	PU	Part number
1	ABICAR ADVANCED	1	522.0179.1
2	ABICAR 1200 PRO	1	522.0181.1

Accessories spare parts

Pos.	Description	PU	Part number
3	Mounting rod, short	1	522.0206.1
not fig.	Cross support	1	522.0210.1
not fig.	Welding start cable, length 6.5 m	1	522.0212.1

Accessories optional

Pos.	Description	PU	Part number
4	Extended cross support	1	522.0211.1
5	Flexible guide rail (185 cm) ¹	1	522.0185.1
6	Magnetic block for flexible guide rail ²	10	522.0186.10
7	ABICAR ADVANCED guide arm for flexible guide rail	2	522.0188.2
8	ABICAR 1200 PRO guide arm for flexible guide rail	2	522.0198.2
not fig.	Mounting rod, long	1	522.0207.1
not fig.	Power cable, 3 m (US plug)	1	522.0213.1
	Power cable, 3 m (AU plug)	1	522.0215.1
	Power cable, 3 m (UK plug)	1	522.0216.1
not fig.	Adjustment tool for flexible guide rail	1	522.0187.1
not fig.	Optional oscillating unit incl. mounting kit and cable support	1	522.0183.1

¹ When purchasing a flexible guide rail, items 6 and 7 or item 8 must also be ordered.

² 1 package of magnets for 1 x guide rail

Depending on the individual order, there may be deviations from the pictorial representation.



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