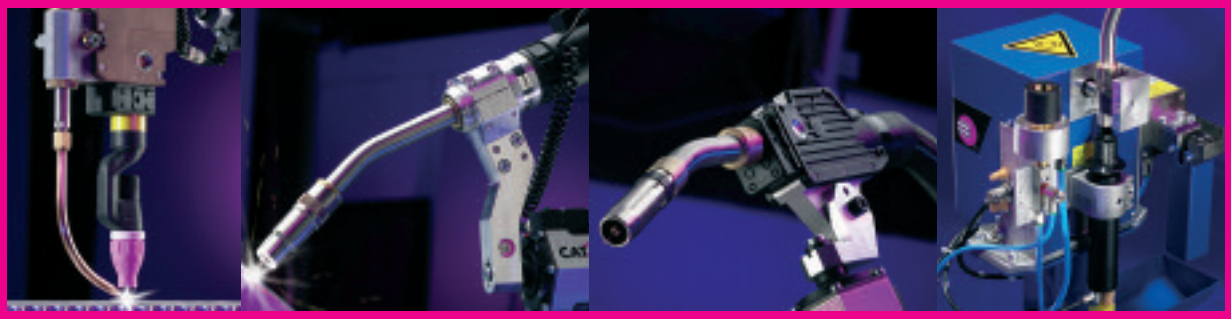
TECHNOLOGY FOR THE WELDER'S WORLD.

ROBO



Product Catalogue 1.1/V1

ABICOR BINZEL®

www.binzel-abicor.com

Finally, peripery that completes the efficiency of a robot work cell.

In the late seventies ABICOR BINZEL started with the development of systems for robotic welding parallel to the introduction of the first robots in the automotive industry.

Today ABICOR BINZEL provides an effective product range of robot torches and corresponding peripheral items which are in use around the world, 24 hours a day.

Accompanying the product, a team of experts, both in our headquarter and in our subsidiaries, is always ready to assist with standard and custom-specific solutions. Besides the installation, application and special training our after-sales service includes the support and optimization of the production process. Quick spare part supply and repairs are included.

To recognize and to co-create new innovative technological trends, is one of our strong points.

Automatic welding – with ABICOR BINZEL

Founded in 1945 the Alexander Binzel Schweisstechnik GmbH & Co. KG specialized in the development and production of welding and cutting torches for the GMAW (Gas Metal Arc Welding), GTAW (Gas Tungsten Arc Welding) and Plasma processes.

Numerous patented developments help shape the world of welding and cutting and set international standards.

The ABICOR BINZEL group is represented in more than 50 countries with over 900 employees, 30 production and sales companies, as well as over 20 exclusive partners.

Main production is located in the parent company in Buseck near Giessen, in Dresden, as well as in the USA, Brazil, India and China.

The brand name ABICOR has been established in 1997 as an impression of a company strategy that puts on innovation and globalization and that pursues a clear brand policy.

Content

MIG/MAG-Welding Torch System "ABIROB® A ECO"
air cooled

"air cooled and effective ..."

The product line ABIROB® A ECO – groundbreaking in its design, trend-setting in standardization – guarantees a continously precise and economic welding process by its robust construction and simple handling.

- Simple and compact modular design – easy to service
- Slim design – optimal accessibility
- High stability and reproducibility – maximum TCP-safety – even in the event of a "crash"
- Innovative Interlock-system – smooth and quick exchange of the cable assembly at constant TCP
- Available in 300 A, 360 A & 500 A (at 100% Duty cycle)

ABIROB® A300

ABIROB® A360

ABIROB® A500

Cable assembly

Fixed bracket

ABIROB® A300

Technical data (EN 60 974-7):

Rating:	300 A CO_2
	250 A Mixed gases M21 (EN 439)
Duty cycle:	100%
Wire size:	0.8–1.4 mm

ABIROB® A360

Technical data (EN 60 974-7):

Rating:	360 A CO_2
	290 A Mixed gases M21 (EN 439)
Duty cycle:	100%
Wire size:	0.8–1.4 mm

ABIROB® A500

Technical data (EN 60 974-7):

Rating:	500 A CO_2
	400 A Mixed gases M21 (EN 439)
Duty cycle:	100%
Wire size:	0.8–1.6 mm

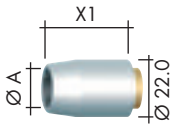
Swan neck	Part-No.			
Type	0°	22	35°	45°
ABIROB® A300	–	–	–	980.1146.1
ABIROB® A360	980.1023	980.1024	980.1025	980.1026
ABIROB® A500	980.1012	980.1013	980.1014	980.1015

Wear and spare parts are not included in the delivery! Please order separately and according to the application!

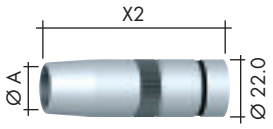
ABIROB® A300, ABIROB® A360, ABIROB® A500

Wear parts

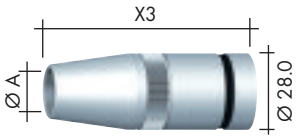
ABIROB® A300



ABIROB® A360



ABIROB® A500

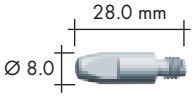


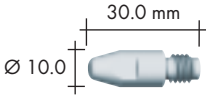
Gas nozzle bottle form (5 pcs.)	**Ø A**	**X1**		**X2**		**X3**	
"FLUSH" [1]	Ø 12.0	–	–	68.0 mm	145.0599	–	–
"RECESS" (– 2.0 mm) [2]	Ø 12.0	–	–	70.0 mm	145.0600	–	–
"STICK OUT" (+ 3.0 mm) [3]	Ø 12.0	–	–	65.0 mm	145.0601	–	–
"FLUSH" [1]	Ø 14.0	–	–	68.0 mm	145.0618	75.0 mm	145.0586
"RECESS" (– 2.0 mm) [2]	Ø 14.0	–	–	–	–	77.0 mm	145.0587
"STICK OUT" (+ 3.0 mm) [3]	Ø 14.0	–	–	65.0 mm	145.0619	72.0 mm	145.0588
"FLUSH" [1]	Ø 14.4	32.0 mm	145.0671.5	–	–	–	–
"STICK OUT" (+ 3.0 mm) [3]	Ø 14.4	29.0 mm	145.0677.5	–	–	–	–
"FLUSH" [1]	Ø 16.0	–	–	–	–	75.0 mm	145.0583
"RECESS" (– 2.0 mm) [2]	Ø 16.0	–	–	–	–	77.0 mm	145.0584
"STICK OUT" (+ 3.0 mm) [3]	Ø 16.0	–	–	–	–	72.0 mm	145.0585
Gas nozzle conical (5 pcs.)	**Ø A**	**X1**		**X2**		**X3**	
"FLUSH" [1]	Ø 13.0	–	–	–	–	75.0 mm	145.0589
"RECESS" – 2.0 mm [2]	Ø 13.0	–	–	–	–	77.0 mm	145.0590
"STICK OUT" + 3.0 mm [3]	Ø 13.0	–	–	–	–	72.0 mm	145.0591
"FLUSH" [1]	Ø 14.0	–	–	68.0 mm	145.0595	–	–
"RECESS" – 2.0 mm [2]	Ø 14.0	–	–	70.0 mm	145.0596	–	–
"STICK OUT" + 3.0 mm [3]	Ø 14.0	–	–	65.0 mm	145.0597	–	–
"FLUSH" [1]	Ø 16.0	–	–	68.0 mm	145.0592	75.0 mm	145.0580
"RECESS" – 2.0 mm [2]	Ø 16.0	–	–	70.0 mm	145.0593	77.0 mm	145.0581
"STICK OUT" + 3.0 mm [3]	Ø 16.0	–	–	65.0 mm	145.0594	72.0 mm	145.0582

[1] FLUSH = Gas nozzle flushed

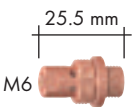
[2] RECESS = Gas nozzle standing back

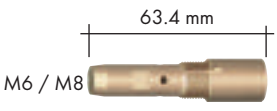
[3] STICK OUT = Gas nozzle protruding

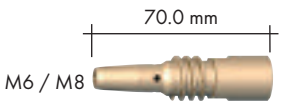




Contact tip (10 pcs.)		**M6**	**M8**
CuCrZr	Ø 0.8	147.0054	147.0117
silver plated	Ø 0.9	147.0172	147.0217
	Ø 1.0	147.0245	147.0316
	Ø 1.2	147.0382	147.0445
	Ø 1.4	147.0519	147.0536
	Ø 1.6	–	147.0590







Contact tip holder (5 / 10 pcs.)			
M6	142.0171(10 pcs.)	142.0160	142.0159
M8	–	142.0163	142.0158
M6 (Cu)	–	142.0196	–
M8 (Cu)	–	142.0170	142.0169 (10 pcs.)

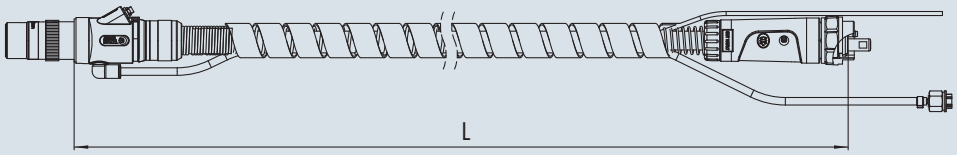
MIG/MAG-Welding Torch System "ABIROB® A ECO"
air cooled

Cable assemblies and accessories

Cable assemblies cpl.							
Length	L=1.15 m	L=1.20 m	L=1.30 m	L=1.45 m	L=1.60 m	L=2.15 m	L=3.15
Part-No.	980.1066	980.1067	980.1068	980.1069	980.1070	980.1097	980.1098

The control cable is not pre-wired on the machine end. Power source specific types on request.
Included in delivery is liner red 0.8–1.2 mm. Other liner please order seperately.

Dimension "L"



Liner		up to L=1.6 m [2]	up to L=3.15 m [2]	L=10.0 m [3]	Collet f. liner
Liner steel red [1]	Ø 0.8–1.2	124.0145	124.0146	124.0159	131.0012
Liner steel white [1]	Ø 1.4–1.6	124.0147	124.0148	124.0160	131.0011

Mounting arm for connection

■ **to the Robot mount CAT2**

Clamp holder
Adjustable TCP definition [4]

Segment holder
Pre-defined angle in 15°-steps [4]

Fixed bracket
Fixed defined TCP [4]

■ **directly to the robot** [5]

RTM holder
To be used at robots with integrated collision software, variable in 15°-steps [4]

[1] Red and white steel liner (insulated) for the use of non-alloyed and low-alloyed steels. The totally insulated wire feed prevents damage caused by "micro-arcing" on the wire. This allows optimal current transfer inside the contact tip improving the welding process. The insulated steel liner must be used for power sources with optional welding wire sensors. Liner for the use of aluminium and special wire types available on request.

[2] Including one collet

[3] For individual production including two collets

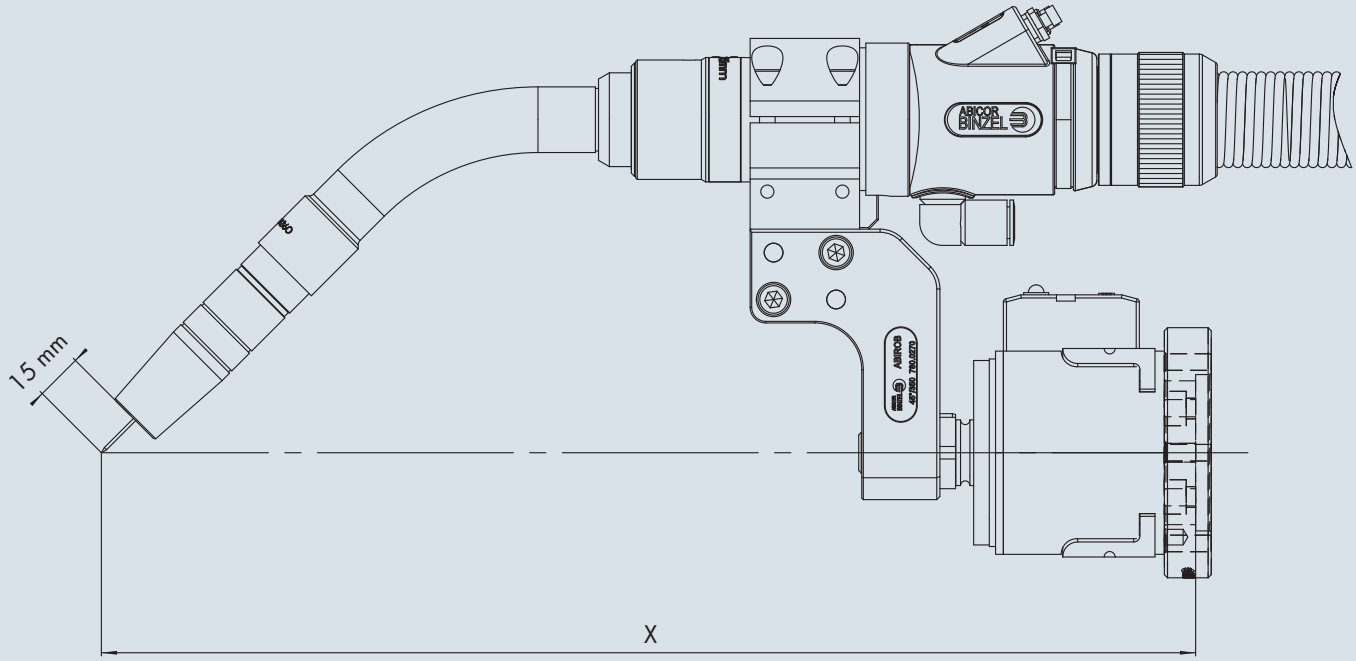
[4] Part-No.: see table page 7

[5] Adapter flanges see page 21.

ABIROB® A300, ABIROB® A360, ABIROB® A500

Dimension sketch and alignment jigs

ABIROB® A ECO shown with fixed bracket



Mounting Type	Torch	Torch geometry	X	Y	Part-No.
Clamp holder	ABIROB® A300	45°	422	0	780.0259
	ABIROB® A360 / A500	22°	366	0	780.0259
	ABIROB® A360 / A500	35°	351	0	780.0259
	ABIROB® A360 / A500	45°	338	0	780.0259
Segment holder	ABIROB® A360 / A500	22°	variable in 15°-steps		780.0184
	ABIROB® A360 / A500	35°	variable in 15°-steps		780.0184
	ABIROB® A300 / A360 / A500	45°	variable in 15°-steps		780.0184
Fixed bracket	ABIROB® A360 / A500	22°	350	0	780.0268
	ABIROB® A360 / A500	35°	350	0	780.0272
	ABIROB® A360 / A500	45°	350	0	780.0270
RTM holder	ABIROB® A360 / A500	22°	variable in 15°-steps		780.0195
	ABIROB® A360 / A500	35°	variable in 15°-steps		780.0195
	ABIROB® A300 / A360 / A500	45°	variable in 15°-steps		780.0195

Other mountings on request.

Alignment jig for torch type	for torch geometry	Part-No.
ABIROB® A300	45°	837.0600
ABIROB® A360 / A500	0° / 22° / 45°	837.0500
ABIROB® A360 / A500	35°	837.0514

MIG/MAG-Welding Torch System "VTS-Interlock"
liquid cooled

"Ease of servicing, stable, flexible ..."

VTS-Interlock – the welding torch system from ABICOR BINZEL for universal, heavy-duty MIG/MAG-Welding – enables a simple and flexible welding torch with different overall sizes and geometries – for changing welding jobs. Standardized interfaces – identical on all VTS modules – guarantee an optimum interchange ability as well as a repeatable TCP installation at the robot or at another welding device.

Reproducible torch position thanks to the "tongue and groove" interlock connection, easy-change torch neck and long-life cable assemblies which are quick to exchange, gives ease of maintenance when servicing the system.

- Flexible adaptation on changing welding jobs
- Standardised interface – interlock connection
- Reproducible torch position
- liquid cooled up to 500 A
- Well proven and 100% reliable

"Reproducible Interface"
Interlock connection

ROBO VTS 290

ROBO VTS 500TS

VTS-Cable assembly

ROBO VTS 290

Technical data (EN 60 974-7):

Rating:	290 A Mixed gases M21(EN 439)
Duty cycle:	100%
Wire size:	0.8–1.2 mm

ROBO VTS 500TS

Technical data (EN 60 974-7):

Rating:	500 A Mixed gases M21(EN 439)
Duty cycle:	100%
Wire size:	0.8–1.6 mm

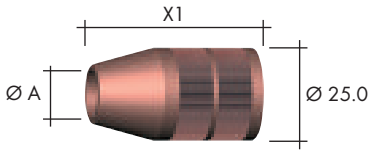
Swan neck	Part-No.			
Type	**0°**	**22°**	**35°**	**45°**
ROBO VTS 290	–	785.5050	–	785.5091
ROBO VTS 500TS	785.5101	785.5102	785.5103	785.5104

Wear and spare parts are not included in the delivery! Please order separately and according to the application!

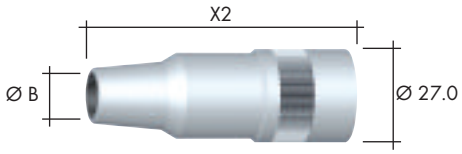
ROBO VTS 290, ROBO VTS 500TS

Wear parts

ROBO VTS 290



ROBO VTS 500TS

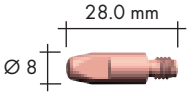


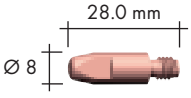
Gas nozzle bottle form (10 pcs.)	**Ø A**	**X1**		**Ø B**	**X2**	
"RECESS" (– 2.6 mm) [2]	Ø 13.0	–	–	Ø 13.0	77.0 mm	145.0556
"RECESS" (– 1.1 mm) [2]	Ø 13.0	–	–	Ø 13.0	75.5 mm	145.0479
"RECESS" (– 2.6 mm) [2]	Ø 15.5	–	–	Ø 15.5	77.0 mm	145.0480
"RECESS" (– 1.1 mm) [2]	Ø 15.5	–	–	Ø 15.5	75.5 mm	145.0544
"STICK OUT" (+ 2.4 mm) [3]	Ø 15.5	–	–	Ø 15.5	72.0 mm	145.0466
Gas nozzle conical (10 pcs.)	**Ø A**	**X1**		**Ø B**	**X2**	
"RECESS" (– 1.0 mm) [2]	Ø 13.0	48.5 mm	145.0564	Ø 13.0	–	–
"STICK OUT" (+ 3.0 mm) [3]	Ø 13.0	44.5 mm	145.0495	Ø 13.0	–	–
"STICK OUT" (+ 3.0 mm) [3]	Ø 15.5	44.5 mm	145.0494	Ø 15.5	–	–
"RECESS" (– 1.1 mm) [2]	Ø 15.5	–	–	Ø 15.5	75.5 mm	145.0553
"STICK OUT" (+ 1.9 mm) [3]	Ø 15.5	–	–	Ø 15.5	72.5 mm	145.0568

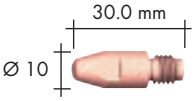
[1] FLUSH = Gas nozzle flushed

[2] RECESS = Gas nozzle standing back

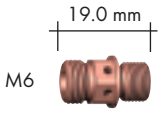
[3] STICK OUT = Gas nozzle protruding



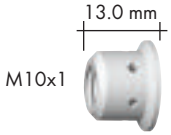


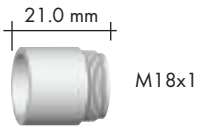


Contact tip (10 pcs.)		**M6**	**M6**	**M8**
CuCrZr	Ø 0.8	140.0054	140.0054	140.0117
	Ø 0.9	140.0172	140.0172	140.0217
	Ø 1.0	140.0245	140.0245	140.0316
	Ø 1.2	140.0382	140.0382	140.0445
	Ø 1.4	–	–	140.0536
	Ø 1.6	–	–	140.0590



Contact tip holder (10 pcs.)		
M6	785.5052	142.0133
M8	–	142.0117





Gas diffuser (10 pcs.) **Nozzle insulator** (10 pcs.)	**Gas diffuser**	**Nozzle insulator**
Standard	962.0657	146.0054
High-temperature-resistant	962.1341 (Ceramic)	146.0059

Neck liner			
for steel	Ø 0.8–1.2	149.0004	149.0040
	Ø 1.4–1.6	–	149.0043
for al	Ø 0.8–1.2	149.0013	149.0045
	Ø 1.4–1.6	–	149.0047

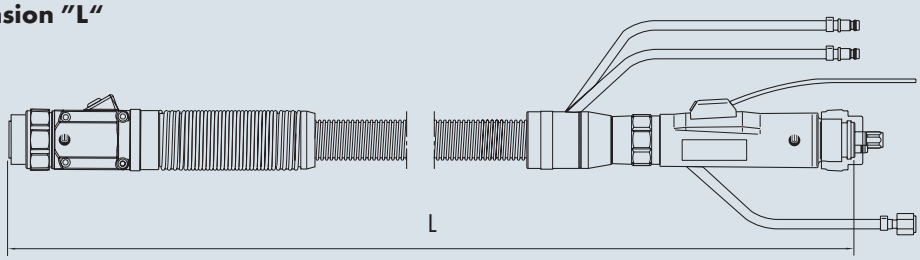
MIG/MAG-Welding Torch System "VTS-Interlock"
liquid cooled

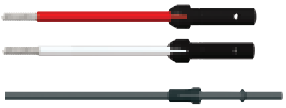
Cable assemblies and accessories

Hybrid cable assembly cpl. with Bikox power cable for improved cooling and long life-time							
Length	L=1.10 m	L=1.20 m	L=1.35 m	L=1.50 m	L=2.00 m	L=2.65 m	L=3.00 m
Part-No.	785.8020	785.8017	785.8021	785.8018	785.8023	785.8024	785.8025

The control cable is not pre-wired on the machine end. Power source specific types on request.
Included in delivery is liner red 0.8–1.2 mm. Other liner please order seperately.

Dimension "L"





Liner		up to L=2.0 m [3]	up to L=3.15 m [3]	L=10.0 m [4]	**Collet / Nipple f. liner**
Liner steel red [1]	Ø 0.8–1.2	124.0145	124.0146	124.0159	131.0012
Liner steel white [1]	Ø 1.4–1.6	124.0147	124.0148	124.0160	131.0011
PA-Liner [2]	Ø 0.8–1.2	128.0039	128.0012	128.0036	131.0001
	Ø 1.4–1.6	128.0040	128.0020	128.0038	131.0002

Mounting arm for connection

■ **to the Robot mount CAT2**

Clamp holder
Adjustable TCP definition [5]

Segment holder
Pre-defined angle in 15°-steps [5]

Fixed bracket
Fixed defined TCP [5]

■ **directly to the robot [6]**

RTM holder
To be used at robots with integrated collision software, variable in 15°-steps [5]

[1] Red and white steel liner (insulated) for the use of non-alloyed and low-alloyed steels. The totally insulated wire feed prevents damage caused by "micro-arcing" on the wire. This allows optimal current transfer inside the contact tip improving the welding process. The insulated steel liner must be used for power sources with optional welding wire sensors. Liner for the use of aluminium and special wire types available on request.

[2] PA-Liner for the use of aluminium and special wire types. Good feed ability properties and scratch resistance on the weld wire. Application temperature limit 150° C.

[3] Including one collet/nipple

[4] For individual production including two collets/nipples

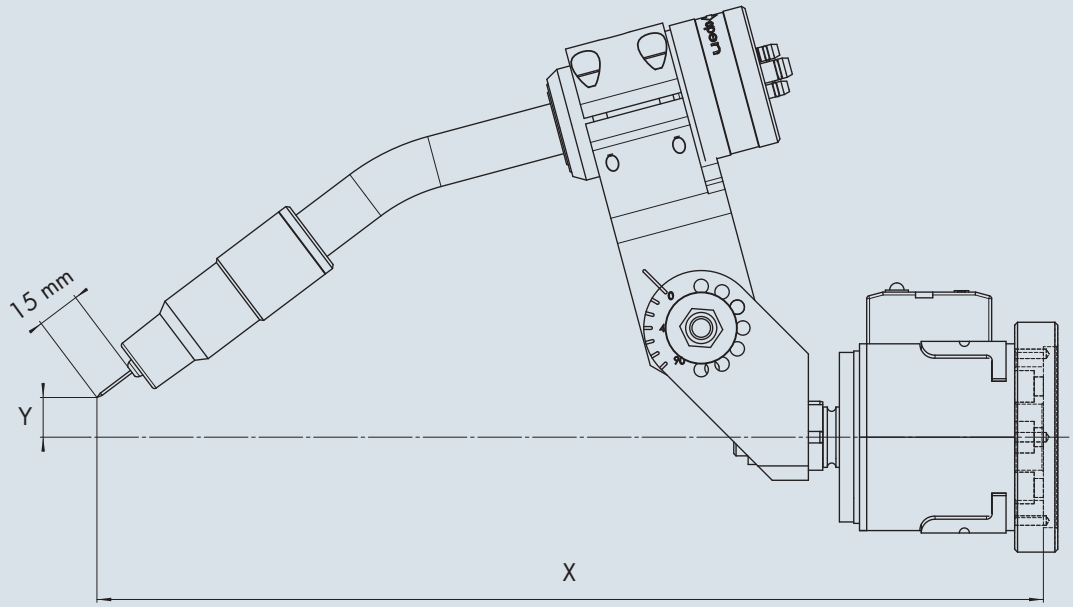
[5] Part-No.: see table page 11

[6] Adapter flanges see page 21.

ROBO VTS 290, ROBO VTS 500TS

Dimension sketch and alignment jigs

ROBO VTS shown with segment holder



Mounting Type	Torch	Torch geometry	X	Y	Part-No.
Clamp holder	VTS 290	22°	354	0	780.0259
	VTS 290	45°	332	0	780.0259
	VTS 500TS	22°	354	0	780.0259
	VTS 500TS	45°	326	0	780.0259
Segment holder	VTS 290 / VTS 500TS	22°	variable in 15°-steps		780.0184
	VTS 290 / VTS 500TS	45°	variable in 15°-steps		780.0184
Fixed bracket	VTS 500TS	22°	350	0	780.0278
	VTS 500TS	45°	350	0	780.0282
RTM holder	VTS 290 / VTS 500TS	22°	variable in 15°-steps		780.0195
	VTS 500TS	35°	variable in 15°-steps		780.0195
	VTS 290 / VTS 500TS	45°	variable in 15°-steps		780.0195

Other mountings on request.

Alignment jig for torch type	for torch geometry	Part-No.
ROBO VTS 290	22° / 45°	837.0452
ROBO VTS 500TS	0° / 22° / 45°	837.0464
ROBO VTS 500TS	35°	837.0466

MIG/MAG-Welding Torch System "WH and WH-PP"
liquid cooled

"Quick adaption to changing welding tasks ..."

The ABICOR BINZEL neck change torch system makes it possible to replace the complete torch neck by an identical type as well by special geometries for different welding positions in next to no time.

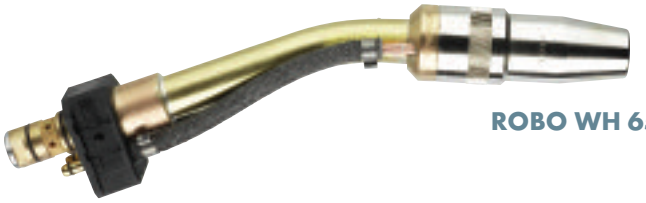
The replacement of contact tip and gas nozzle as well as the monitoring of the TCP also take place outside the welding cell, thus increasing the availability of the system and reducing downtimes.

- Flexible adaption on changing welding jobs
- Also available as a Push Pull System
- liquid cooled up to 550 A
- Well proven and 100% reliable

ROBO WH 242 D

ROBO WH W500

Quick change body WH



ROBO WH 652 D TS

Quick change body WH-PP

... fully automatic torch neck change – see page 26

ROBO WH 242 D

Technical data (EN 60 974-7):

Rating:	320 A CO_2
	280 A Mixed gases M21 (EN 439)
Duty cycle:	100%
Wire size:	0.8–1.2 mm

ROBO WH W500

Technical data (EN 60 974-7):

Rating:	550 A CO_2
	500 A Mixed gases M21 (EN 439)
Duty cycle:	100%
Wire size:	0.8–1.6 mm

ROBO WH 652 D TS

Technical data (EN 60 974-7):

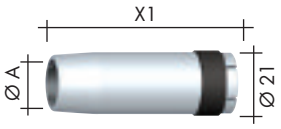
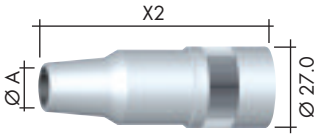
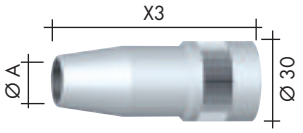
Rating:	550 A CO_2
	500 A Mixed gases M21 (EN 439)
Duty cycle:	100%
Wire size:	1.0–1.6 mm

Swan neck	Part-No.			
Type	**0°**	**22°**	**35°**	**45°**
ROBO WH 242 D	962.1314	962.1315	–	962.1316
ROBO WH W500	962.1550	962.1549	962.1551	962.1532
ROBO WH 652 D TS	962.1353	962.1365	–	962.1366

Wear and spare parts are not included in the delivery!
Please order separately and according to the application!

ROBO WH 242 D, ROBO WH W500, ROBO WH 652 D TS

Wear parts

	ROBO WH 242 D		ROBO WH W500		ROBO WH 652 D TS	
						
Gas nozzle bottle form (5 pcs.)	**Ø A**	**X1**		**X2**		**X3**	
"RECESS" (– 2.6 mm) [2]	Ø 13.0	–	–	77.0 mm	145.0556	–	–
"RECESS" (– 1.1 mm) [2]	Ø 13.0	–	–	75.5 mm	145.0479	–	–
"RECESS" (– 2.6 mm) [2]	Ø 15.5	–	–	77.0 mm	145.0480	–	–
"RECESS" (– 1.1 mm) [2]	Ø 15.5	–	–	75.5 mm	145.0544	–	–
"STICK OUT" (+ 2.4 mm) [3]	Ø 15.5	–	–	72.0 mm	145.0466	–	–
Gas nozzle conical (5 pcs.)	**Ø A**	**X1**		**X2**		**X3**	
"RECESS" (– 1.0 mm) [2]	Ø 13.0	62.0 mm	145.0135	–	–	–	–
"RECESS" (– 1.1 mm) [2]	Ø 15.5	–	–	75.5 mm	145.0553	–	–
"RECESS" (– 1.0 mm) [2]	Ø 15.5	62.0 mm	145.0090	–	–	–	–
"STICK OUT" (+ 1.9 mm) [3]	Ø 15.5	–	–	72.5 mm	145.0568	–	–
"RECESS" (– 1.0 mm) [2]	Ø 18.0	–	–	–	–	84.0 mm	145.0574
"RECESS" (– 1.0 mm) [2]	Ø 21.5	–	–	–	–	84.0 mm	145.0575

		28.0 mm Ø 8	28.0 mm Ø 8	30.0 mm Ø 10	35.0 mm Ø 12
Contact tip (10 pcs.)		**M6**	**M6**	**M8**	**M10**
CuCrZr	Ø 0.8	140.0054	140.0054	140.0117	–
	Ø 0.9	140.0172	140.0172	140.0217	–
	Ø 1.0	140.0245	140.0245	140.0316	140.0348
	Ø 1.2	140.0382	140.0382	140.0445	140.0481
	Ø 1.4	–	–	140.0536	140.0547
	Ø 1.6	–	–	140.0590	140.0616

	23.5 mm M6	23.2 mm M6 / M8	28.0 mm M10
Contact tip holder (10 pcs.)			
M6	142.0149	142.0133	–
M8	–	142.0117	–
M10	–	–	142.0145

	27.0 mm M16x1	21.0 mm M18x1	16.0 mm M22x1
Nozzle insulator (10 pcs.)			
Standard	146.0066	146.0054	146.0056
High-temperature-resistant	–	146.0059	146.0069(Ceramic)

Neck liner				
for steel	Ø 0.8–0.9	149.0073	149.0226	–
0° / 22°	Ø 1.0–1.2	149.0077	–	149.0080
	Ø 1.4–1.6	–	149.0228	149.0083
for steel	Ø 0.8–0.9	149.0075	149.0227	–
35° / 5°	Ø 1.0–1.2	149.0079	–	149.0080
	Ø 1.4–1.6	–	149.0229	149.0083
for al	Ø 0.8–1.0	149.0085	149.0230	149.0088
0° / 22°	Ø 1.2–1.6	149.0090	149.0232	149.0093
for al	Ø 0.8–1.0	149.0087	149.0231	149.0088
35° / 45°	Ø 1.2–1.6	149.0092	149.0233	149.0093

[1] FLUSH = Gas nozzle flushed • [2] RECESS = Gas nozzle standing back • [3] STICK OUT = Gas nozzle protruding

Viewing samples of the different gas nozzles you can find on the pages 5 and 9.

MIG/MAG-Welding Torch System "WH and WH-PP"
liquid cooled

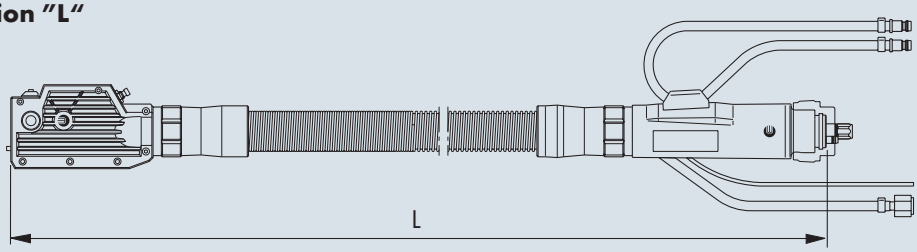
Cable assemblies

Cable assemblies "WH" cpl.								
Length	L=1.05 m	L=1.15 m	L=1.25 m	L=1.45 m	L=1.65 m	L=2.15 m	L=2.65 m	L=3.15 m
Part-No.	965.2001	965.2002	965.2003	965.2004	965.2005	965.2006	965.2007	965.2008

Cable assemblies "WH-PP" cpl. (gear ratio i=17.1:1 / Motor 42 V DC*)						
Length	L=1.10 m	L=1.50 m	L=1.70 m	L=2.20 m	L=2.70 m	L=3.20 m
Part-No.	965.4014	965.4015	965.4016	965.4001	965.4002	965.4003

Included in delivery is liner red 0.8–1.2 mm. Other liner please order seperately.
*The control cable is not pre-wired on the machine end. Power source specific types of motor-gear-combinations (24 V / 42 V / 32 V) and lengths of more than 3.20 m on request.

Dimension "L"



Liner		up to L=1.65 m	up to L=3.20 m	up to L=5.00 m
Liner steel red [1]	Ø 0.8–1.2	124.0176	124.0111	124.0113
Liner steel BSLblue [1]	Ø 1.4–1.6	124.0136	124.0108	124.0110
PA liner [2]	Ø 0.8–1.2	128.0039	128.0012	128.0016
	Ø 1.4–1.6	128.0040	128.0020	128.0030

Drive roll for WH-PP	Al (U-groove)	Universal (V-groove)
Ø 0.8	961.0017	961.0269
Ø 0.9	961.0056	961.0270
Ø 1.0	961.0018	961.0227
Ø 1.2	961.0019	961.0228
Ø 1.4	–	961.0279
Ø 1.6	961.0020	961.0267

Mounting arm for connection
to the Robot mount CAT2

WH-Standard holder	Segment holder
Adjustable	Pre-defined angle
TCP definition [3]	in 15°-steps [3]

Also available as RTM holder.

[1] Red and BSLblue liner (insulated) for the use of non-alloyed and low-alloyed steels. The totally insulated wire feed prevents damage caused by "micro-arcing" on the wire. This allows optimal current transfer inside the contact tip improving the welding process. The insulated steel liner must be used for power sources with optional welding wire sensors. Liner for the use of aluminium and special wire types on request.

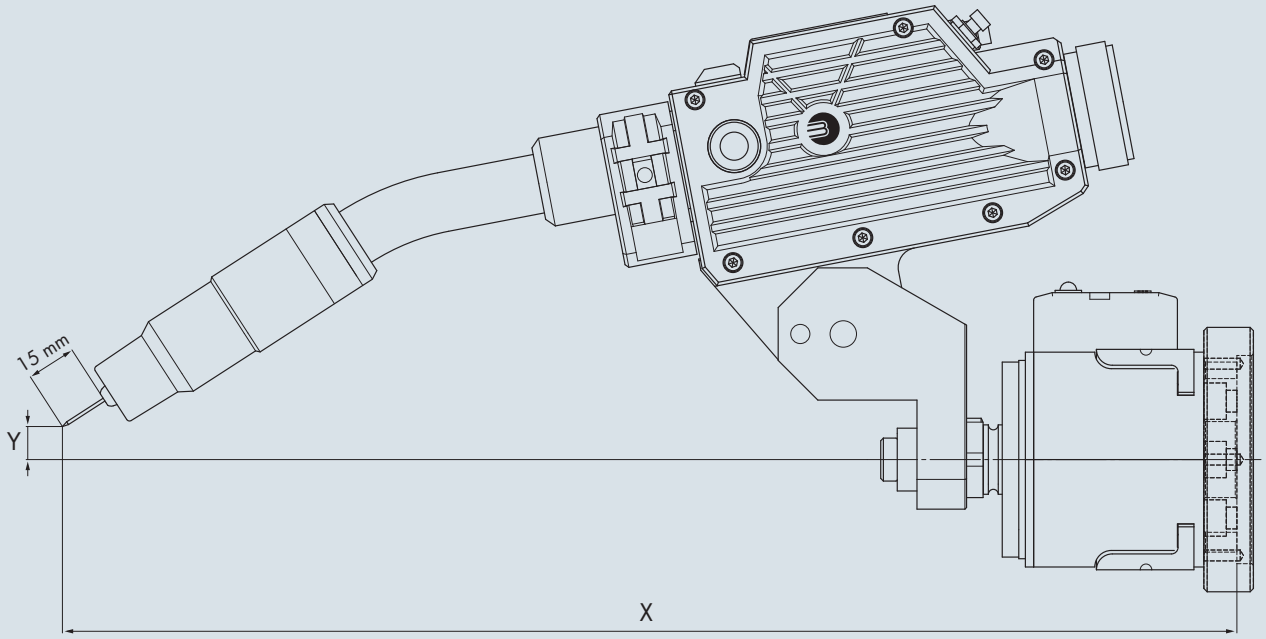
[2] PA liner for the use of aluminium and special wire types. Good feed ability properties and scratch resistance on the weld wire. Application temperature limit 150° C.

[3] Part-No.: see table page 15

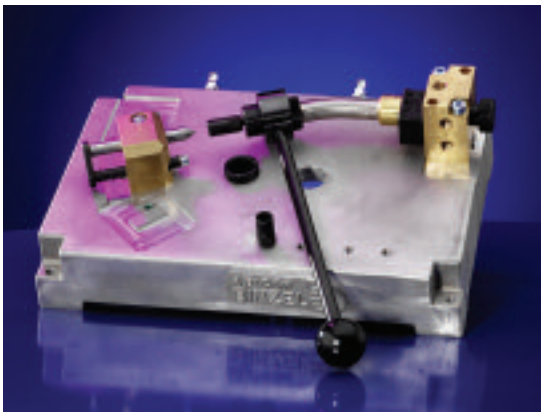
ROBO WH 242 D, ROBO WH W500, ROBO WH 652 D TS

Dimension sketch and alignment jigs

ROBO WH shown with standard holder

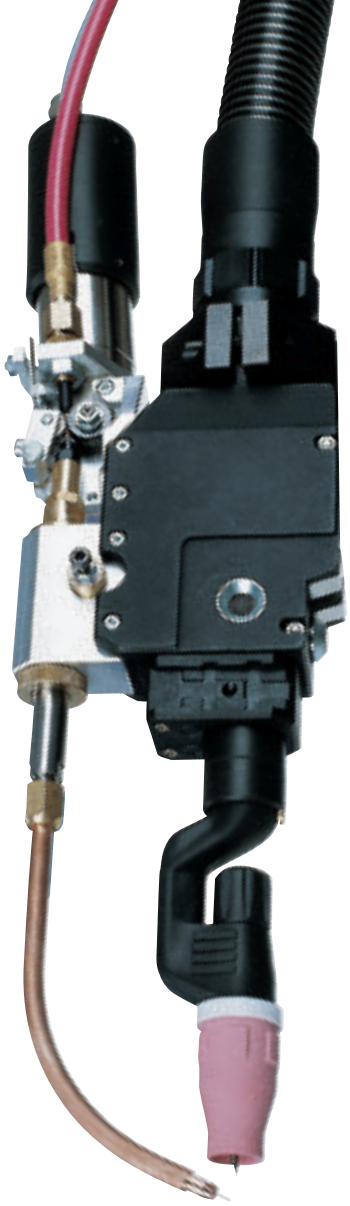


Mounting Type	Torch	Torch geometry	X	Y	Part-No.
WH standard	WH 242 D	22°	354	0	960.0026
adjustable	WH 242 D	45°	349	0	960.0026
	WH W500	22°	354	0	960.0026
	WH W500	45°	349	0	960.0026
	WH 652 D TS	22°	410	0	960.0026
	WH 652 D TS	45°	382	0	960.0026
Segment holder WH	WH 242 D	22° / 45°	variable in 15°-steps		780.0146
	WH W500	22° / 45°	variable in 15°-steps		780.0146
	WH 652 D TS	22° / 45°	variable in 15°-steps		780.0146
RTM holder	WH 242 D	22° / 45°	variable in 15°-steps		780.0360
	WH W500	22° / 45°	variable in 15°-steps		780.0360
	WH 652 D TS	22° / 45°	variable in 15°-steps		780.0360



Alignment jig for torch type	for torch geometry	Part-No.
ROBO WH 242 D	0° / 22° / 45°	837.0020
ROBO WH W500	0° / 22° / 45°	837.0692
ROBO WH W500	35°	837.0688
ROBO WH 652 D TS	0° / 22° / 45°	837.0099

TIG-Welding Torch System "ABITIG®-WH"
liquid cooled



ABITIG® WH 400 W

"Quick, safe and failure-free ..."

The ABITIG® WH-Welding Torch System from ABICOR BINZEL for TIG soldering and TIG welding offers a high process stability for joining various materials.

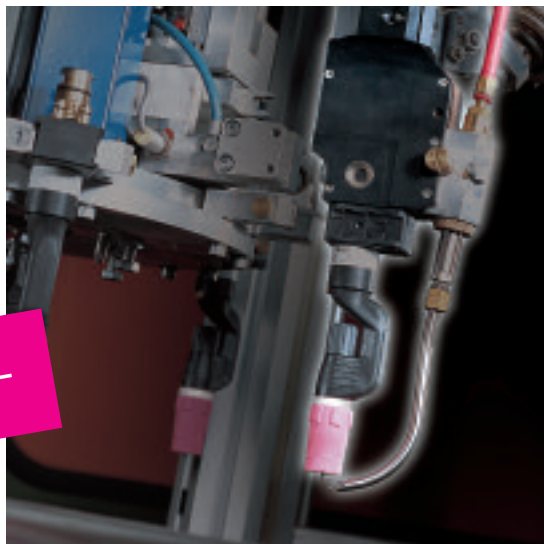
Preset tungsten electrodes, reproducible torch changes and maintenance service outside the robot cell guarantees constant high quality and continuous operation of the system.

With two sizes and different geometries, the TIG welding torch system ABITIG® WH covers nearly all applications in the field of automated TIG welding and is suitable for welding even the most complicated parts. Also available as Push- or Push-Pull-Option with cold wire feeding.

- Flexible adaption on changing welding jobs
- Adjustable tungsten electrodes
- Reproducible torch position
- Cold wire feeding optional
- liquid cooled up to 400 A
- Well proven and 100% reliable

Swan neck	Part-No.			
Type	0°	45°	70°	90°
ABITIG® WH 220 W	–	–	781.1001	–
ABITIG® WH 400 W	781.0504	781.0507	781.0501	781.0510

Wear and spare parts are not included in the delivery!
Please order separately and according to the application!



... fully automatic torch neck change – see page 26

ABITIG® WH 220 W

Technical data (EN 60 974-7):

Rating:	220 A DC
	160 A AC
Duty cycle:	100%
Wire size:	1.0–3.2 mm

ABITIG® WH 400 W

Technical data (EN 60 974-7):

Rating:	400 A DC
	280 A AC
Duty cycle:	100%
Wire size:	1.6–4.8 mm

ABITIG® WH 220 W, ABITIG® WH 400 W

Wear parts	**ABITIG® WH 220 W**	**ABITIG® WH 400 W**
		
Back cap		
	776.0053	967.1351

	35.0 mm	33.0 mm	56.0 mm	47.0 mm
				
Electrode holder / Gas diffuser (5 pcs.)	**Electrode holder**	**Gas diffuser**	**Electrode holder**	**Gas diffuser**
Ø 1.0 mm	776.0061	776.0171	–	–
Ø 1.6 mm	776.0062	776.0172	775.0062	773.0172
Ø 2.0 mm	776.0067	776.0177	775.0067	773.0177
Ø 2.4 mm	776.0063	776.0173	775.0063	773.0173
Ø 3.2 mm	776.0064	776.0174	775.0064	773.0174
Ø 4.0 mm	–	–	775.0065	773.0175
Ø 4.8 mm	–	–	775.0066	773.0176

		
Insulator	(10 pcs.)	(1 pc.)
	776.1043	775.1043

	26.0 mm	37.0 mm
		
Gas nozzle short, Ceramic (10 pcs.)		
Ø 6.5 mm	777.0081	–
Ø 7.5 mm	–	775.0081
Ø 8.0 mm	777.0082	–
Ø 9.5 mm	777.0083	–
Ø 10.0 mm	–	775.0082
Ø 11.0 mm	777.0084	–
Ø 13.0 mm	–	775.0083
Ø 15.0 mm	–	775.0084

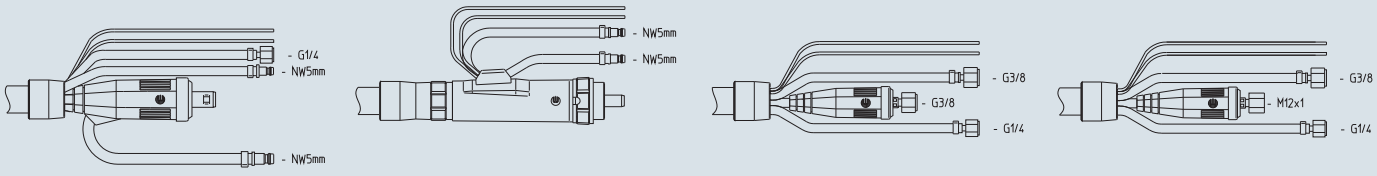
	36.0 mm	52.0 mm
		
Gas nozzle long, Ceramic (10 pcs.)		
Ø 6.5 mm	777.2171	–
Ø 7.5 mm	–	775.2171
Ø 8.0 mm	777.2172	–
Ø 9.5 mm	777.2173	–
Ø 10.0 mm	–	775.2172
Ø 11.0 mm	777.2174	–
Ø 13.0 mm	–	775.2173
Ø 15.0 mm	–	775.2174

TIG-Welding Torch System "ABITIG® WH"
liquid cooled

Cable assemblies and options

Cable assemblies cpl.		Part-No.	
Version	L=4.00 m*	L=6.00 m*	L=8.00 m*
BCS-00 Standard	781.0526	781.0527	781.0528
BCS-03	781.0517	781.0518	781.0519
BCS-06	781.0523	781.0524	781.0525
BCS-08	781.0520	781.0521	781.0522

*Other versions on request.



BCS-00 BCS-03 BCS-06 BCS-08

Options
Cold wire feeding

Description	Version / Specification	Part-No.
Cold wire feeding cpl.	incl. guide tube and -nozzle	967.0320
Guide tube	ABITIG® WH 220 W 70	967.0327
Guide tube	ABITIG® WH 400 W 0	967.0326
Guide tube	ABITIG® WH 400 W 45	967.0328
Guide tube	ABITIG® WH 400 W 70	967.0325
Guide tube	ABITIG® WH 400 W 90	967.0325
Guide tube	for wire size 0.6	967.0335
Guide tube	for wire size 0.8	967.0329
Guide tube	for wire size 1.0	967.0330
Guide tube	for wire size 1.2	967.0331
Guide tube	for wire size 1.6	967.0332
Wire conduit cpl.	4.00 m length	781.0514
Wire conduit cpl.	6.00 m length	781.0515
Wire conduit cpl.	8.00 m length	781.0516

Push-Pull Option

Push-Pull Option cpl. with tacho motor	i=13.7:1 for ΔV = 1.1–8.0 m / min. incl. drive rolls	963.0120
Push-Pull Option cpl. with encoder motor	i=34.3:1 for ΔV = 0.2–5.0 m / min. incl. drive rolls	963.0253
Drive roll	for wire size 0.6	961.0268
Drive roll	for wire size 0.8	961.0269
Drive roll	for wire size 1.0	961.0227
Drive roll	for wire size 1.2	961.0228
Drive roll	for wire size 1.6	961.0267

Ignition / Bracket

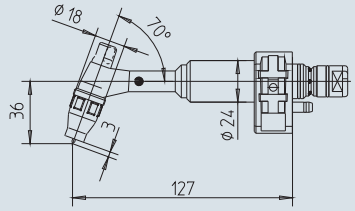
Ignition aid cpl.	ABITIG® WH 220 W	967.0102
Ignition aid cpl.	ABITIG® WH 400 W	967.0101
Bracket	Connector for CAT2	963.0007
Standard bracket	ABITIG® WH 220 W / 400 W	960.0026

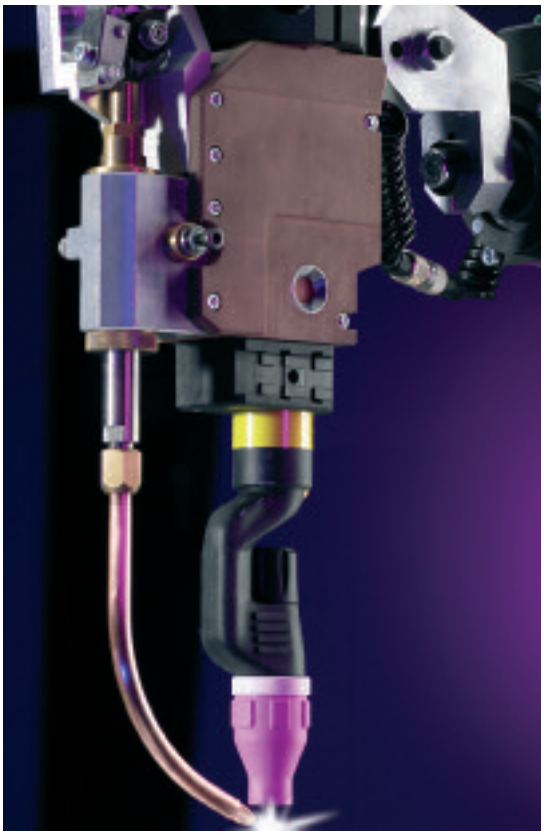
ABITIG® WH 220 W, ABITIG® WH 400 W

Dimension sketches and alignment jigs

ABITIG® WH 220 W

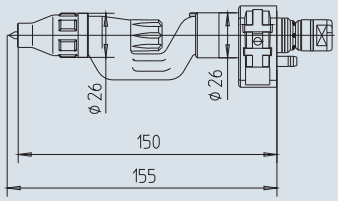
70°



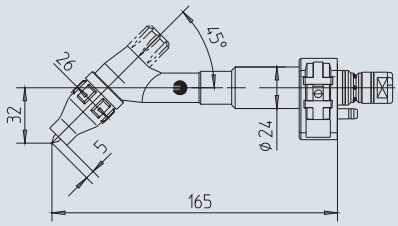


ABITIG® WH 400 W

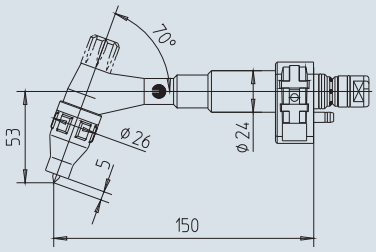
0°



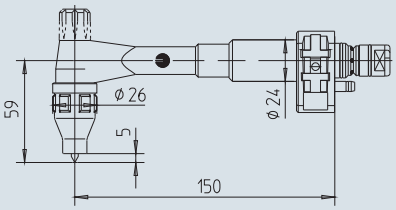
45°

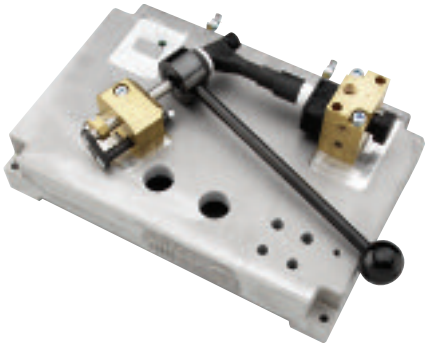


70°



90°





Alignment jig for torch type	for torch geometry	Part-No.
ABITIG® WH 220 W	70°	837.0442
ABITIG® WH 400 W	0° / 70°	837.0440
ABITIG® WH 400 W	45° / 90°	837.0441

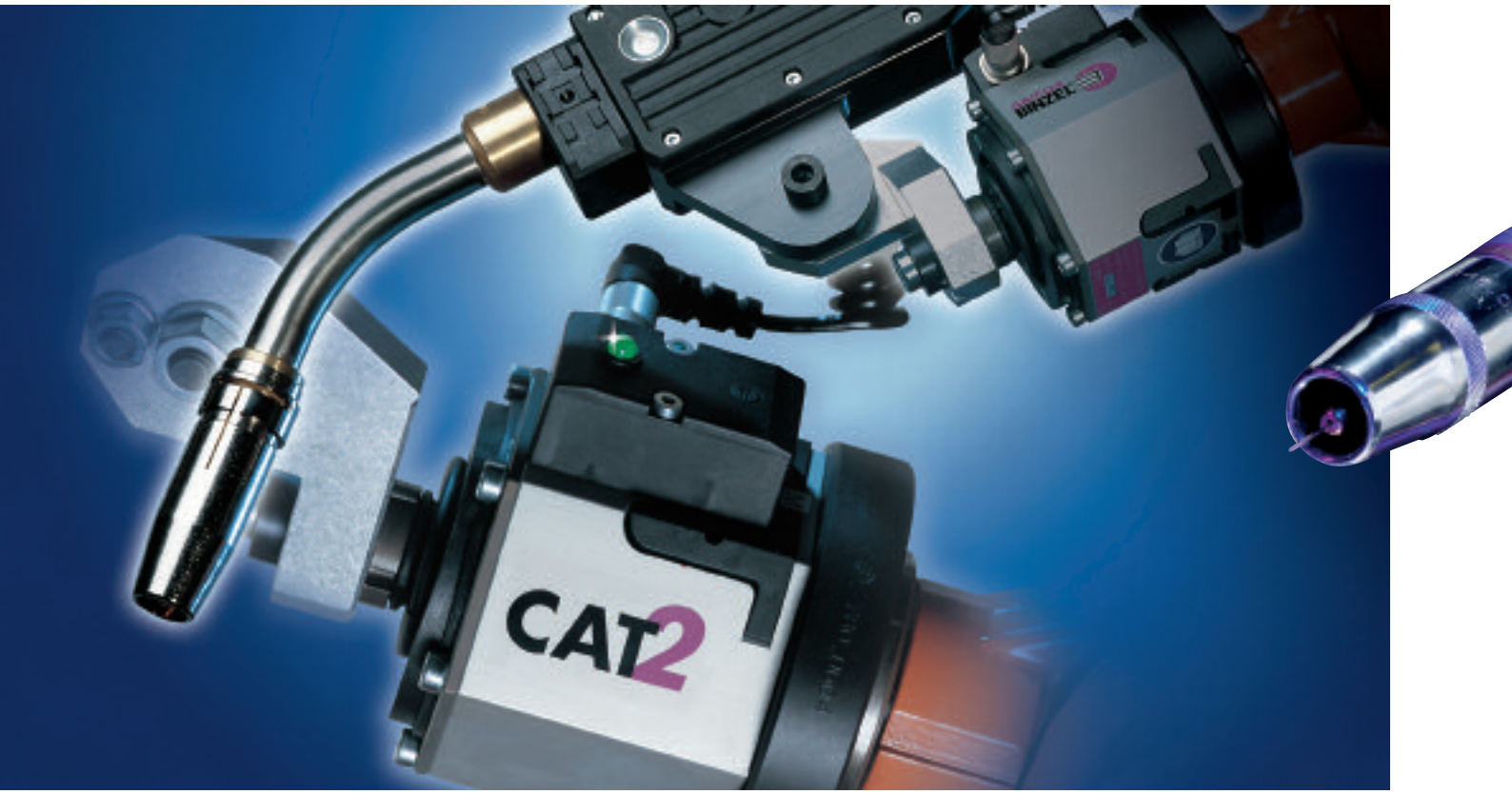
Robot mount "CAT2" – for safer welding

To stop collisions quickly ...

Faster robots, increasing dynamics, and thinner metals with complex outlines can lead to a collision of the torch to the workpiece. The **CAT2** robot mount protects against collisions with optimized resetting accuracy. Safety switch sensitivity can be user adjusted.

The wide range of accessories gives the **CAT2** a multitude of mounts and extensions for realising the desired TCP.

- Variable deflection in every position
- Instantaneous stop in case of collision
- Precise repeatability minimizes downtime
- Precise switch points by innovative switching-time response
- Perfect for ultrahigh accuracy, light gauge sheet metal operations
- Easy to service by visual multi-functional display for a quick error analysis
- Covered screws for quick service
- Adaptable to all robot types and handling systems – by adapter flange (plastic or aluminium)



Technical data:
Robot mount "CAT2"

Dimensions:	Corner width 75 mm; Across flats 65 mm; Height 87 mm (robot flange > release flange)
Weight:	approx. 630 g approx. 850 g (incl. tool holder and flange)
Release force:	please look at the chart
Max. excursion:	- in X- and Y-plane against each spring 10–14° - in Z-plane against each spring 4–8 mm
Instantaneous stop release:	- Through Z-axis 0.5°–1° - Deviation through X- and Y-direction approx. 1.5° - Deviation through Z-direction approx. 0.5–1 mm
Repeatability:	< +/– 0.04 mm (at 300 mm stand-off from robot flange)
Safety switch:	24 V DC, max. 100 mA

Robot mount "CAT2"

Deflection of the CAT2:

- Collision in direction of the X- or Y-axis
- Rotation around the Z-axis
- Collision in direction of the Z-axis

The release torque is defined by the spring types, depending on application and weight of the torch. There are five spring types available – see table.

Release force (N)

Spring type	Release force	
	X-, Y-axis (N)	Z-axis (N)
S	46	475
M	80	535
L	85	925
LL	130	1325
XL	150	1540

ABIROB® A360
with Robot mount CAT2

Robot mount CAT2

Description	Part-No.
Robot mount CAT2 (S) cpl. [1]	780.2131
Robot mount CAT2 (M) cpl. [1]	780.2100
Robot mount CAT2 (L) cpl. [1]	780.2121
Robot mount CAT2 (LL) cpl. [1]	780.2118
Robot mount CAT2 (XL) cpl. [1]	780.2132
Robot mount CAT2 (S)	780.2031
Robot mount CAT2 (M)	780.2001
Robot mount CAT2 (L)	780.2021
Robot mount CAT2 (LL)	780.2038
Robot mount CAT2 (XL)	780.2032
Holder	780.0202
Helix cable cpl.	780.0201
Universal TCP Check Tool for CAT2	780.0204

[1] Cpl. with holder (780.0202) and helix cable (780.0201)

Adapter flange

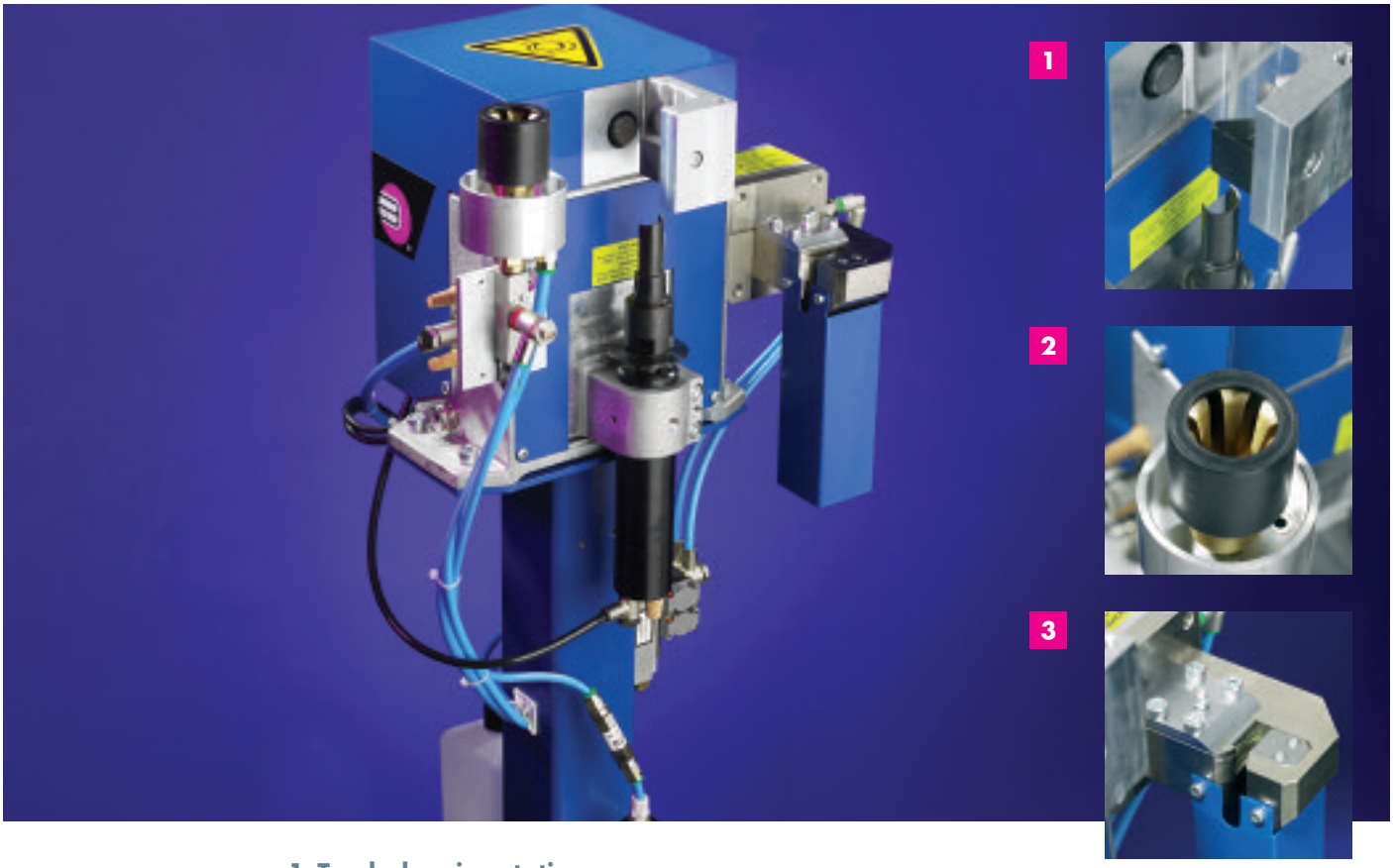
Description	Plastic type Part-No.	Aluminium type Part-No.
ISO 9409-1-A31.5	780.0632	780.0532
ISO 9409-1-A40	780.0604	780.0504
ISO 9409-1-A50	780.0603	780.0503
ISO 9409-1-A63	780.0614	780.0514
ISO 9409-1-A80	780.0607	780.0507
ISO 9409-1-A100	780.0649	780.0549
ISO 9409-1-A125	780.0630	780.0530

Adapter flanges can be delivered for all common welding robots.
Please indicate type and model of robot.

Attention! Due to insulation reasons always apply plastic adapter flange when using MIG/MAG welding torches of the ABIROB® A product series!

Torch Cleaning Station "BRS-CC"
Plug & Play ...

... the complete solution for reliable automatic servicing of the torch neck. Installed quickly and easily, or **"Plug & Play ..."**, the compact torch cleaning station BRS-CC means top reliablility. Combined in a single station, the 3 systems guarantee optimally timed processes and an increase in available plant floor space. A number of other features such as mounting stand and drip pan reduce installation costs.



1. Torch cleaning station
- Precise and effective cleaning for almost all robot welding torches
- Proven and trusted cutter principle, suitable even for heavy spatter adhesion
- 3-point clamping of the gas nozzle fixes the torch in place during the cleaning process

2. Spraying unit "TMS-VI"
- Direct, economical spraying of anti spatter fluid reduces welding spatter adhesion and extends the servicing intervals
- Clean environment thanks to encapsulated spraying nozzle and collecting pan for dirty residual oil
- Simple disposal of residual oil and replenishment of the anti-spatter agent by simply exchanging the bottles

3. Wire cutting fixture "DAV"
- The combined clamping and shearing action guarantees precise cutting quality and ensures optimum arc-start properties as well as exact TCP measurement
- Long service life thanks to sturdy design

Torch cleaning station "BRS-CC"

Description	Part-No.
"BRS-CC" cpl.	831.0490
"BRS-CC" without "DAV"	831.0550
"BRS-CC" without "DAV" without rack	831.0570
"BRS-CC" with "DAV" without rack	831.0580

Torch cleaning station "BRS-CC"

V-Block and reamer

For torch type	with gas nozzle	Outer-Ø / Nominal-Ø (mm)	Length (mm)	with contact tip	Clamping block Part-No.	Reamer Part-No.
ABIROB® A300	145.0671.5	22.0 / 14.4	36.0	M6 / Ø 8	831.0371	837.0709.1
ABIROB® A360	145.0599	22.0 / 12.0	68.0	M6 / Ø 8	831.0371	831.0604
ABIROB® A360	145.0600	22.0 / 12.0	70.0	M6 / Ø 8	831.0371	831.0604
ABIROB® A360	145.0601	22.0 / 12.0	65.0	M6 / Ø 8	831.0371	831.0604
ABIROB® A360	145.0595	22.0 / 14.0	68.0	M6 / Ø 8	831.0371	831.0592
ABIROB® A360	145.0596	22.0 / 14.0	70.0	M6 / Ø 8	831.0371	831.0618
ABIROB® A360	145.0597	22.0 / 14.0	65.0	M6 / Ø 8	831.0371	831.0593
ABIROB® A360	145.0618	22.0 / 14.0	68.0	M6 / Ø 8	831.0371	831.0592
ABIROB® A360	145.0619	22.0 / 14.0	65.0	M6 / Ø 8	831.0371	831.0593
ABIROB® A360	145.0592	22.0 / 16.0	68.0	M6 / Ø 8	831.0371	831.0487
ABIROB® A360	145.0593	22.0 / 16.0	70.0	M6 / Ø 8	831.0371	831.0487
ABIROB® A360	145.0594	22.0 / 16.0	65.0	M6 / Ø 8	831.0371	831.0589
ABIROB® A500	145.0589	28.0 / 13.0	75.0	M6 / Ø 8	831.0318	831.0180
ABIROB® A500	145.0590	28.0 / 13.0	77.0	M6 / Ø 8	831.0318	831.0180
ABIROB® A500	145.0591	28.0 / 13.0	72.0	M6 / Ø 8	831.0318	831.0169
ABIROB® A500	145.0586	28.0 / 14.0	75.0	M6 / Ø 8	831.0318	831.0592
ABIROB® A500	145.0587	28.0 / 14.0	77.0	M6 / Ø 8	831.0318	831.0618
ABIROB® A500	145.0588	28.0 / 14.0	72.0	M6 / Ø 8	831.0318	831.0593
ABIROB® A500	145.0580	28.0 / 16.0	75.0	M8 / Ø 10	831.0318	831.0488
ABIROB® A500	145.0581	28.0 / 16.0	77.0	M8 / Ø 10	831.0318	831.0488
ABIROB® A500	145.0582	28.0 / 16.0	72.0	M8 / Ø 10	831.0318	831.0591
ABIROB® A500	145.0583	28.0 / 16.0	75.0	M8 / Ø 10	831.0318	831.0488
ABIROB® A500	145.0584	28.0 / 16.0	77.0	M8 / Ø 10	831.0318	831.0488
ABIROB® A500	145.0585	28.0 / 16.0	72.0	M6 / Ø 8	831.0318	831.0591
VTS 290	145.0495	25.0 / 13.0	44.5	M6 / Ø 8	831.0316	831.0169
VTS 290	145.0564	25.0 / 13.0	48.5	M6 / Ø 8	831.0316	831.0180
VTS 290	145.0494	25.0 / 15.5	44.5	M6 / Ø 8	831.0316	831.0576
VTS 500TS / WH W500	145.0479	25.0 / 13.0	75.5	M8 / Ø 10	831.0316	831.0368
VTS 500TS / WH W500	145.0556	25.0 / 13.0	77.0	M8 / Ø 10	831.0316	831.0368
VTS 500TS / WH W500	145.0466	25.0 / 15.5	72.0	M8 / Ø 10	831.0316	831.0216
VTS 500TS / WH W500	145.0568	25.0 / 15.5	72.5	M8 / Ø 10	831.0316	831.0216
VTS 500TS / WH W500	145.0553	25.0 / 15.5	75.5	M8 / Ø 10	831.0316	831.0023
VTS 500TS / WH W500	145.0544	25.0 / 15.5	75.5	M8 / Ø 10	831.0316	831.0023
VTS 500TS / WH W500	145.0480	25.0 / 15.5	77.0	M8 / Ø 10	831.0316	831.0023
WH 242 D	145.0135	21.0 / 13.0	62.0	M6 / Ø 8	831.0314	831.0564
WH 242 D	145.0090	21.0 / 15.5	62.0	M6 / Ø 8	831.0314	831.0563
WH 652 D TS	145.0574	30.0 / 18.0	84.0	M10 / Ø 12	831.0319	831.0162
WH 652 D TS	145.0575	30.0 / 21.5	84.0	M10 / Ø 12	831.0319	831.0547

Technical data:

Pneumatic connection – manifold block

Compressed air supply outlet: G 1 / 4
Inside width: min. Ø 6 mm
Nominal pressure: 6 bar
Operating pressure: 6–8 bar

Electrics – terminal block

4 inlets for triggering the 5 / 2-control valves
Control voltage: 24 V DC
Power demand: 4.5 W
1 inductive proximity switch a-contact (pnp)
Operating voltage: 10–30 V DC
Tolerated residual ripple: Vss < 10%
Continuous current: max. 200 mA
Current consumption: approx. 4 mA (24 V)
Voltage drop: approx. 1.2 V (200 mA)

Cleaning station

Pneumatic motor (nominal speed)
- with lubricated air: approx. 650 U / min.
- without lubricated air: approx. 550 U / min.
Air consumption: approx. 380 l / min.

Injection unit

Capacity of the bottle: 1 litre

Wire cutting station

Cutting rate at 6 bar
- Solid wire: up to 1.6 mm
- Flux-cored wire: up to 3.2 mm
Cutting time: 0.5 sec.

General data

Weight: approx. 16 kg
Ambient temperature: + 5 °C up to + 50 °C

Front injector "ABIROB® TMS-VI"

For the reduction of spatter adhesion ...

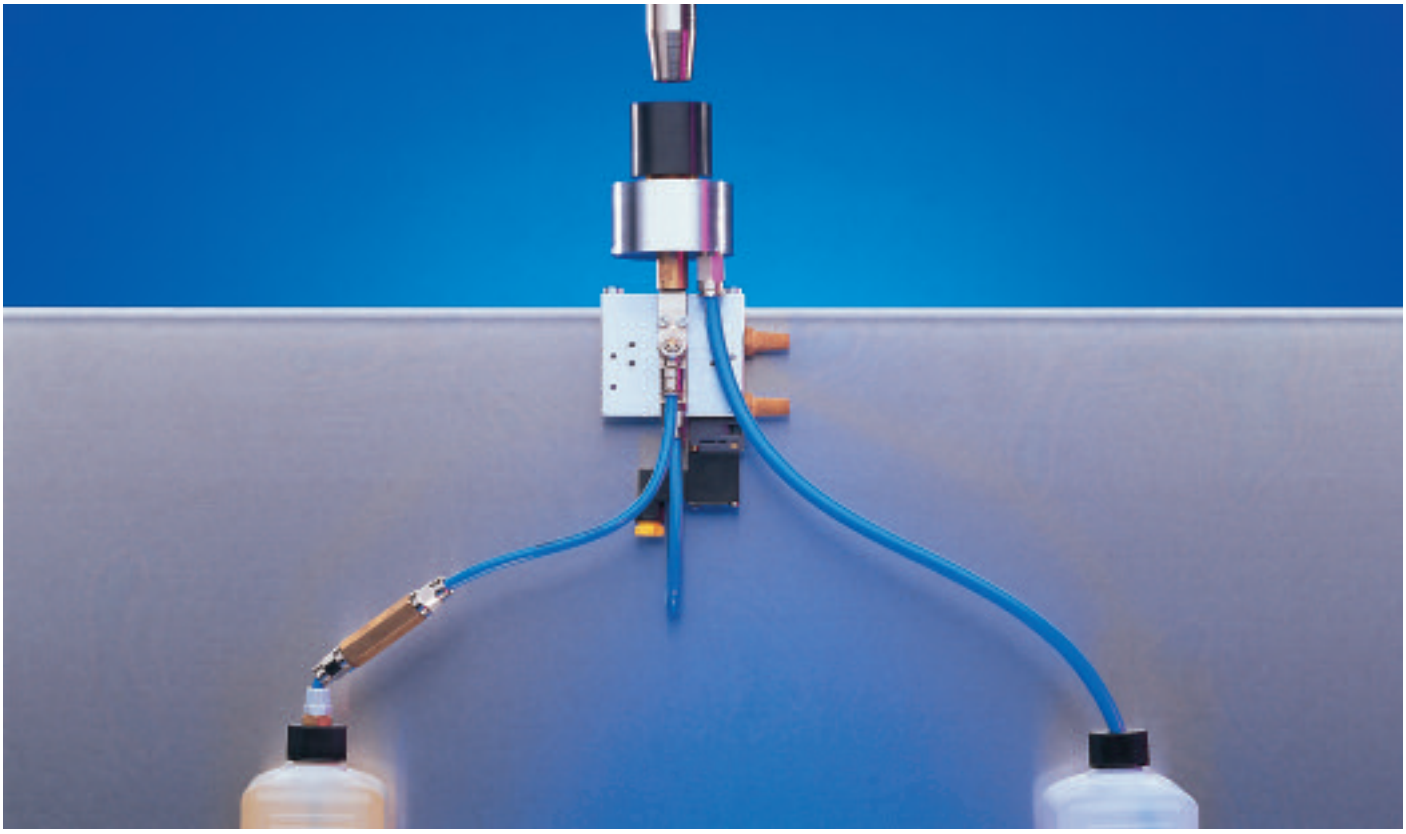
With the **Front injector ABIROB® TMS-VI** the cleaned torch is sprayed with anti spatter fluid which minimizes built-up of welding spatter.

The specially developed spray nozzle enables a highly efficient application of the anti spatter fluid.

Front injector ABIROB® TMS-VI – this new concept enables a smooth and economical spraying of the anti spatter fluid to the front of the welding torch.

The advantages at a glance:

- Effective and economical anti spatter spray supply to nozzle interior and nozzle edge
- Covered injector nozzle and extra bottle for used oil improves working safety and ensures environmental friendly use
- Trouble-free refilling of the anti spatter fluid, simply by swapping the bottle
- Trouble-free dispose of used oil by swapping the bottle
- Installation set for a user-friendly installation of the unit



Technical data:

Pneumatics

Working pressure:	5–10 bar
Compressed air supply outlet:	Internal dia. Ø 4 mm

5 / 2 solenoid valve

Air connection:	G 1 / 8"
Nominal flow:	approx. 650 l / min.
Input signal:	24 V DC
	I max. ≤ 1.1 A
	I nom. = 220 mA

Front injector "TMS-VI"

Description	Part-No.
Front injector TMS-VI cpl.	830.1110
Solenoid valve* pilot-controlled (NW 10) 24 V DC / 42 V AC	832.0005
Anti spatter fluid 1 litre	192.0056
Anti spatter fluid 5 litre	192.0052
Anti spatter fluid 20 litre	192.0048
Anti spatter fluid 200 litre	192.0046

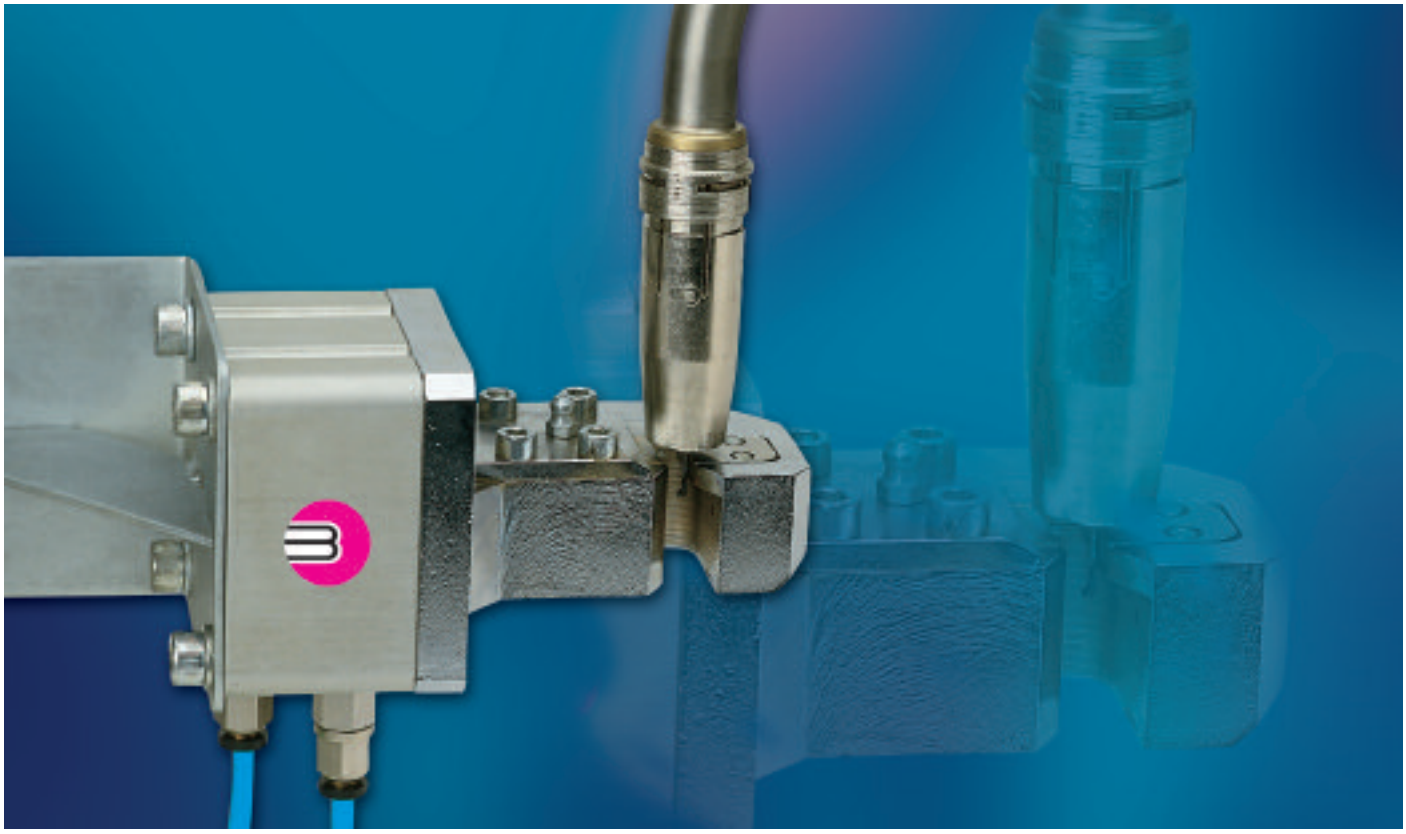
*Optional for blasting through the cable assembly.

Wire cutting station "DAV"
The perfect cut ...

The **wire cutting station DAV** in MIG/MAG robotic welding is an essential requirement to guarantee a consistent wire stick-out, and clean end of the wire as well as better capacity of arc-start due to the cutting of the welding ball and oxides formed at the end of the wire.

The ABICOR BINZEL wire cutting station DAV stands for:

- Defined wire length as requirement for the automatic TCP measurement
- Precise and reliable cutting quality even with hard or thick wires
- High durability and longevity of the blades
- Wire clamping function for the wire removal in connection with the ATS-Rotor



Technical data:

Wire cutting station "DAV"

Working pressure:	6–8 bar
Air connection:	Internal dia. Ø 4 mm
Cutting range at 6 bar:	Solid wire 1.6 mm
	Cored wire 3.2 mm
Weight:	2700 g

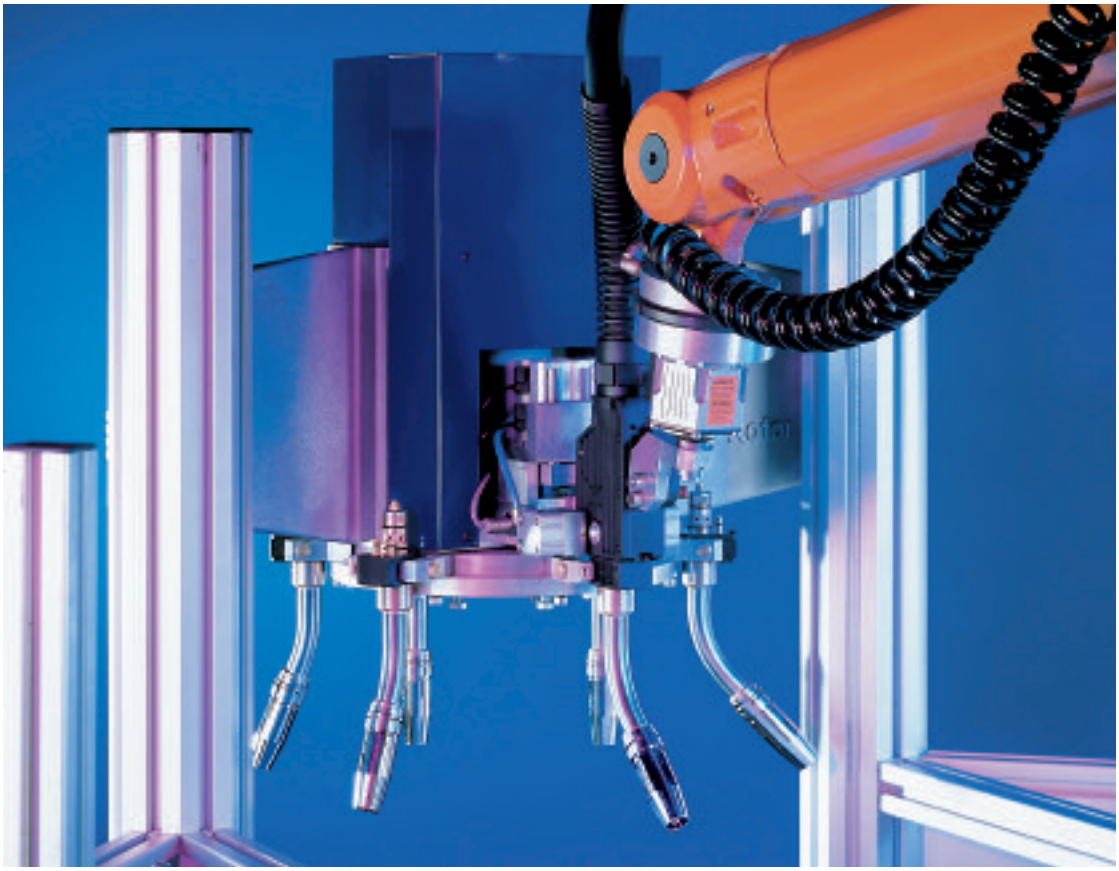
Extension set

Working pressure:	6–8 bar
Air connection:	G 1/ 8"
Control requirements:	24 V DC
	I max. = 1.1 A
	I nom. = 220 mA
Weight:	265 g

Wire cutting station "DAV"

Description	Part-No.
Wire cutting station "DAV" cpl.	839.0020
Replacement knife	839.0024
Replacement static blade	839.0026
Extension set consisting of: 5 / 2-way-valve, plug, connectors, pneumatic hose (1 m) silencer	839.0035

"ATS-ROTOR"
Work around the clock ...



The intelligent system for the automatic exchange of the WH torch necks (MIG and TIG)

Integrated into the robot cell the ATS rotor can be equipped with up to five replacement torch necks. The factory standardized interface enables the application of MIG/MAG- and TIG-neck changes. Depending on the welding application the robot accesses the neck change system cyclically and event-oriented (for example a stuck torch) to exchange a torch neck with a new torch neck.

Only after exchanging all five change necks (in a cyclical exchange) a manual action needs to be done by equipping the ATS rotor with newly serviced necks. Exchanging of the spare and wear parts on the torch necks is performed outside the robot cell, while the production process continous.

This means to the user an enourmous potential (up to the fivefold) of the availability of the unit (referring to the maintenance service at the torch neck).

- System for an automatic torch neck changing, unique worldwide
- Simple aluminium cast frame with low-maintenance pneumatic cylinder
- Integrated SPS (industry standard) for the connection at the robot control system
- Easy to install and use

Technical data:

Dimensions:	660 mm width, 416 mm height (plus 100 mm lift)*
Weight:	approx. 31 kg
Ambient temperature:	5° – 50° C
Protection class:	I (DIN 57 106)

Pneumatic data

Connection:	G1 / 4"
Internal dia.:	min. Ø 6 mm
Rated pressure:	6 bar
Air consumption:	1.5 l

Electrical data

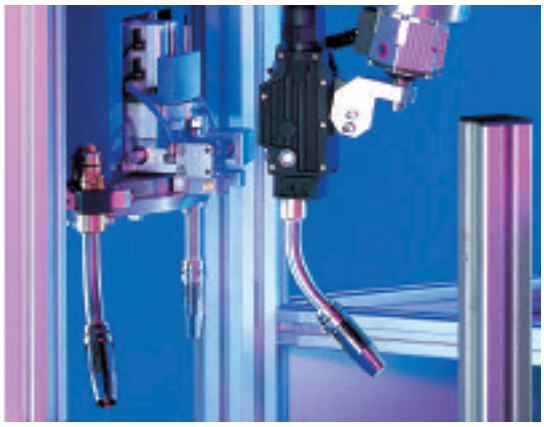
Operating voltage:	24 V DC
Power consumption:	50 W
W max. ripple:	Vss<10%

*For more detailed information please refer to seperate data-sheet.

"ATS-ROTOR"

Functioning

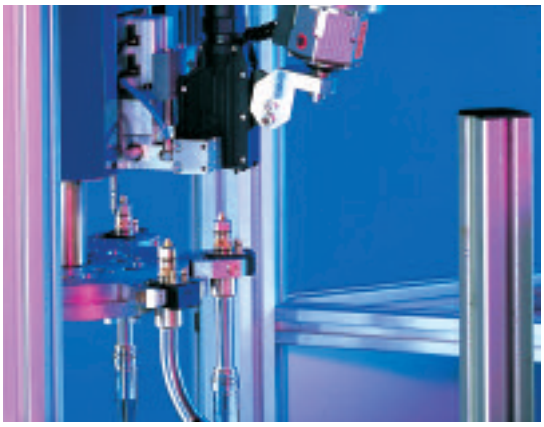
The robot controls the ATS-Rotor through the use of 24 V digital inputs and outputs.
Each individual change cycle is performed automatically under the control of an integrated PLC.



1 Robot docks WH neck into ATS-Rotor change station.

2 Neck release mechanism is engaged and wire is cut inside the torch body.

3 The change neck is taken off by the downward movement of the rotor plate. Quick release valves in the water channels avoid leaking of the coolant.



4 Rotor carousel rotates a replacement neck into position.

5 Replacement neck is locked into position. All supply connectors are automatically made, robot moves out of change station and continues.

ATS-Rotor

Description	Part-No.
ATS-Rotor with SPS	840.3300
ATS-Rotor without SPS	840.3400

Welding Accessories

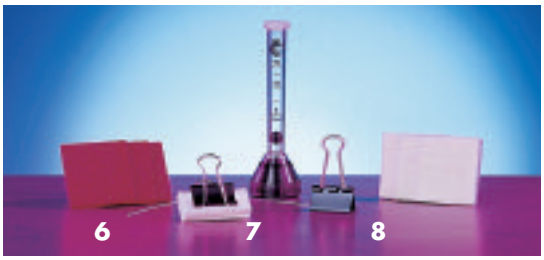
To achieve the best results ...

... one of the things which will help you to achieve the best results in the welding process is to use professional accessories. When ideally tailored to the task, they provide the basis for operational safety and long service life.

High-quality welding accessories increase the output and reliability of your torch.

To achieve perfect results, don't leave anything to chance.

Rely on original welding accessories from ABICOR BINZEL.



1 Anti spatter fluid
silicon free, protect for spatter

1 litre	Part-No.: 192.0056
5 litre	Part-No.: 192.0052
20 litre	Part-No.: 192.0048
200 litre	Part-No.: 192.0046

2 Special coolant BTC-15
The special coolant from BINZEL protect down to –10° C for all liquid welding and cutting facilities.

5 litre	Part-No.: 192.0110
20 litre	Part-No.: 192.0111
200 litre	Part-No.: 192.0112

3 Spigot

for 200 litre barrel	Part-No.: 192.0109

4 Sharpener

for collet core liner	Part-No.: 191.0064

5 Hose cutter Part-No.: 191.0062

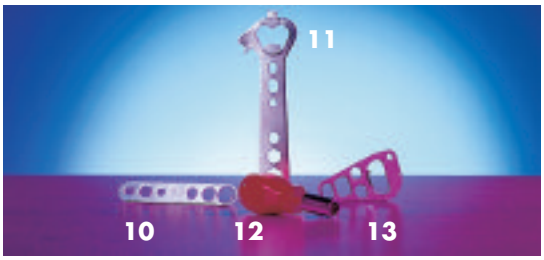
6 Wire cleaning felt

red for steel (set)	Part-No.: 193.0001
white for al (set)	Part-No.: 193.0002
red for steel (25 pcs.)	Part-No.: 193.0003
white for al (25 pcs.)	Part-No.: 193.0004

7 Gas flow meter Part-No.: 191.0003

8 Clamp Part-No.: 193.0007

Welding Accessories



9 Accessory case
big Part-No.: 192.0069
small Part-No.: 192.0066

10 Spanner Part-No.: 191.0001

11 Multiple spanner Part-No.: 191.0015

12 Electrode spanner Part-No.: 743.0064

13 Universal spanner Part-No.: 750.0125

14 Cable assembly support Part-No.: 191.0039

15 Protective cover
2.0 m length Part-No.: 191.0079

Not shown:

Protective cover
ABIROB® A Part-No.: 191.0161

Socket wrench
SW 6 Part-No.: 191.0103
SW 8 Part-No.: 191.0102
SW 10 Part-No.: 191.0104

Alignment tool Part-No.: 191.0090

Cutter for nozzle insulators
M10x1 Part-No.: 191.0085

Coolant Recirculator WK 23 / WK 43

The portable cooling device for all common applications!

- **Simple handling:** Connection (feed and return) via quick-action couplings.
- **Compact design size:** Small space requirements.
- **Sturdy design:** Indestructible stainless steel tank and sturdy housing.
- **Service-friendly:** Clear coolant sight glass.

"Cool" supplement: liquid cooled welding with air cooled power sources!

WK 23

WK 43

Technical data:

Type	WK 23	WK 43
Heat exchanger:	2 lines	4 lines
Immersion pump 50 Hz (protection class IP 54)	Delivery height: Hmax. 32 m Flow rate at G3/8" connector: Qmax. 13.5 liters/min.	Delivery height: Hmax. 32 m Flow rate at G3/8" connector: Qmax. 13.5 liters/min.
Immersion pump 60 Hz (protection class IP 54)	Delivery height: Hmax. 32 m Flow rate at G3/8" connector: Qmax. 16.0 liters/min.	Delivery height: Hmax. 32 m Flow rate at G3/8" connector: Qmax. 16.0 liters/min.
Cooling capacity (RT = 22° C)	approx.1000 W at 1 liter/min.	approx.1250 W at 1 liter/min.
Dimensions (LxBxH)	253x270x460 mm	253x270x516 mm
Weight:	17 kg	18 kg
Tank capacity:	7 liters	7 liters

Type	Line voltage	Frequency	Power rating	Current consumption	Part-No.
WK 23	115 V	50 Hz	0.35 kW	6.5 A	850.0214
WK 23	115 V	60 Hz	0.35 kW	6.5 A	850.0135
WK 23	230 V	50 Hz	0.35 kW	3.1 A	850.0137
WK 23	230 V	60 Hz	0.35 kW	3.1 A	850.0210
WK 23	240 / 415 V	50 Hz	0.50 kW	2.6 / 1.6 A	850.0144
WK 43	115 V	50 Hz	0.35 kW	6.5 A	850.0215
WK 43	115 V	60 Hz	0.35 kW	6.5 A	850.0156
WK 43	230 V	50 Hz	0.35 kW	3.1 A	850.0159
WK 43	230 V	60 Hz	0.35 kW	3.1 A	850.0211
WK 43	240 / 415 V	50 Hz	0.50 kW	2.6 A / 1.6 A	850.0165

Operating instructions:
As coolant for all liquid cooled torch systems, we recommend the special ABICOR BINZEL coolant BTC-15, which remains liquid down to -10° C. Must be used in conjunction with an adequate motor protection device. A water flow cut-off switch (850.0033) is recommended.

Notes

M&W

Our product range:

- **MIG/MAG**
  - Welding Torches
  - Machine and Special Torches
  - Push-Pull Welding Torches
  - Fume Extraction Torches
  - Central Adaptor System
- **TIG**
  - Welding Torches
  - Machine and Special Torches
- **PLASMA**
  - Cutting Torches
  - Welding Torches
  - Machine and Special Torches
- **Robotic Peripheral Equipment**
  - Robot Torches MIG/TIG/Plasma
  - Robot Mount CAT2/iCAT
  - Torch Change System ATS-Rotor
  - Tool Change System WWS
  - Wire Cutting Station DAV
  - Torch Cleaning Station BRS-LC, BRS-CC and BRS-FP
  - Wire Feeding Station APD-MF
- **Welding Accessories**
  - Coolers
  - Welding Cable Plug and Socket
  - Anti Spatter Spray and Paste

  and so on ...

ABICOR BINZEL®

Alexander Binzel Schweisstechnik GmbH & Co. KG
P.O. Box 10 01 53 · D-35331 Gießen
Phone: +49 (0) 64 08 / 59-0
Fax: +49 (0) 64 08 / 59-191
Email: info@binzel-abicor.com

www.binzel-abicor.com

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