TECHNOLOGY FOR THE WELDER'S WORLD.

Get started with ROBOTICS!

ROBiPAK – the right equipment for cobots.

ABICOR BINZEL® ROBOTIC SYSTEMS

www.binzel-abicor.com

Benefit from the possibilities of the new robot technology!

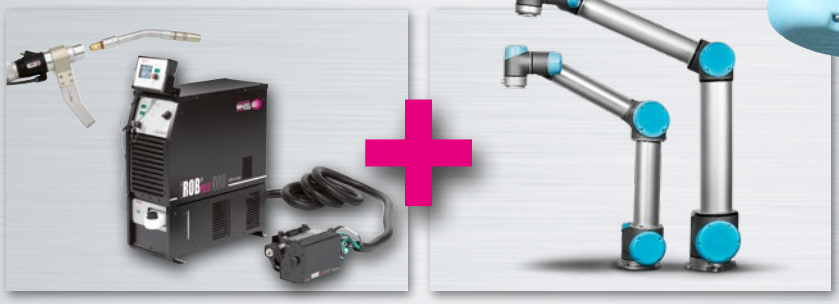
Start now!

The advantages at a glance!

- Relieves you and your welders in production
- Simple programming of various components – no special training required
- Higher efficiency in your production through high productivity and quality
- Welding without physical strain, especially with constantly repeating components
- Collaborating robots (cobots) require less additional safety technology and thus reduce your investment

ROBiPAK – the system solution for cobots. Fits perfectly!

Prefabricated. Immediately ready for use!



The perfectly coordinated team!

The ABICOR BINZEL system solution ROBiPAK for air or liquid cooled welding applications consists of the complete welding equipment including welding torch, torch holder and cable assembly as well as the power source iROB.

- Lower service life costs due to particulary durable components
- Flexible cable assemblies adapted to the movement range of the cobot
- Due to the high TCP stability, you only need to program the cobot once
- Perfect welding seams: the power source iROB also provides pulse and special characteristics curves
- Easy programming: Simply set your welding parameters via the operating panel of the robot

Benefit from the welding know how of the Innovation and Technology Centre (ITC) of ABICOR BINZEL and send in your work piece for test welding.

Optimally tuned!
From the power source to the power nozzle.

Power source iROB Pulse 400

- **Performance strength**
  – iROB Pulse 400 / 400 MV:
  maximum welding current 400 A
- **Easy to use**
  iROB Control: easy, icon-based control prevents operating errors
- **Liquid or air cooling**
  – Air cooled models are ideally suited for thin plate welding
  – Liquid cooled models are specifically designed for high performance welding with high heat emission
- **Intermediate cable assembly**
  Safe power transmission through large wire cross section in liquid cooled or air cooled design
- **Integrated quality management**
  Continuous monitoring of wire feed speed, welding voltage and gas quantity etc.
- **Flexible interface**
  Three interface applications are available: classic analog digital versions or digital field bus systems (optional)

Premium quality in complete packages …

"Ready to weld" packages.
Our "ready to weld" packages provide a perfect basis for an easy development of a robot welding work area and consist of a high-performance power source, a reliable wire feed system and robust welding torches.

iROB Power source: The versatile welding unit for robots.
The strong robot power source iROB is the perfect basis for automated MIG/MAG welding processes. It reliably supplies welding torches with power and ensures the smooth interaction between robot technology, welding torches and peripheral devices. iROB works with the extremely robust pulse technology to guarantee an exceptionally long duty cycle with consistantly good welding results.

Wire feeder system iROB: reliable wire feeding in continuous operation.
The wire feed system consists of the powerful wire feed of iROB and a coordinated wire feed hose.

Welding torch system ABIROB®: robust and high-performance welding technology.
MIG/MAG welding torches of the ABIROB® series with an innovative interface design ensure a continuously precise welding process. Its modular design allows a quick exchange of the torch neck and cable assembly components with the same TCP (tool center point) – without additional programming.

Wire feed iROB feed

- **Consistent wire feed**
  iROB feed ensures the precise and reliable wire feeding in automated continuous operation by four driven wheels
- **Individual mounting platform**
  The iROB bracket modules are specially configured for the respective installation situation of the robots

ABIROB® A 360

ABIROB® W 500

- **Two torch neck variants**
  – ABIROB® A: with air cooling, power range up to 290 A
  – ABIROB® W: with liquid cooling, power range up to 500 A
- **Original wear parts**
  Each package is equipped with a welding ready set of original ABICOR BINZEL wear parts (wire diameter 1.2 mm)
- **Robust cable assemblies**
  The durable cable assemblies (air and liquid cooled) have been specially developed for continuous use in automation

SPS Siemens S7-1200

- **Secure connection via ProfiNet**
  The SPS provides the data exchange between robot and power source
- **Ready to weld!**
  Supplied with power supply, switch and pre-installed software

URCap for ROBiPAK: Simple and intuitive programming.
The included URCap plug-in extends the programming interface after installation with additional functions, which enables you to easily weld with the UR cobot. The easy-to-use commands “Welding start” or “Welding stop” and “Set welding parameters” help you to program quickly. Updates are available free of charge as downloads.

ROBiPAK air cooled
PAK.0023.1

Torch neck and wear parts	Torch neck	ABIROB® A 360, 22°, air cooled	980.1024.1
	Contact tip	CuCrZr M8 / 1.2 mm / 30 mm	140.0445
	Gas nozzle	conical, ND 14 / 0	145.0595
	Contact tip holder	M 8 / M12x1	142.0163.5
Cable assembly and holder	Cable assembly	ABIROB® A ECO for cobots, 3.0 m	890.0468.1
	Holder	RTM-Interlock ABIROB® W	780.0449.1
	Flange	intermediate flange CAT, d = 50.0 mm, ISO 9409-A50 / d = 31.5 / L = 70	780.1613.1
Power source	Power source	iROB Pulse 400	890.0002.1
	Mains plug	32 A / IP 44 – Europe	184.0396.1
	Power supply	iROB KIT Power Supply	890.0005.1
	Interface	iROB RI 3000	890.0104.1
		installation kit RI 3000 – ProfiNet CU	890.0167.1
		interface cable 5.00 m (2 x RJ45)	890.0296.1
	iROB control	operator terminal iROB	890.0009.1
	Holder	holder for iControl	890.0010.1
	Earth cables	95 mm², L = 4.00 m	890.2105.1
Wire feeder	Set consisting of:		890.0485.1
	Coil carrier	coil carrier attachment for iROB	
	Wire feed case	iROB feed 22 B EURO-ZA right	
	Intermediate cable assembly	iROB A / 1.2 m / 95 mm²	
	Wire feeding rollers	V-groove 1.2	890.0238.4
Superior SPS	S7 1200	incl. switch and power supply unit – Plug-and-play	890.0505.1

Technical data torch necks

ABIROB® A 360

Cooling method:	air cooled
Rating:	290 A mixed gas M21 according to DIN EN ISO 14175
Duty cycle:	100 %
Wire-Ø:	0.8–1.4 mm

ABIROB® W 500

Cooling method:	liquid cooled
Rating:	500 A mixed gas M21 according to DIN EN ISO 14175
Duty cycle:	100 %
Wire-Ø:	0.8–1.6 mm

ROBiPAK liquid cooled
PAK.0024.1

Torch neck and wear parts	Torch neck	ABIROB® W 500, 22°, standard, liquid cooled	782.0076.1
	Contact tip	contact tip CuCrZr M8 / 1.2 mm / 30 mm	140.0445
	Gas nozzle	conical ND 15.5	145.0553.10
	Contact tip holder	M 8 / M10x1	142.0117.10
	Gas distributor	standard	943.0284
Cable assembly and holder	Cable assembly	RSP ABIROB® W5F for cobots, 3.0 m	782.1154.1
	Holder	RTM-Interlock ABIROB® W	780.0449.1
	Flange	intermediate flange CAT, d = 50.0 mm, ISO 9409-A50 / d = 31.5 / L = 70	780.1613.1
Power source	Power source	iROB Pulse 400	890.0002.1
	Cooling unit	iCool	890.0001.1
	Mains plug	32 A / IP 44 – Europe	184.0396.1
	Power supply	iROB KIT Power Supply	890.0005.1
	Interface	iROB RI 3000	890.0104.1
		installation kit RI 3000 – ProfiNet CU	890.0167.1
		interface cable 5.00 m (2 x RJ45)	890.0296.1
	iROB control	operator terminal iROB	890.0009.1
	Holder	holder for iControl	890.0010.1
	Earth cables	95 mm², L = 4.00 m	890.2105.1
Wire feeder	Set consisting of:		890.0489.1
	Coil carrier	coil carrier attachment for iROB	
	Wire feed case	iROB feed 22 B EURO-ZA right	
	Intermediate cable assembly	iROB W / 1.2 m / 95 mm²	
	Wire feeding rollers	V-groove 1.2	890.0238.4
Superior SPS	S7 1200	incl. switch and power supply unit – Plug-and-play	890.0505.1

Technical data power sources

	iROB Pulse 400	iROB Pulse 400 MV
Power supply voltage:	3 x 400 V AC	3 x 400 V AC / 3 x 230 V AC
Main voltage tolerance:	± 15 %	± 15 %
Main voltage frequency:		50 / 60 Hz 50 / 60 Hz
Main fuse:	25 A (400 V)	25 A (400 V) / 45 A (230 V)
Max. power input (kVA):	16.1 kVA (400 V)	16.1 kVA (400 V) / 16.5 kVA (230 V)
Max. power input (kW):	15.3 kW (400 V)	15.3 kW (400 V) / 15.7 kW (230 V)
Power factor (PF):	0.95	0.95
Efficiency:	88 % (400 V)	88 % (400 V) / 87 % (230 V)
Max. welding current (40 °C):	x = 60 % 400 A	x = 60 % 400 A
	x = 100 % 360 A	x = 100 % 360 A
Max. welding current (25 °C):	x = 60 % 400 A	x = 60 % 400 A
	x = 100 % 400 A	x = 100 % 400 A
Welding current range:	3 – 400 A	3 – 400 A
Dimensions (LxWxH):	624 x 282 x 474 mm	624 x 282 x 474 mm
Weight:	29.9 kg	31.0 kg

Easily expanded!
Additional options for ROBiPAK.

Perfectly coordinated!

Electronic gas management system
Significantly reduced shielding gas consumption, increased weld seam quality

Wire feeding system MasterLiner
Uniform wire feeding even over longer distances

Torch cleaning station
Automatic cleaning for better welding results and increased system availability

Adjusting device
Easy inspection and adjustment of the TCP of the welding torches outside the welding cell

Kevlar cover
For optimum protection of the robot during welding from spatter and sparks – customized, heat-resistant, non-combustible and cut-resistant

ABICOR BINZEL® ROBOTIC SYSTEMS

Alexander Binzel Schweisstechnik GmbH & Co. KG
Kiesacker · 35418 Buseck · GERMANY
T +49 (0) 64 08 / 59-0
F +49 (0) 64 08 / 59-191
info@binzel-abicor.com

www.binzel-abicor.com

IBG GROUP