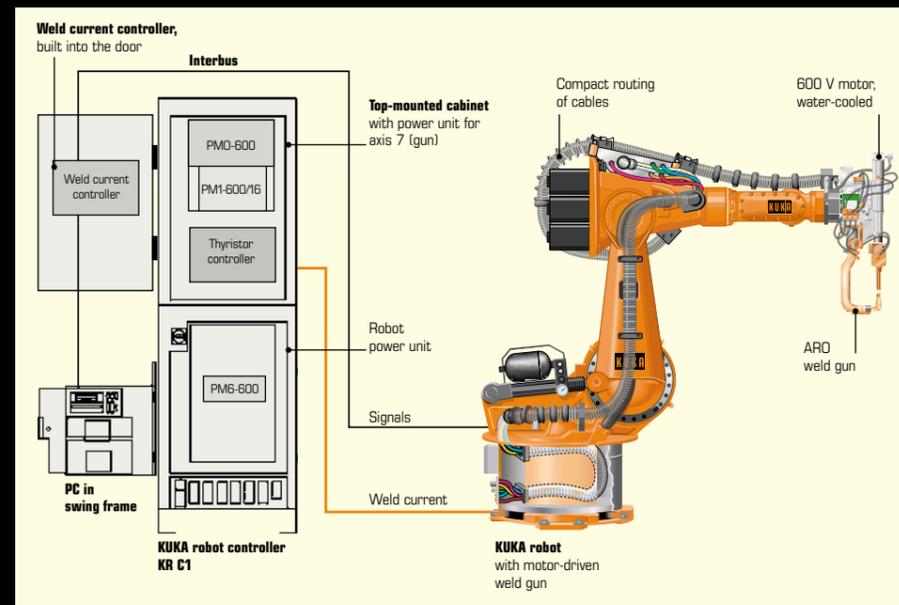


INVEST IN A SYSTEM WITH SEAMLESS INTEGRATION.

Build on KUKA's optimized systems engineering with uniform operator control.



The hardware and software components: power unit for axis 7, programmable weld current controller with thyristor power unit, motor-driven spot weld gun. Application software for control of the motor-driven gun (= axis 7).

From a single source.
KUKA Roboter, KUKA Schweissanlagen and ARO offer an integrated system solution ranging from planning to customer support, consisting of robot, weld gun and process engineering.

Open system.
As an independent manufacturer, KUKA is also open to weld guns from other manufacturers. No matter which guns you wish to use, they will always be compatible with KUKA robots.

Seamless integration.
The open KUKA robot controller KR C1 is prepared for weld gun applications. Everything works together as a single unit and can be integrated without problem.

Information services on
Telephone +49 (0) 8 21/7 97-40 00

KUKA Roboter GmbH
Bluecherstrasse 144
D-86165 Augsburg
Tel.: +49 (0) 8 21/7 97-40 00
Fax: +49 (0) 8 21/7 97-16 16
e-mail: info@kuka-roboter.de
http://www.kuka-roboter.de

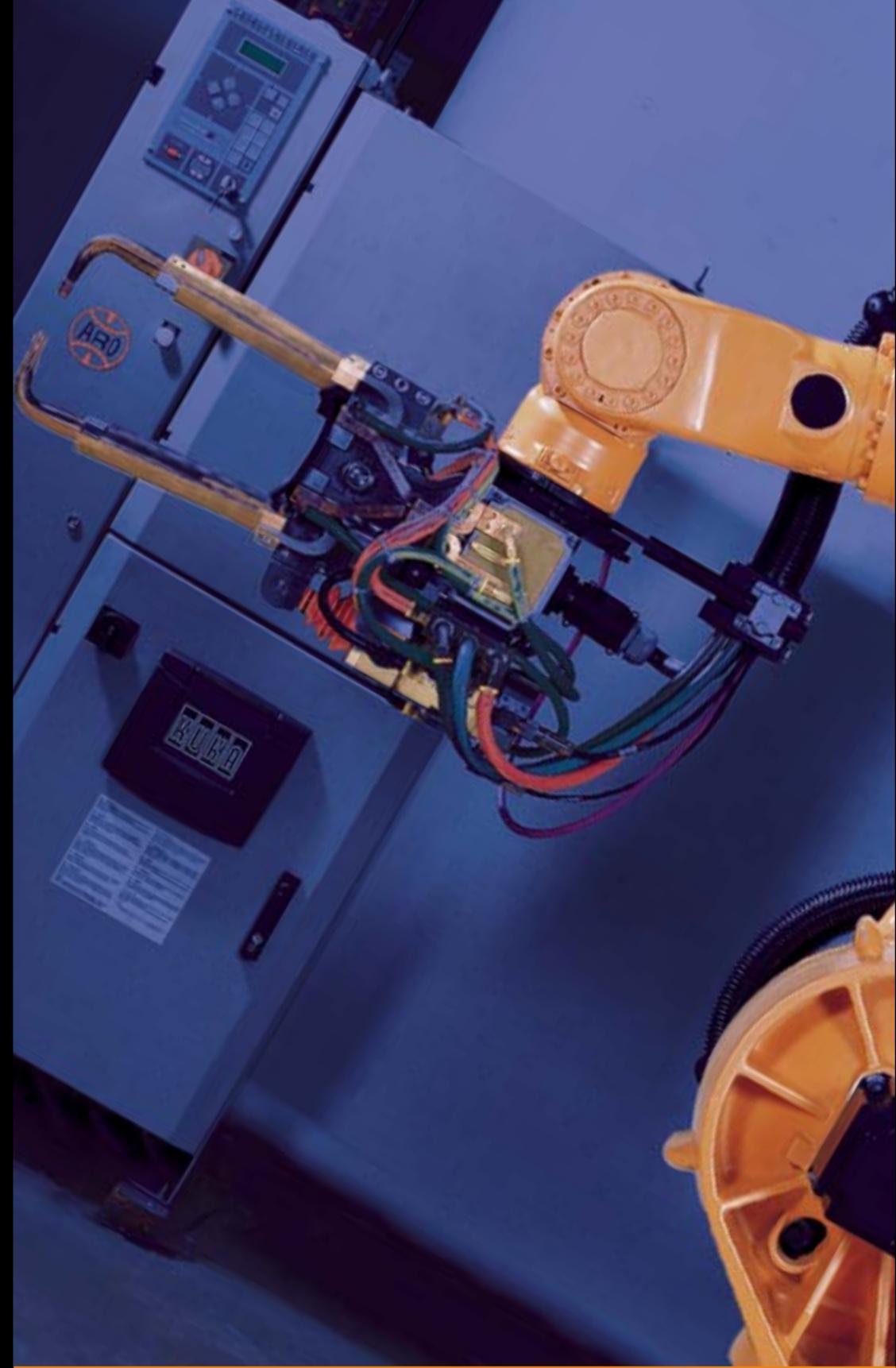
KUKA Schweissanlagen GmbH
Bluecherstrasse 144
D-86165 Augsburg
Tel.: +49 (0) 8 21/7 97-0
Fax: +49 (0) 8 21/7 97-19 91
e-mail: info@kuka.de
http://www.kuka.de

ARO S.A.
1, Avenue de Tours
F-72500 Chateau du Loir
Tel.: +33-2/43 44-74 00
Fax: +33-2/43 44-07 85
e-mail: aro@aronet.com
http://www.aronet.com

IWKA Group companies



Faster on the spot.
KUKA weld gun systems for robots.

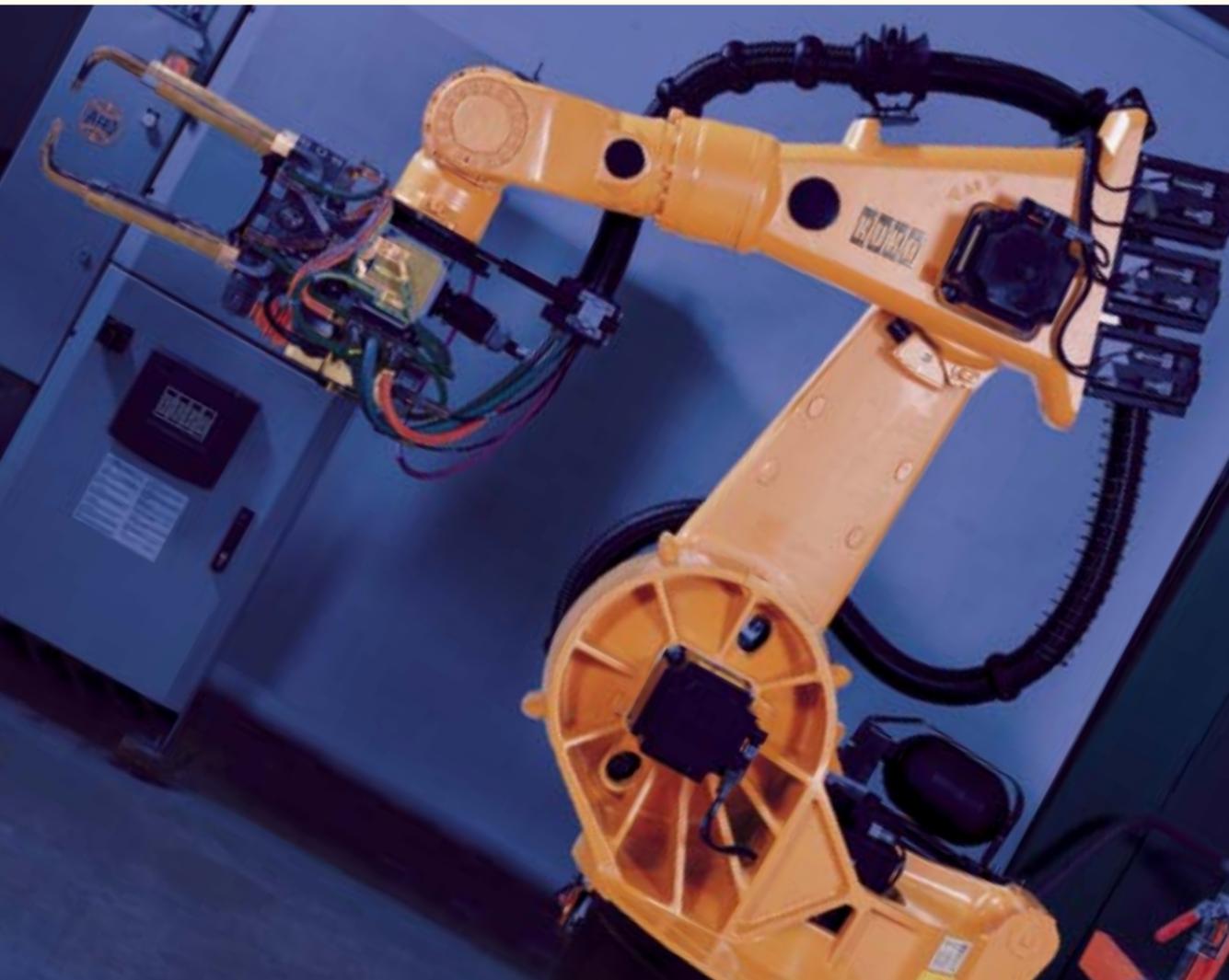


UTILIZE ALL THE ADVANTAGES – SYSTEMATICALLY.

Build on the unique KUKA range of services for expertise in robotics, process engineering and welding.

Systematic solutions. The KUKA Group is the only manufacturer able to supply robots, weld guns and welding systems from a single source. This means that KUKA can offer you unrivalled consultancy and systems competence that is not available anywhere else on the robotics market: ranging from robots and weld guns to process know-how. You can read about all the technical advantages of our systems on the next page.

Open to other manufacturers. KUKA is not bound to any particular contractual partner. On request, KUKA will integrate other manufacturers' weld guns into the application.



PUT THE SQUEEZE ON YOUR CYCLE TIMES.

Invest in electric motor-driven weld guns from KUKA and all their system-based advantages.



Reduce your cycle times:
The gun closes and opens while the robot is moving.



Familiar operator control:
The robot and weld gun systems are fully integrated.



Save compressed air:
Benefit from KUKA's electric motor-driven components.



Lower the noise level in your plant: No more irritating banging noises.

Faster on the spot.

The weld gun is operated as the 7th robot axis, allowing positioning as well as approximation (rounding). This enables the opening and closing motions to be initiated while the robot is moving, making the division into retract and working stroke superfluous. The sheet metal no longer vibrates during welding, and the squeeze time is reduced by a factor of 10. Shorten your cycle times!

A better result.

The robot registers the electrode burn-off and automatically adjusts the gun closing point accordingly. **Familiar operator control.** Operator control is carried out as usual on the KUKA Control Panel (KCP). The virtually maintenance-free weld gun system is fully adapted to the KUKA robot system and therefore requires no extensive training. The application software for the

servo gun is likewise integrated 1 : 1 into the robot software.

Easier to program.

Three sets of commands (SPOT, INIT and TIP Dressing) are all you need to learn to be able to program the entire application: SPOT coordinates the motion and welding sequences, INIT controls the adjustment to the electrode burn-off, and TIP Dressing programs the electric dressing processes. All functions are easy and quick to learn.

A parameter list speeds up programming. The simulation program KR SIM and the KR C1 offline programming facility shorten commissioning and reduce downtime.

Easier handling.

The KCP allows simple manual operation for flexible reworking – and effortless teaching of points. The movements of the gun are still controlled via the robot program.