# OUR BABY HAS ARRIVED!

ADSONE
Automatically more efficiency

BJB
Your Connection to Light

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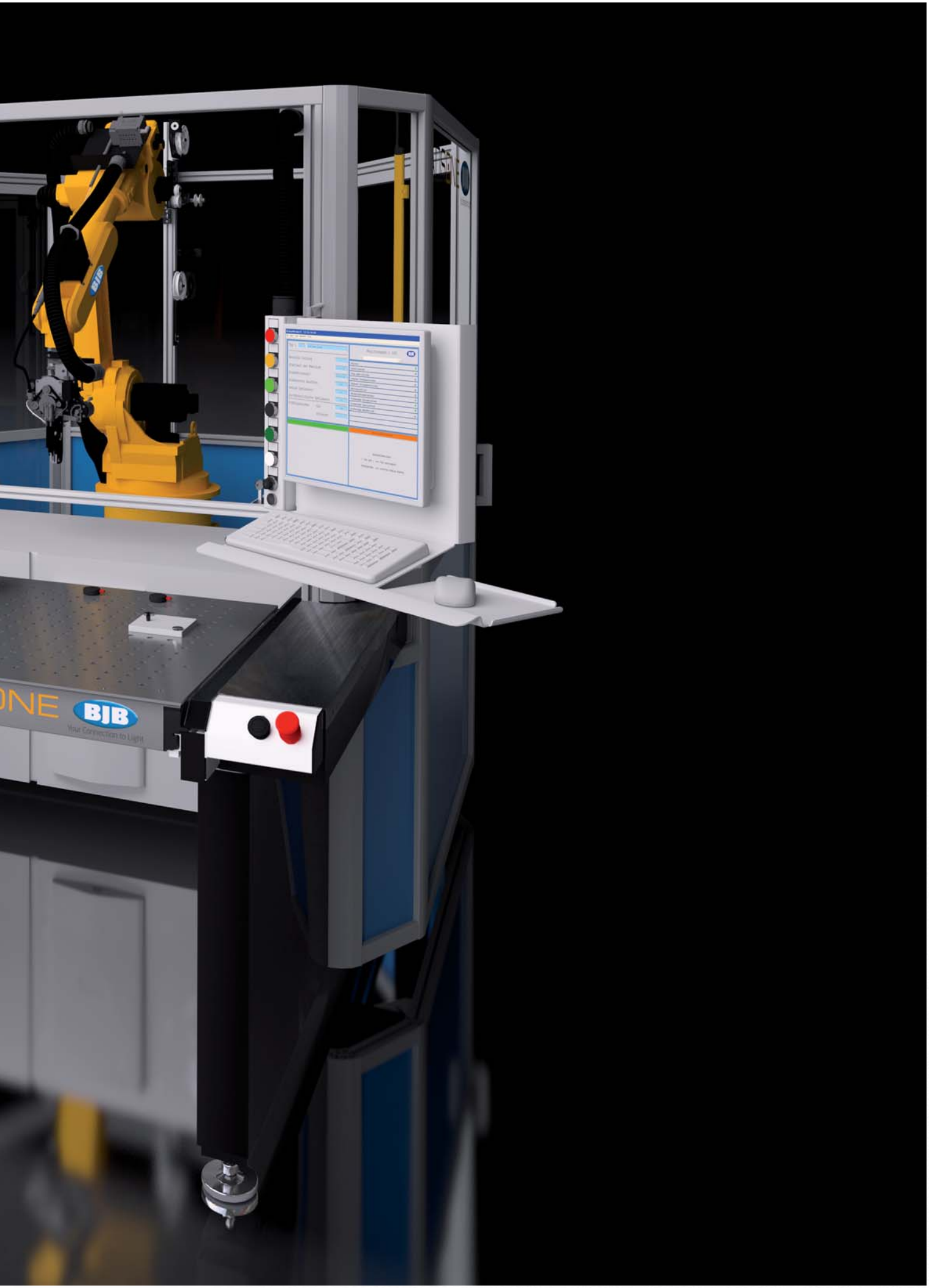
Automatically more efficiency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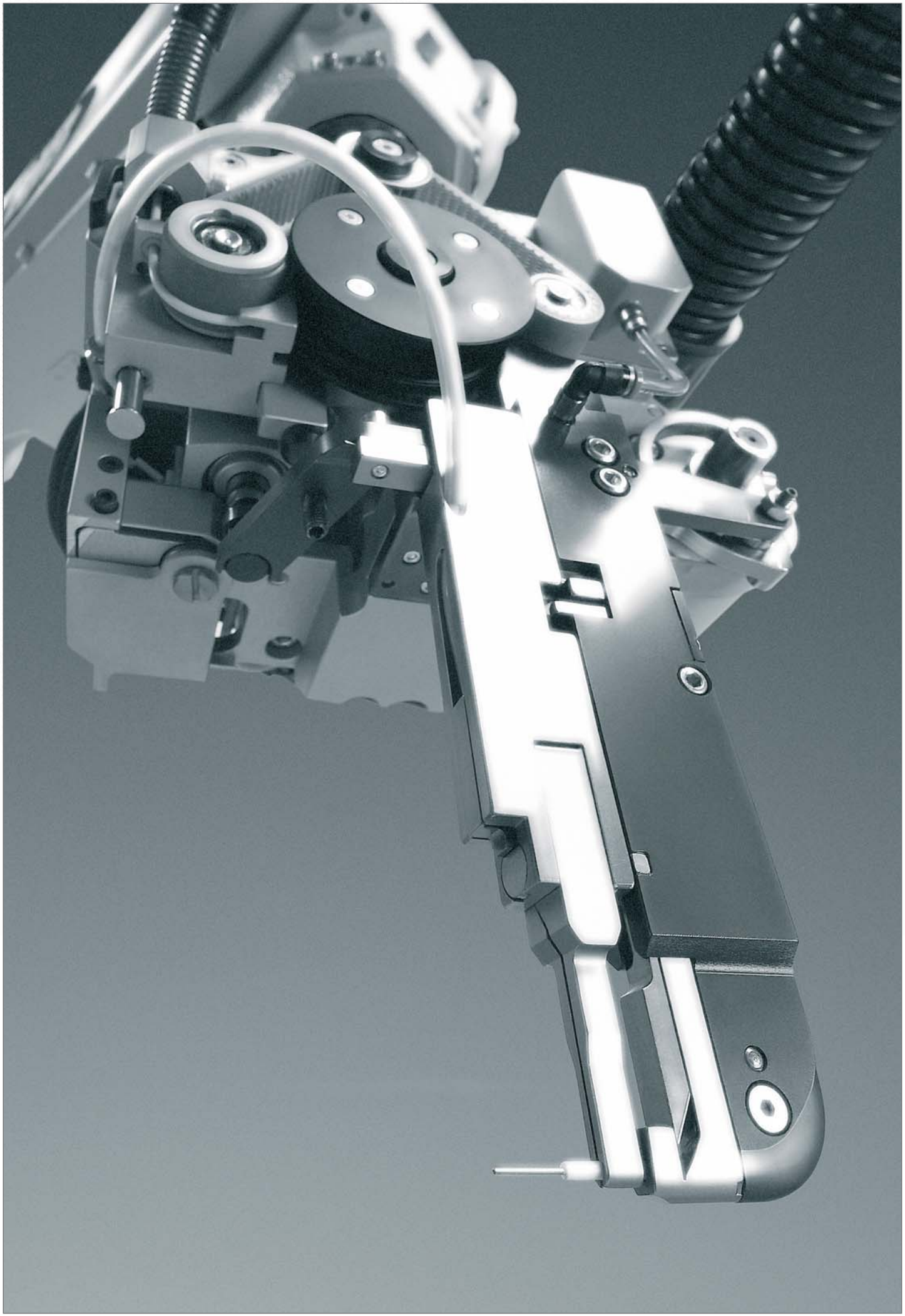


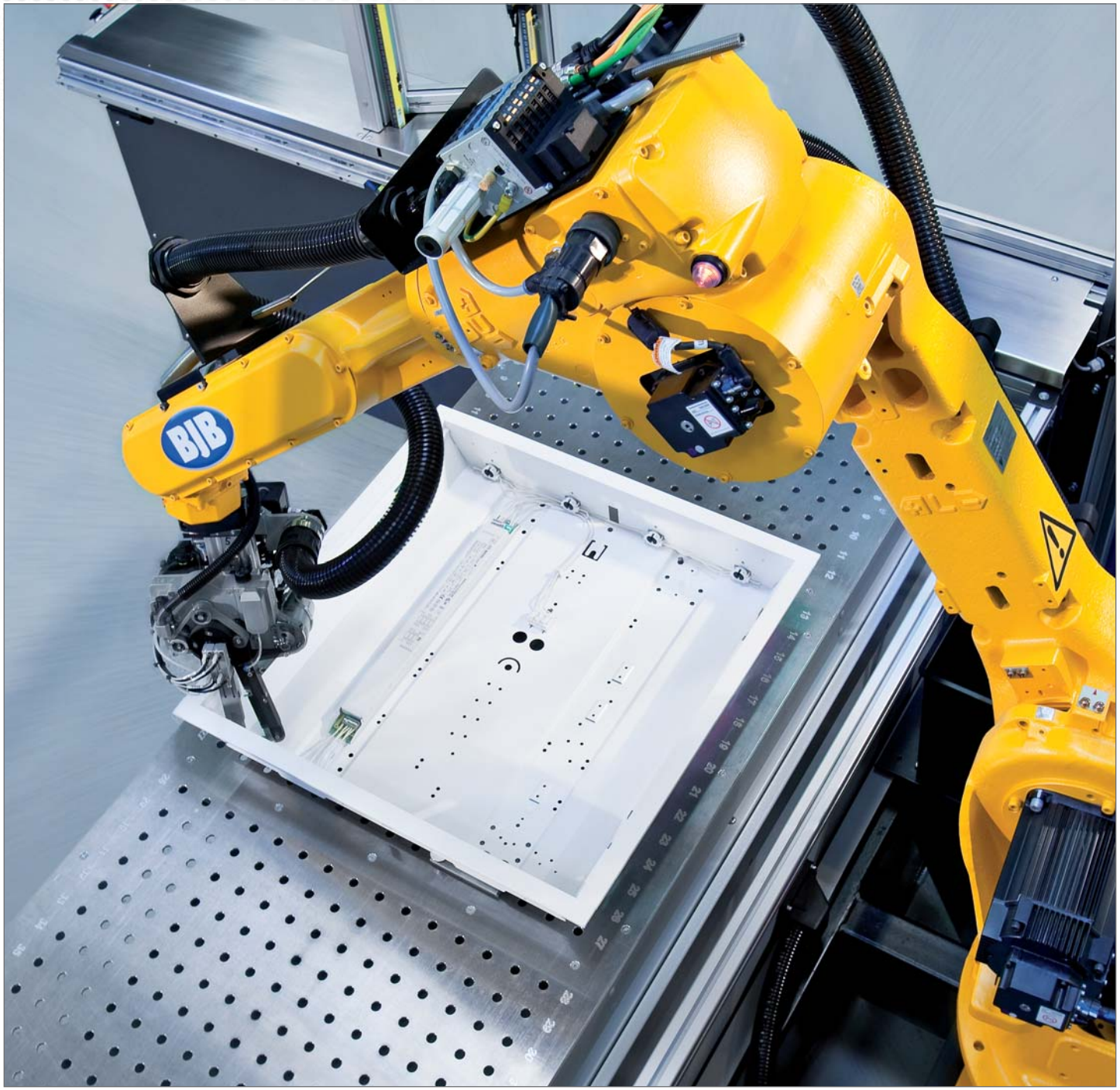
# Install – connect – operate,
# and high-quality light fittings become standard.


With the ADS ONE, BJB is adding a compact model to its series of automatic wiring machines for light fittings. This version has a work tray carrier and the tried and tested 6-axis wiring robot. **We deliver the machine fully assembled, so that it can be set up and put into operation very quickly and easily.** It is suitable as an entry-level model for all manufacturers who want to take the first step towards automation, or as an addition to existing systems and production lines.

With the latest generation of wiring tool and a work tray carrier which is easy to load, this is an extremely efficient, high-precision assembly unit. Even inaccessible points within the light fitting housing can be reached without difficulty and the wiring capabilities range from horizontal wiring of push-wire terminals through to 90° vertical wiring. The newly developed anti-collision module reliably prevents damage to the wiring tool. Like all ADS systems from BJB, the ADS ONE is controlled centrally via an intuitive menu-driven user interface.

Whether in terms of improved productivity or reproducible quality, the ADS ONE offers the user and provides the opportunity to introduce these production technologies in a very attractive package.

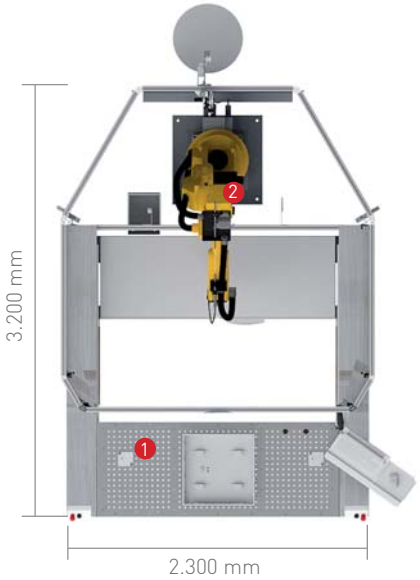
**ADS ONE.** Automatic wiring of light fittings
with one worktray carrier



# **ADS ONE.** Top performance in less than 7 m²

ADS also means consistent high quality. This is because automated series production is considerably more precise than manual work. With the ADS ONE, the production process is as follows:

1. The light fitting housing, equipped with components, is placed on the work tray carrier by the system operator.
2. The operator presses a key to release the work tray carrier, which then moves into the working area of the wiring robot.
3. The light fitting is then wired automatically according to the principles of push-wire technology.
4. As soon as this process has been completed, the work tray carrier with the wired light fitting returns to the initial position and the light fitting can be removed.

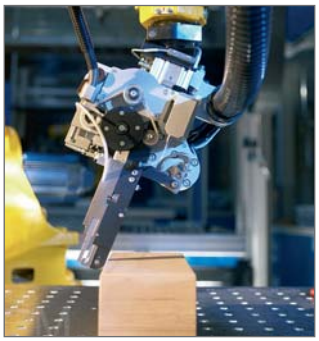



1 Manual workstation
2 Wiring station

# **ADS ONE.** Fully automatic

**Automatic tool measurement**
In order to obtain the best possible wiring result, the wiring tool must be set perfectly. This happens automatically with the aid of the tool measurement. In order to do this, the robot travels with the wiring tool gripper through a laser fork light barrier, and in so doing determines the position of the gripper relative to the robot flange. The newly measured values can then be adopted permanently.

In order to check the setting of the wiring tool, the wire tip can also be checked for the position of the initial and final pushwire terminals. If the deviation is too great, the system operator is requested to check the setting of the wiring tool and to correct it, if necessary.



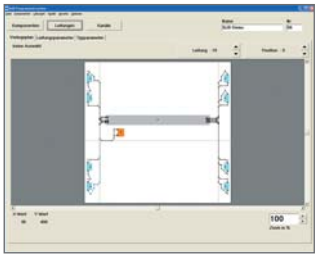
**Improved wiring tool with collision module**
The improved wiring tool is particularly narrow and can wire both horizontally and vertically. As the core component of the system, it is a necessary requirement for successful and efficient luminaire wiring automation. Together with the dynamic 6-axis robot, it provides very high wiring speeds. More advantages: simplified maintenance and a high degree of availability. It is now even safer thanks to the collision module, which can prevent serious damage to the wiring tool. When a collision occurs in the direction of travel, e.g. with a series connection device, the entire wiring tool pivots backwards and the robot immediately comes to a standstill. The operator can correct the error in the operating area and click the wiring tool back into the home position.

**Flexible workpiece carrier**
The flexible workpiece carriers are set up quickly and, above all, without tools for the type of luminaire to be processed. This is achieved using „fixing elements" in connection with the matrix on the workpiece carrier. This system also guarantees that future generations of luminaires can be accommodated without changing the workpiece carrier.

**Intuitive operating interface**
The ADS Basic System is simple and intuitive to use. The production data is shown in the main menu, and production can be influenced directly using the mouse or keyboard. A menu-guided user interface is provided in order to optimise and adapt luminaire programs. In the clearly structured submenus, parameters such as wiring speeds can be changed, positions can be moved and lines can be re-arranged. All changes are incorporated and implemented directly by the machine following a plausibility check.

The graphic display of the current luminaire with the corresponding repositioning plan makes it easier to enter data for the specific luminaire. New programs can be created based on existing data. The operator can use this function in parallel with the ongoing production to prepare new luminaires.

# Unlimited learning capabilities with the ADS Offline programming systems.



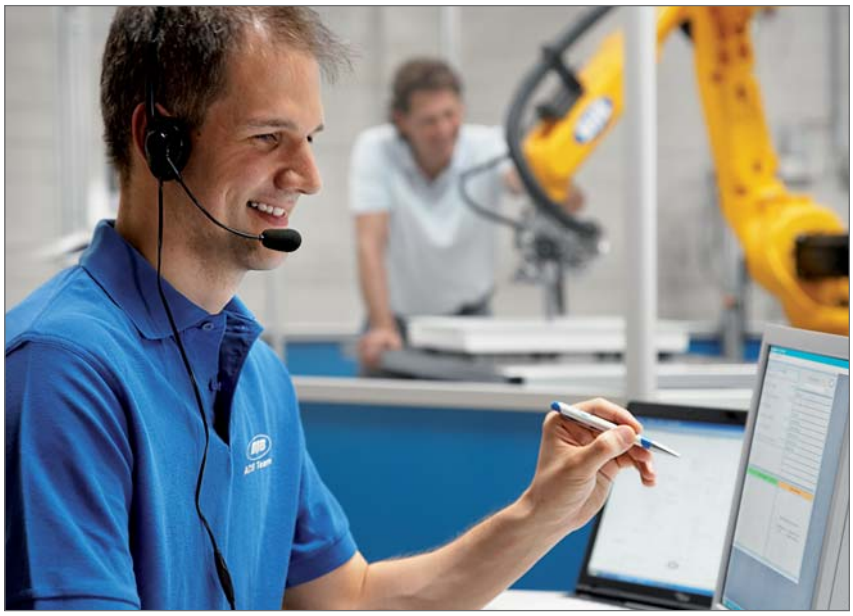
**ADS Offline PC version**
With the ADS Offline programming system, entire wiring programs can be simply and effectively created independently of production. For this purpose, the luminaire is created and positioned over coordinates. The components are then loaded from the integrated component database and inserted in accordance with the drawing. The line paths are then determined by specifying cable channels. After the connection points have been defined, the system automatically calculates the best wiring path on the basis of the cable channels which have been defined. Pre-defined operation strategies make it easier to create a wiring program.

The program is available on userfriendly, Windows-based software. The completed wiring program can be stored on diskette, flash memory or in the network and then read by the robot controller.

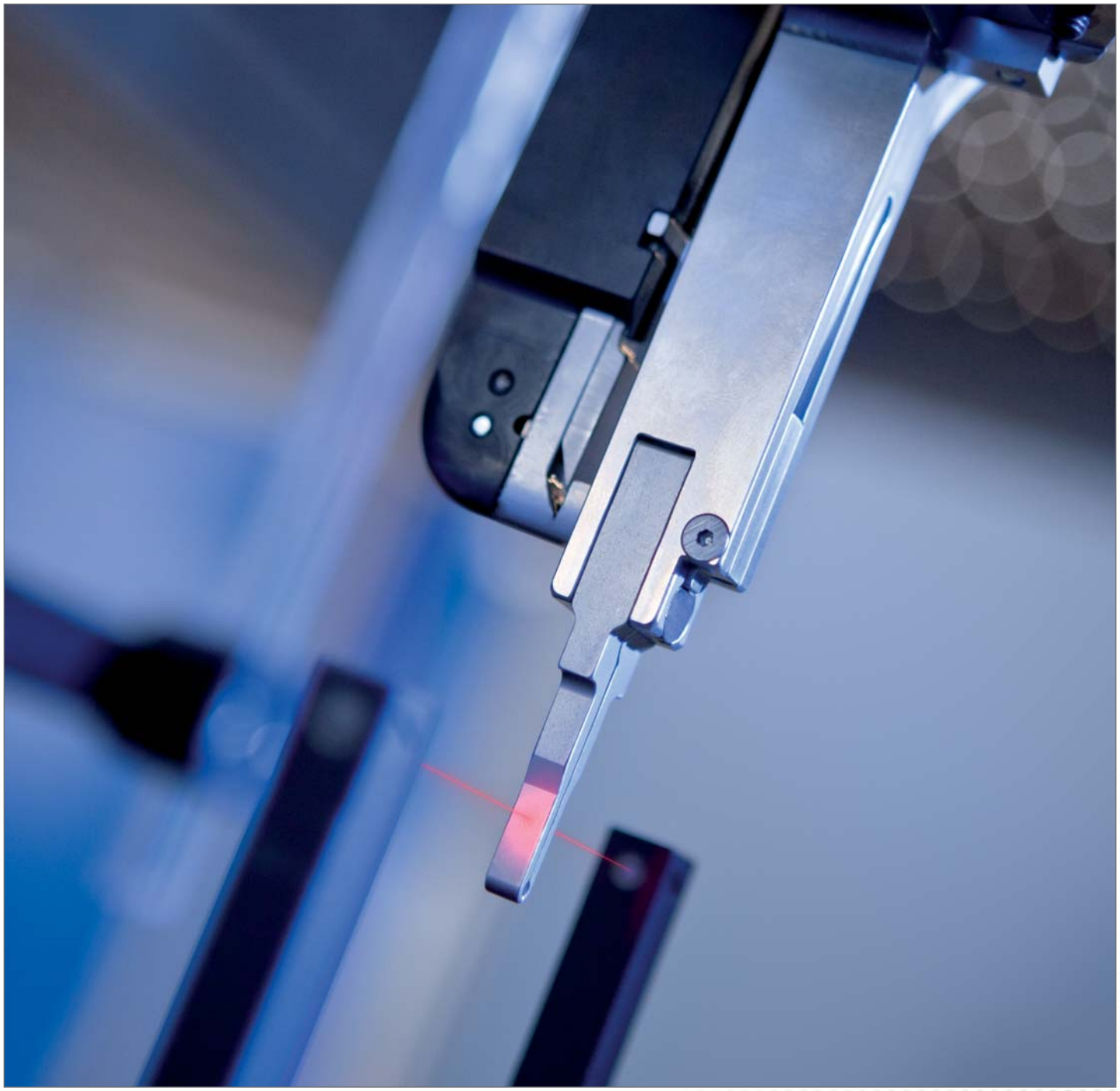
**ADS Offline with infrared camera system**
In addition to the software described above, this system extension consists of a table with a standard workpiece carrier for holding the luminaires and an infrared camera system with a special teach target that contains the measurements of the wiring tool. The position of the wiring tool is recorded by the infrared camera system using reflection balls. The PC is integrated in the system. Using the teach target, components can be positioned or individual robot positions defined.

The system is used with luminaires where components are difficult to access and guarantees the user the possibility of simulating offline the full flexibility of the 6-axis robot.

# And we promise you one more thing: we won't leave you on your own!



**ADS Lifetime support**
After an ADS system is commissioned, a team of BJB specialists remain available for consultation and support to help system operators. Trained staff are available on workdays from 7 am to 9pm CET via PC or telephone hotline to answer your questions on programming, operation or maintenance, all free of charge. Remote diagnosis is standard for all ADS systems. The ADS support package is rounded off by a comprehensive stock of replacement parts and components.



As with all technical products, the ADS automation systems from BJB are constantly being further developed and adapted as progress is made in technology and experience gained in the field. For this reason and for your benefit, we retain the right to change design features and technical data. Only our written confirmation of order is binding.

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BJB GmbH & Co. KG · Werler Str. 1 · 59755 Arnsberg / Germany
Telephone +49 29 32.9 82-0 · Fax +49 29 32.9 82-82 01
info@bjb.com · www.bjb.com

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