



3DRS



AUTOMAZIONI INDUSTRIALI[®] S.r.l.



**INTELLIGENT MOVEMENT
TO MOVE THE WORLD**

www.autind.com

Automazioni Industriali S.r.l. was founded in Lumezzane (BS) in 1984 to operate in the field of applied robotics. Born in one of the main industrial areas in the province of Brescia, it has always been one of the company's priorities to look ahead into the future of highly advanced technologies. It soon conceived a robot-guiding vision system for its robotised lines: DRS (DRIVE ROBOT SYSTEM), which is constantly upgraded. Thanks to the commitment of its young team and to the implementation of state-of-the-art technologies, the company ranks now among the leading anthropomorphic robot integrators in Italy.

Over 25 years' progress and expertise directly applied onto the product allow us to offer specific solutions to meet the needs of both Italian and foreign industries, which find in Automazioni Industriali a perfect partner capable of solving virtually every problem related to automation in different production sectors: automotive, plastics, metalworking, steel, heating, water and food.

Our production facilities stretch over 5,000 sqm, with 900 sqm of office space dedicated to sales, administration and mechanical-electrical engineering.



THE COMPANY





PRODUCT DESIGN AND PRODUCTION



Automazioni industriali designs the entire robotised line in-house. A qualified team of engineers, by means of cutting edge simulation software, accurately develop the project in order to offer a technical solution that best meets the needs of the customer, who gives the go ahead to the manufacturing of the equipment after approval of the layout drawings. Assembled in a dedicated area and fitted with leading edge technology, the equipment undergoes the most stringent quality control tests as well as pre-acceptance testing in front of the customer.

Any software applications are both developed and customised to suit the needs of each end user, so as to make the most of the machine's functionality. Thanks to the flexibility of its technological solutions and to its capacity to face new challenges, Automazioni Industriali can also develop robotised lines for specific applications.

In addition, we run training courses where operators interact directly with the equipment, which allows them to learn everything they need to use all of its features.

All our systems are conceived to comply with the applicable environmental and occupational safety standards and directives. As a result, they have been equipped with the necessary devices to keep down the noise, dust and fumes generated throughout the various stages of the production process.

-All systems are supplied on a "turn-key" basis.

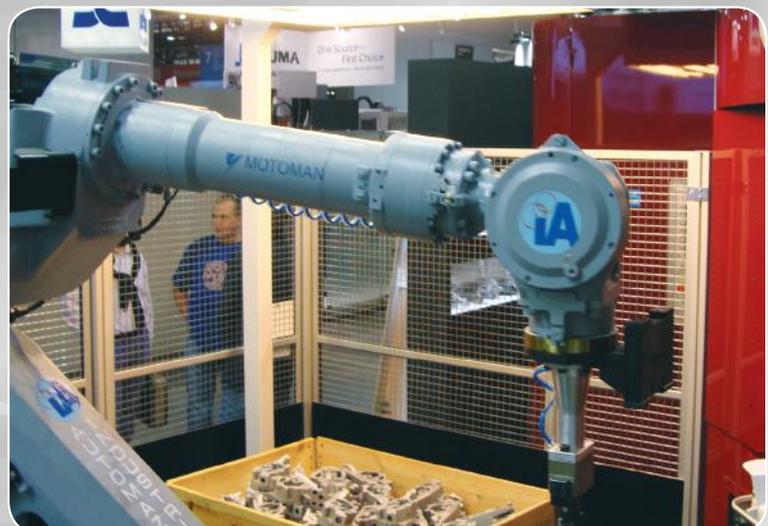
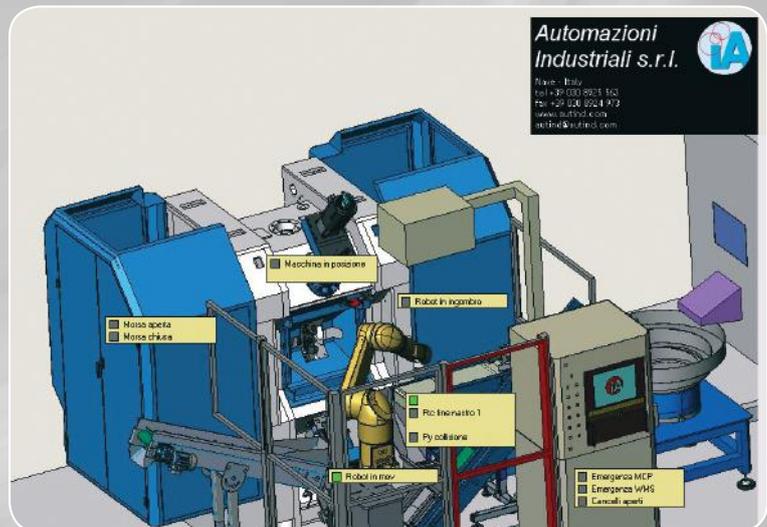
-Equipped with the latest operating software.

-Accompanied by user and maintenance manuals, electrical drawings and CE marking.

Automazioni Industriali continually invests in R&D so its customers can have the most technologically advanced products. The DRS (DRIVE ROBOT SYSTEM) software developed by Automazioni Industriali is the best performing vision system currently on the market. The result of lengthy and thorough research, it is a top-quality robot-guiding vision system. What is more, this vision system is not sensitive to the light, colour or shape variations of the workpieces. Automazioni Industriali develops a range of customised software applications, aimed at improving the production process and achieving high machine utilisation: self-learning software applications for easy robot operation, diagnostic software for real-time monitoring of the system operation and monitoring software for the supervision of the entire production process.



R&D





WORKHANDLING SYSTEMS FOR LATHES AND MACHINING CENTRES



Our automated workhandling systems for lathes and machining centres have been entirely conceived and developed to satisfy the production requirements of our customers. This type of robotic system can interlink with two or more machine-tools simultaneously. In addition, it can be fitted with washing stations, marking stations or any additional station required by a particular production process. The DRS (DRIVE ROBOT SYSTEM) vision system and the automatic gripper changeover make it a highly versatile system.

ADVANTAGES:

- Maximum operator safety.
- High system productivity.
- High operating range.
- Fast retooling.
- Option to add auxiliary operations such as washing, marking or drilling.
- Simultaneous interlinking with two or more machining centres.
- Option to handle post-processing stations.
- Self-learning operating software.

Our automated workhandling systems for transfer machines have been entirely conceived and developed to satisfy the production requirements of our customers, allowing them to handle even short production runs automatically. It is the fastest, most reliable and most versatile system currently on the market for loading/unloading workpieces onto a transfer machine.

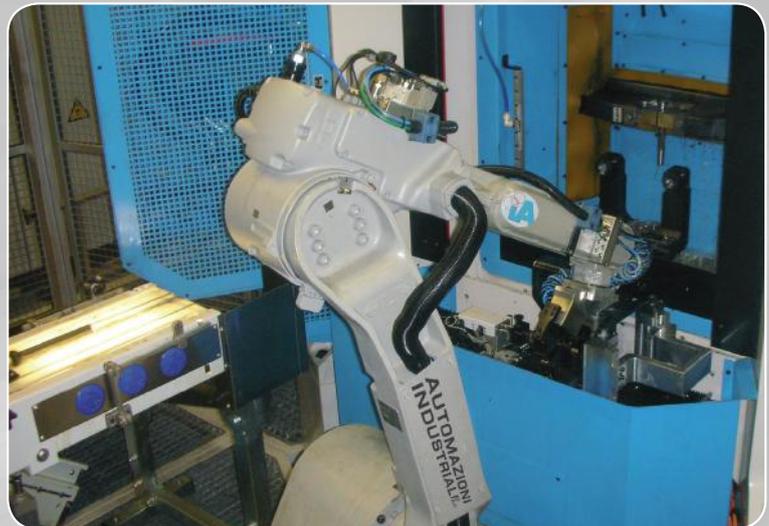
Our proven experience in the sector allied with the integration of an advanced vision system enables us to reduce the workpiece loading time as well as the retooling time for workpiece changeover. Our robot cells can be provided with logo and marking recognition, system diagnostics, system performance management and teleassistance or remote technical support.

ADVANTAGES:

- Maximum operator safety.
- High system productivity.
- High operating range.
- Fast retooling.
- Option to add auxiliary operations such as washing, marking or drilling.
- Handling of complex working cycles.
- Option to handle post-processing stations.
- Self-learning operating software.
- Direct partnerships with the main manufacturers of transfer machines worldwide.



WORKHANDLING SYSTEMS FOR TRANSFER MACHINES





AUTOMATIC TRIMMING OF NON-FERROUS METALS



High performance automatic trimming line with EASY 25 press, anthropomorphic robot and DRS (DRIVE ROBOT SYSTEM) vision system for workpiece location. The press is fitted with a system which checks that the workpiece has been correctly positioned and otherwise expels it. The trimming line comes complete with a sound-proof cabin fully compliant with the relevant noise-pollution standards for improved operator safety.

Technologically advanced and allowing an average production of 2,200 workpieces per hour, Easy 25 is the fastest, most robust and most versatile metal trimming line ever manufactured.

The trimming line comes in two versions: with an EASY 25 or with an EASY 40 press, enabling it to meet every requirement in the trimming of non-ferrous metals.

ADVANTAGES:

- Maximum operator safety.
- Environmentally friendly.
- High system productivity.
- High operating range.
- Workpiece counter and container handling.
- Fast retooling.
- Self-learning operating software.
- Night shift.

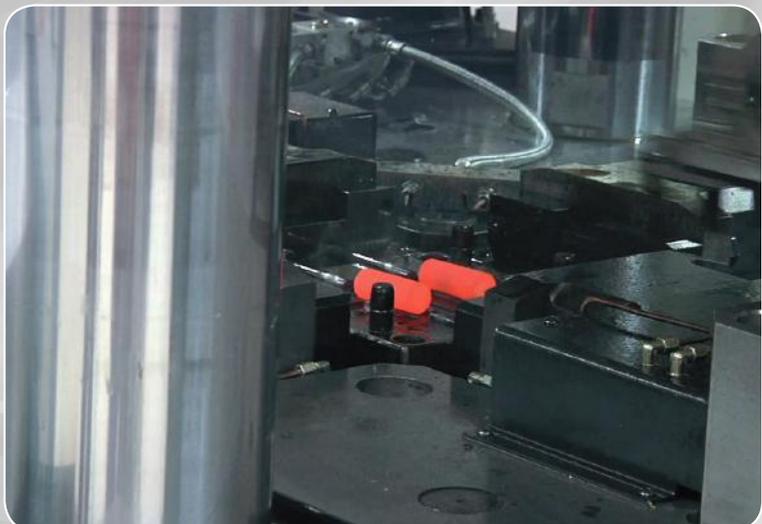
This automated workhandling system for hot-forging presses or fly presses has been entirely conceived and developed to satisfy the production requirements of our customers, allowing them to handle even short production runs automatically. This robot cell can handle the workpieces while they are extremely hot and can interlink with various machines simultaneously if so required by the production cycle.

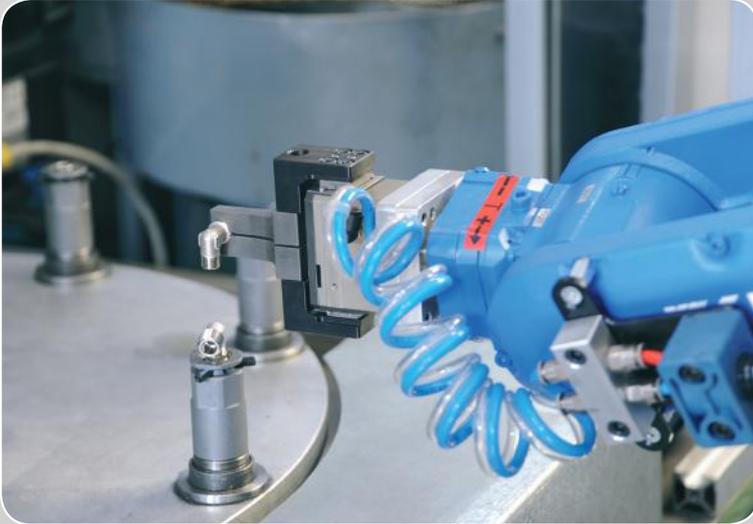
ADVANTAGES:

- Maximum operator safety.
- Simultaneous handling of various machines, trimming, marking.
- High system productivity.
- High operating range.
- Handling of hot workpieces.
- Workpiece flip-over for multi-phase cycles.
- Constant monitoring of workpiece temperature.
- Gripping unit for workpiece loading/unloading (patented).
- Self-learning operating software.
- Fast retooling.

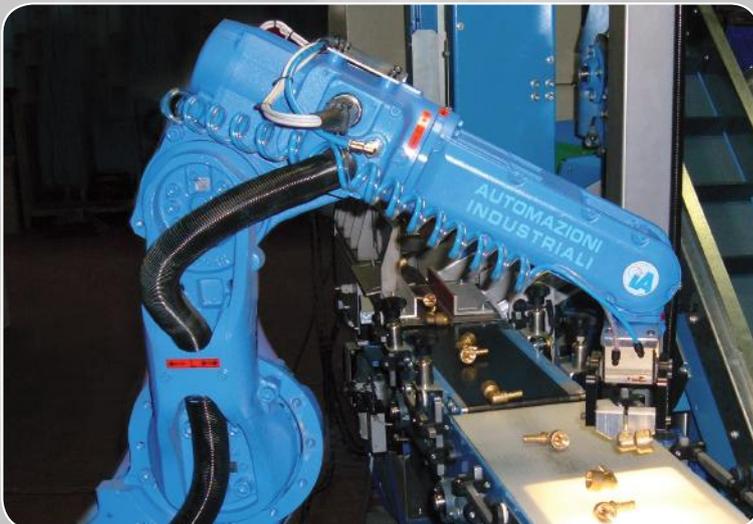


WORKHANDLING SYSTEMS FOR HOT-FORGING AND FLY PRESSES





WORKHANDLING SYSTEMS FOR ASSEMBLY AND TESTING MACHINES



This automated workhandling system for assembly and testing machines has been entirely conceived and developed to satisfy the production requirements of our customers, allowing them to handle even short production runs automatically. Our proven experience in this sector and the use of an advanced vision system allow the system to handle various items simultaneously. The system has been specifically designed to guarantee the consistent quality of the finished or semi-finished workpieces.

ADVANTAGES:

- Maximum operator safety.
- High system performance.
- High operating range.
- Fast retooling.
- Option to perform several machining operations.
- Self-learning operating software.

For this type of application, the robot can be equipped with a vision system for workpiece location or with special stacking pallets, depending on the specific handling needs. The freedom of movement characteristic of anthropomorphic robots and our experience in robotics allow us to meet the most stringent requirements coming from the various industrial fields.

ADVANTAGES:

- Maximum operator safety.
- High operating range.
- Fast retooling.
- Handling of heavy items and hot workpieces.
- Option to perform several machining operations.
- Workpiece counter, boxing, bagging.
- Self-learning operating software.

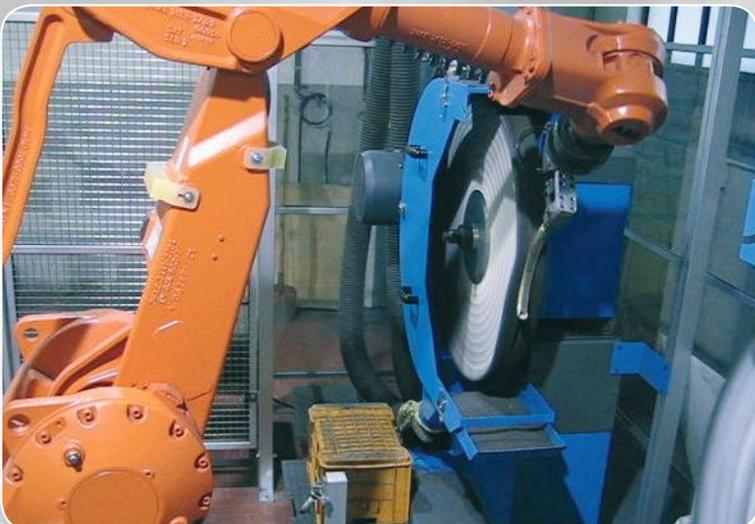


WORKHANDLING SYSTEMS FOR VARIOUS ITEMS





METAL POLISHING AND GRINDING



The metal polishing robot cell includes a feed system with pull-out trays used by the operator to load and unload the workpieces without interrupting the working cycle.

The two independent polishing units are equipped with a speed and pressure control system and come complete with automatic devices that guarantee the best performance and efficiency.

The metal grinding robot cell includes two grinding units fitted with two abrasive wheels. It is possible to regulate the speed and contact force in order to ensure the consistent quality of the grinding operations.

ADVANTAGES:

- Maximum operator safety.
- Dust control.
- High system performance.
- High operating range.
- Consistent quality of workpiece polishing-grinding.
- Monitoring of machine settings.
- Easy programming.
- Fast retooling.
- Self-learning operating software.

The robot cells used in foundry or die casting have been entirely conceived and developed to satisfy the production requirements of our customers, allowing them to handle even short production runs automatically. This robot cell, which can easily handle extremely hot workpieces, can simultaneously interlink with several machines in charge of the various operations required by the working cycle, accurately positioning the workpiece in the die.

ADVANTAGES:

- Maximum operator safety.
- High system performance.
- High operating range.
- Unloaded workpiece compliance test.
- Automatic control of die lubrication.
- Option to handle auxiliary stations.
- Unloaded workpiece stacking.
- Self-learning operating software.
- Fast retooling.



FOUNDRY AND DIE CASTING





FORGE TRONIC



The hot-forging process has been re-engineered to obtain a compact piece of equipment, requiring minimum maintenance and, what is more important, giving the user total movement control. All the axes in the FORGE TRONIC press are driven by powerful electric motors which allow us to regulate and monitor all the static and dynamic variables of every movement: position, speed, acceleration, torque and power.

With FORGE TRONIC it is no longer necessary to rely on skilled staff to carry out precise mechanical regulations, since a small number of parameters set in the software application are enough for the machine to program the desired movement. A PC with a touch-screen monitor enables the user to set up the working cycle. All the regulations which, with standard presses, used to be time-consuming and require advanced mechanical skills are now easily accessible from the monitor. From here we can control the operation of each extruder, establishing the relevant stroke, potential start and end delays, and speed settings.

ADVANTAGES:

- Low noise emissions.
- No complex kinematics.
- No waste of energy.
- No need for costly and demanding maintenance.
- No direct contact with hydraulic oil.
- Easy to program.
- Flexible and versatile workpiece changeover.
- Fast retooling.

Our dedicated Customer Service department, thanks to a vast stock of spare parts, provides fast and efficient technical support from the very first phone call.

Always ready to meet the customer's needs, the company offers fast mechanical, electrical and software technical support with a view to reducing idle time to a minimum.

For extra reliability, our After-Sales department has implemented systems such as remote assistance and video inspection, which allow us to give a real-time response.

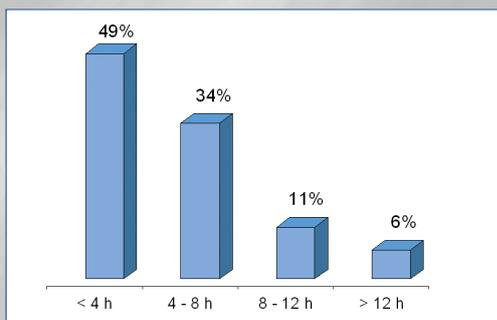
In addition, After-Sales can provide customers with pre-arranged maintenance schedules, training courses and complete system overhauling.



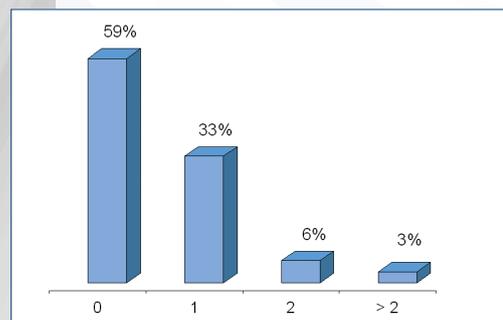
SERVICE AND TECHNICAL SUPPORT



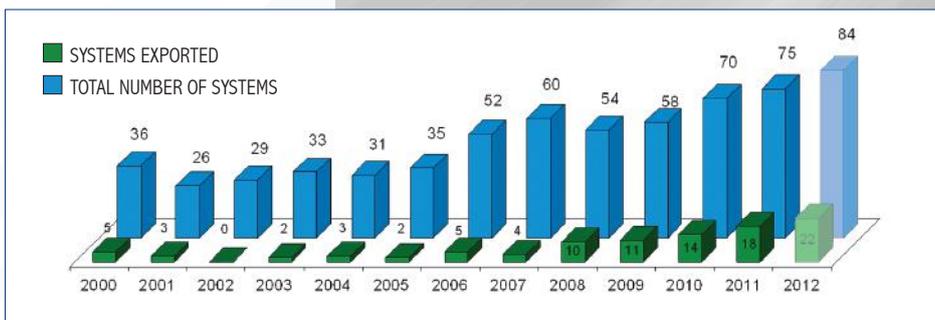
OUR SYSTEMS
AROUND
THE WORLD



TECHNICAL SUPPORT SERVICE TIMEFRAME



SUPPORT RESPONSE TIME (NUMBER OF DAYS)



OVER 650 SYSTEMS INSTALLED



We can give you

more than a hand



We can give you

a whole handout of ideas



Aderente ad AIB



AUTOMAZIONI INDUSTRIALI ©
S.r.l.

Tel. +39.030.8925563 - Fax +39.030.8924973
via Castagnotta, 8 - Loc. Muratello di Nave
25075 Nave Brescia - ITALY

www.autind.com