

What you should know about us ...

- robot systems
- complete robot cells
- temperature control units
- complete cooling units

Expertise by tradition

For decades REMAK has been developing and manufacturing handling systems and temperature control units for the plastics- and rubber-processing industry.

developing and manufacturing handling systems for the plastics-and rubber-processing industry. Our satisfied customers include many companies in the automotive and automotive supply sector known throughout the world. The name REMAK stands for expertise and confidence in intelligent, complete solutions. Many hundreds of production cells all over the world daily demonstrate their durability in long-term use, even under the hardest conditions.

We know how to handle plastics. Our many years of experience with automation have demonstrated that only a fully automated processing system can guarantee consistent product quality. Since the foundation of the company in 1978 (from an engineering office), the numerous developments and patents pioneered by REMAK have had a major influence on the further development of plastics processing procedures. We also have the right solutions for your automation projects.

With almost 3,000 m2 of production and office facilities, we offer all the requirements for modern production. Sophisticated CAD workstations linked by our own internal fibreoptic network to development and design ensure our know-how lead.

Since 1987, the company has been part of the international acting Klöckner Werke AG, Duisburg.



Aerial view of the company



REMAK of North America, Inc.

Our guiding principle: The focus on the customer



The people in our company form the basis for the continued success of our work.

Our company works in a marketorientated way.

> That means that our developments and processes, together with our complete thinking and action, are directed at the needs of our target markets.

Closeness to the customer and innovation skills mean that we are able to adapt ourselves quickly to the requirements of or customers, and as a partner, to put forward suggestions pointing the way to new possibilities and improvements for the future

The people in our company form the basis for the continued success of our work.

A company can only offer the right services for all its customers if the products themselves are backed up by people who are aware of the importance of performance and quality – whether in development, production, sales, administration or on site

with the customer.

Around 40 percent of our staff work in production or assembly, 30 percent work in design, development and administration and a good 30 percent work in direct contact with our customers in sales, service or software.



training

Our staff - and especially those involved in design and development - are kept up-to-date with the latest technologies by continual ongoing training, so that at all times, we can offer our customers individual and expert consultation and advice with their requirements. Characterised throughout by innovative technical processes, the plastics-processing market is always changing quickly. We aim always to be at the forefront of developments.

In order to document our outstanding quality claims, the company has had certifed itself successfully to ISO 9001:2000.



project departement

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Closeness to the customer - worldwide

For us, quality and the customer are the focus of all our actions!

Quite apart from the enthusiasm for technical innovation, the focus of our actions is always placed on quality, and on the customer.

Our customer service centre is well known for its expertise and direct action.

Our customers can reach us quickly and describe their problems to us over our hotline.

We offer direct support in all areas. Our experienced specialists will find the best and most effective solution for you. Around 95 percent of problems can be solved with the customer over the telephone.

It is particularly beneficial if you have the facility of a modem connection in your manufacturing department.

If emergency servicing or major maintenance of our equipment or systems is indicated, this will be handled rapidly and efficiently by our customer service centre, who will arrange for the dispatch of the necessary replacement parts and coordinate the work of our service technicians based all over the country. "There's always one around the corner".



service vehicles

The REMAK replacement parts warehouse ensures outstanding delivery availability. Our customer service and central replacement parts sales, together with our technical sales staff, offer our customers decisive time advantages in delivery and service.

And if you want to be completely sure, we can offer you a maintenance agreement - our technicians will carry out a regular "check-up" of your machinery, and if necessary suggest the relevant preventive maintenance.



free standing gantry robot

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ROBOT-SYSTEMS Standard solutions – mature, cost-effective and ex-stock



A control platform ensures that our robots can communicate with each other.

EMAK supplies modern, highperformance operating equipment.

Under the heading of the "RX range", we have brought together all the machinery that has proven itself on the market as a "standard solution". In the course of several development stages, we have continued to optimise sound machinery concepts for different, popular applications. These equipment series are manufactured in large numbers and cover a broad market requirement.

An essential and common feature of all machinery models is a robust mechanical system designed for long-term, reliable operation. The drive packages use the very latest and rugged technology, from intelligently designed complete pneumatics with accurate fixed stops through to servo technology with

DC servos and absolute travel measurement systems.

Another common feature of all the ranges is the same type of controls, with a simple, easy-to-understand and self-explanatory user interface. Learning a new system from machine to machine is not required. The operator can see in clear text which stage of the procedure he is in at the moment. The further possible steps in the programme are indicated by LED's. The controls thus take the user through the various stages of the programme in the easiest possible way. Sufficient memory is provided - depending on the series in question - to store 25 to 50 handling programmes and the relevant sub-programmes, for instance palette-handling programmes.

Error messages are also displayed in clear text, allowing rapid location of the source of the error.

All RX machines are available either ex-stock, or at least with very short





Custom-made - individual solution for individual requirements

The standard assemblies can be combined with one another as required by the individual application.

REMAK is very well equipped to meet these demands of the market, and is known throughout the world as an expert partner for all automation solutions to do with injection-moulding machinery. Our handling systems, robots and other systems can be found from Mexico in the west to South Korea in the east, form Norway to South Africa, and of course on the American continent from Canada to Argentina.

REMAK supplies robot systems tailored to the specific application, complete manufacturing cells, and links existing production machinery with its own automation components.



articulated robot

We know the requirements of our customers in the automotive industry, the electronics and communications industry, the packaging sector and medical technology. It makes no difference to us whether it is a small, fast-running machine or a large machine with a clamping force of over 4,400 tons. We provide complete solutions anywhere in the

world, e.g. for lost-core technique or for fabric- or film-backmolding. We have developed and marketed special solutions for special procedures such as multi-component operation, milling and turning technology and stackmold applications.

All these areas are covered wheresoever possible with modular solutions. Existing linear and/or rotational axes are adapted to the particular application, modified if necessary to meet special requirements and brought together to create complete machines. This naturally creates special solutions that remain unique. Gripper and sensor technology is one of our particular areas of expertise.

In line with the mechanical solution, the right control modules are then used, before "life is breathed into them" with the corresponding software.



robot cell

For the highest quality demands - always the right temperature



Our temperature control equipment maintains the production process at the required temperature at all times.

Levery processor knows how important the correct, constant temperature is for the quality and efficiency of many processing procedures. The maximum possible availability and productivity are essential capabilities to remain successful on the international market.

REMAK is an expert partner in this

REMAK is an expert partner in this respect, with many systems in successful use throughout the world.

With a computer programme developed by REMAK, we can quickly generate the design data for your manufacturing process, to produce the correctly dimensioned temperature-control equipment and compact cooling systems.

We can thus ensure that your injection-molding tools, rollers, screw barrels or tanks are always maintained at the right temperature.

Depending on the operating temperature, the circulating medium used will be either water or oil. Water is a much better heat conductor, and is used up to 95 °C without pressure or up to 160 °C with overpressure. Above these temperatures, we recommend to use oil as the heat conductor.

As an addition to the traditional temperature-control range, REMAK now offers multiple monitoring, temperature-control and impulse-cooling for intermittent heating processes. Up to 20 circuits can be individually monitored, temperature-controlled and impulse-cooled with cold water by a single temperature measurement. Due to the deliberately high temperature difference, impulse-cooling achieves a very efficient dissipation of heat. The basic heat balance in multiple temperature control is set by temperature-control units

3 years guarantee! Because we have confidence in our technology. And so will you!



temperature control units



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