



# ANDROMAT® Manipulators



Henschel Andromat Inc.





Aerial photo of the factory buildings in Kassel

## Henschel Industrietechnik

The renowned company Henschel was founded in 1810 in Kassel.

Since 1975 the manipulator system ANDROMAT® has provided foundries and forges with a capable system for handling and processing workpieces. With more than 700 systems installed throughout the world, we have since become a global market leader in this segment.

With our ANDROMAT® manipulators, operators are relying on heavy-duty, proven products, which provide for humane, safe and economical workplaces within production.

As a partner of foundries and forges, we place special emphasis on a customer-oriented organisation.

Our customer service serves as the indicator of your satisfaction.

For us, this is signified in particular by reliability, performance and quick response times.



Andromat®

## Our central spot - logistic guarantor for our reaction rate

The central spot of Henschel Industrietechnik in Kassel secures a quick and efficient order fulfillment for our customers. In the middle of Germany, right in the center of Europe, Kassel is one of the most important traffic junctions and thus, logistic positions.

Not only is Kassel placed right in the geographic center of Germany, but it also lies right in the middle of the north-south-speedway of the German railway system. Plus, it's the intersection of the north-south and the east-west-freeway. With freeways A7, A44, A49 as well as the new A38, Kassel is well-connected to the national road system.

Kassel as a region is not only a highly important conception and innovation-area, but also it is one of Germany's 10 greenest cities with over 60% of the urban area being green space.

The internationally renowned Bergpark Wilhelmshöhe with its sights happens to be one of the most beautiful sites of its kind.

“ The best times in life are those small moments when you feel: you're at the right spot, to the right time. “

## Henschel – A company history with tradition



Georg Christian Carl Henschel  
1758 - 1835



Carl Anton Henschel  
1780 - 1861



Georg Alexander Carl Henschel  
1810 - 1860



Carl Anton Oskar Henschel  
1837 - 1894



Historic painting of the transport of a Henschel engine



Contemporary photograph of the Henschel factory buildings



Traditional production of high-quality engines for locations all over the world

# The brand new Andromat AMX 70

The new AMX 70 is based on our widespread experience out of decades and has been improved once again in many important details in a close relation with our customers. The system serves the higher payload range in foundries and forges.



# Excellent ergonomics

To protect the operator from the stress caused by the rough environment, the ergonomics of the Andromat AMX have been essentially redesigned:

- High capacity air-conditioning (optional) and fresh air supply into the cabin incl. dust free air,
- mechanical separation of the cabin by special rubber-metal swing elements (e.g. cushion against low frequent vibrations),
- optimal sight due to oversized windows. Isolation against noise and heat and a sliding door available on demand.



Andromat AMX 80

## Cutting/Grinding

- Optimized drive up to 6.000 rpm.
- Automatic feed rate for cutting operations
- Stable and sensitive operation, locking devices for roll and yaw axis.
- Quick exchange system for different tools.



## Expertise in handling

The ANDROMAT® system is under constant further development and each is matched to the specific application, no matter how specialised. The versatility of the systems allows the addition of peripheral equipment, different dimensional configuration of the arms, a variety of wheel mounting systems, use of numerous types of tooling and more. Our project engineers are always available to give advice.

The aims of the engineers will include ensuring:

- Minimal maintenance requirements
- High levels of up time

# ANDROMAT® technology – proven versatility



Andromat AMX 40 in a foundry



Andromat AMX 20 in a foundry

## Powerful concept

The layout based on a large number of details, so each request can be solved with the most effective solution.

Henschel Industrietechnik is the industry leader with vast amounts of experience. With nearly 700 ANDROMAT® manipulators worldwide operated daily in foundries and forges. This know-how in application and development is reflected by the engineering advancements in the Andromat AMX manipulators.

We are looking forward to find a solution for your individual material handling needs.

## FOUNDRY



Andromat AMX 40 with carriage



Andromat AMX 40 with carriage in a forge

## Continuous Improvement

For the past 40 years, ANDROMAT® has continuously provided the highest level of equipment quality, reliability, operator ergonomics, comfort and user friendly operation, all through our systematic product development client partnerships. These industry-leading product innovations not only make ANDROMAT® the best available, they offer the maximum return on your investment.

## FORGE

Andromat AMX 40 on a ring forging mill



Wheel mounted Andromat AMX 40 in a forge



# Modular Control concept ANDROMAT®

## ① Digital control card

- Extensive parameter list for diagnostic, service and support
- Direct control and adjustment of all parameters from laptop, touch panel, or over Ethernet network
- Monitoring of all analog signals with time-based storage for histories and real time charting
- Ratio of electrical signal between master arm and slave arm is variable, allowing for setup and storage of independent operator profiles
- Operational limits for environment and safety are infinitely variable

## ② Touch-panel

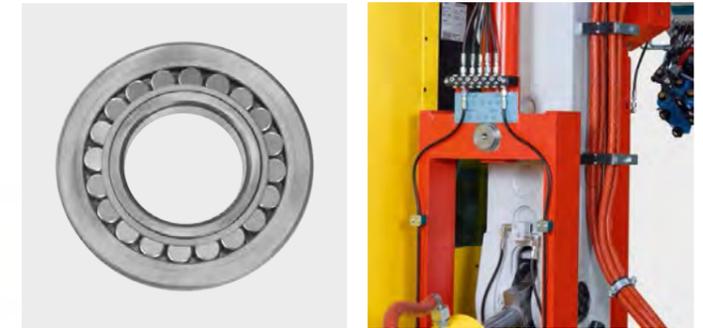
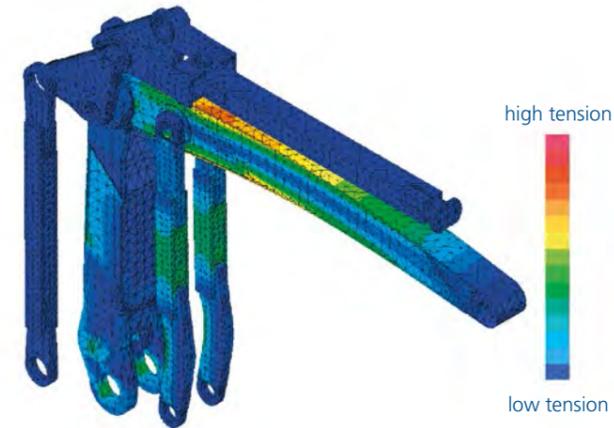
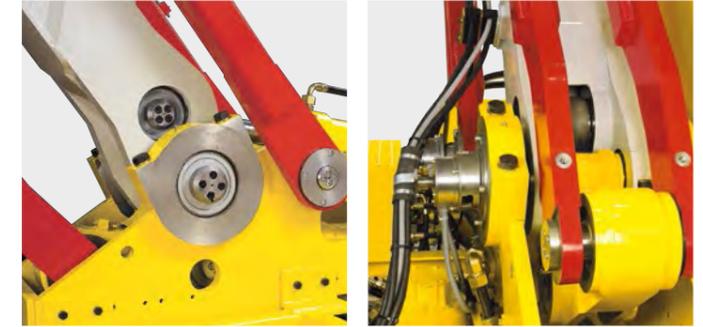
- With proper authorization, adjustment of all parameters from inside the cabin
- Direct monitoring and adjustment of analog signals
- Choice of different sets of parameters for various operators or operations
- Monitor actual and stored operational errors
- Different authorization levels for operators, service staff, or specialists
- Multilingual

# Modular Structure

## High lifting capacity

The benefits of the Andromat AMX shown in great detail:

- More robust, low-maintenance spherical roller bearings
- All bearings are protected from dirt and moisture contamination
- Increased axle diameters.



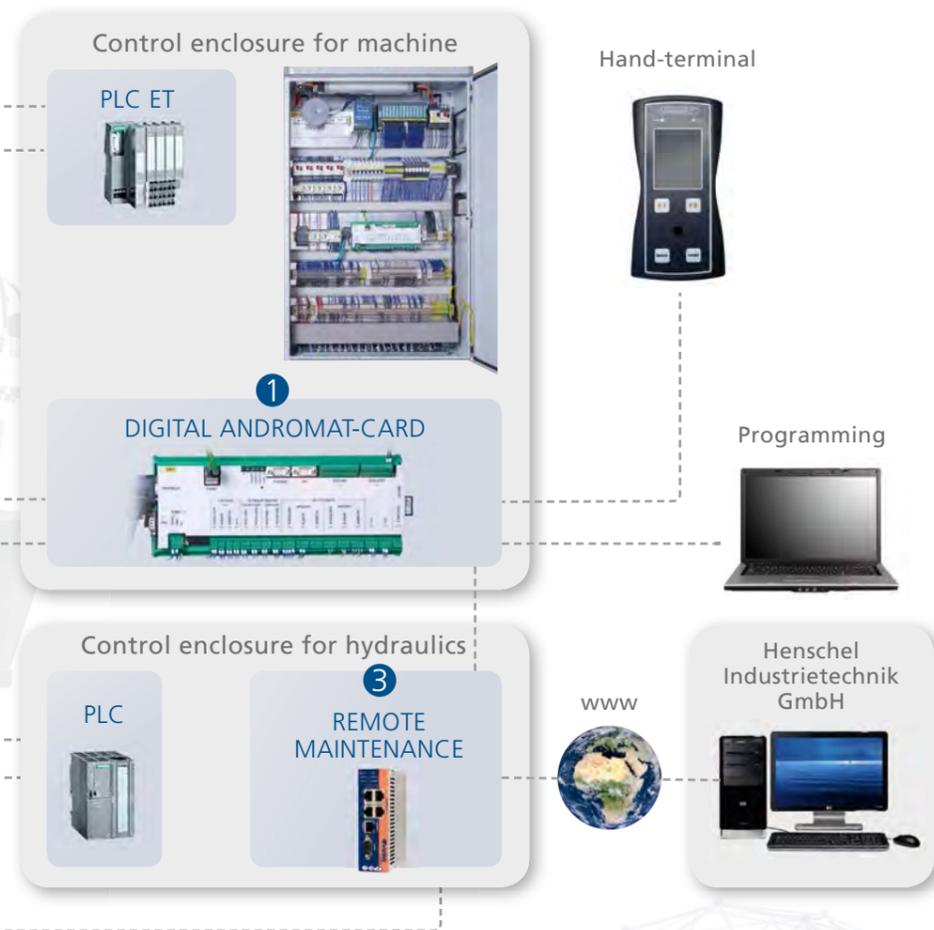
## Efficient simplicity

The machine concept allows for decreased maintenance by:

- Reducing and concentrating of greasing points
- Optimized routing of the hydraulic hoses

## ③ Remote Access via Ethernet/Internet

- PLC program adaptation at any time by ANDROMAT® engineers
- Real time access to all current parameters and process datas
- Analysis of any operational errors
- Prevents extended down time and travel expenses
- Internet PLC remote access granted only with authorization of customer



## Tool management

The modular tool-system of the Andromat AMX represents a big benefit. Many tools can be used flexibly through the application of a quick changeover system.



# Worldwide Service

## Optimised for high productivity

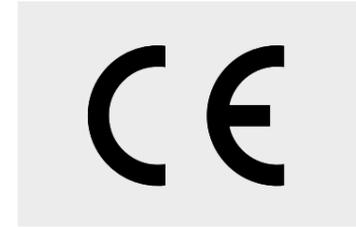
The extensive modular construction system contributes to simple and quick maintenance. In the first instance this results in the extreme high level of up time.

We are entirely focussed on meeting customers needs:

- Almost all spare parts are available ex stock Kassel
- Qualified service personnel offers many years of experience
- Spare parts and service provided at fair prices.



# Certified Quality



## Maintenance

Henschel offers an extensive portfolio to support the ANDROMAT® user. You can choose the level of service that matches the needs of your particular production assets. You can rely on Service provided by Henschel and enjoy peace of mind during the entire life of your production asset.

## Installation

Our team of highly trained service professionals will install and start up your Andromat wherever you are located on the world.

## Retrofit and refurbishment

After many years of indefatigable Manipulator operation, a timely modernization of your ANDROMAT® could make sense. Together with you we evaluate possible improvements in ergonomics, performance, energy savings or safety and take care that your ANDROMAT® keep on working efficiently.



