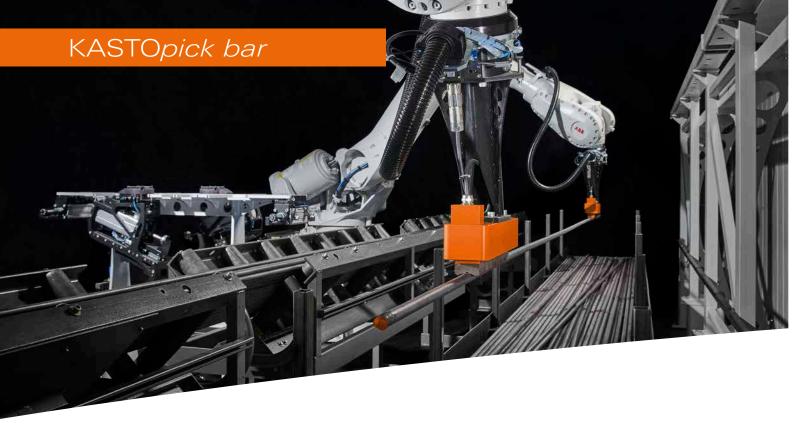


# KASTOpick bar

Automated bar separation





# KASTOpick bar

#### Automated bar separation from storage cassettes

KASTOpick bar can automatically remove and manipulate bar material from storage cassettes without human intervention. This system enables the feeding of downstream metal-cutting machines or the generation of optimum picking orders for strapping.

The separation system can be connected to both new storage solutions and existing systems used to store magnetic blank or black steel. The system is designed to handle a bar weight of up to 500 kg. Higher individual bar weights are also available upon request. KASTOpick bar serves as the link between storage systems, saws, and strapping units to achieve full automation in steel distribution or treatment processes.

The KASTOpick bar gripper systems are highly versatile and enable the separation of a wide variety of profiles: for instance, flat, square, and round materials, as well as round tubes and profile tubes that are not wrapped or labelled.

The robot system communicates with the ERP system or the upstream or downstream machines to access all the information required to ensure safe removal and transport. Based on the dimensions of

the materials and the volume of orders, the bars are automatically stacked in an ideal pattern.

### Removal process

To start the removal process, the 3D sensor measuring probe moves over the cassette to scan it. An algorithm developed by KASTO is used to process the resulting 3D point cloud. In the process, all possible gripping points are analysed for each bar within the 3D image and each robot. At the same time, a collision check is performed to determine if there are any collisions with other system components.

Once a collision-free gripping point has been identified for an individual bar and both robots, the robots predict the proposed movement. Collision-free gripping points are derived from the point cloud and the algorithm generates a path of motion, removes the bar and transports it to the target position. The process then begins anew.

## Your advantages at a glance

Automated picking of material bundles and order preparation for steel distribution

Enables fully automated and operator-free material removal in a 3-shift operation

Production steps can be interlinked through the connection of downstream machines Optimum and operator-free order picking and provision of materials

Greater efficiency through material removal and manipulation

No need for programming or teach-in by the user



Bar removal with a magnetic gripper using KASTOpick bar

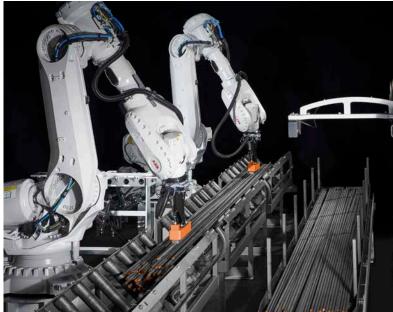
3D sensor measuring probe for locating the bars



Even the most disorganised systems can be unloaded

Dense storage through single-bar manipulation





# KASTO - Saws. Storage. And more.

#### Expertise right down the line

For over 180 years, KASTO has been synonymous with quality and innovation. In addition to metal saws and automatic storage systems for bar stock and sheet metal, KASTO also provides customised solutions for material logistics. Intelligent software

solutions and the expert KASTO service complete the product portfolio. Thanks to continuous technological advancements and ongoing optimisation of machine designs, KASTO has become the leading provider of metal sawing and storage solutions.



KASTO's range of saws includes hacksaws, band saws and circular saws, including everything from saws for the machine shop to high-performance fully automatic machines. www.kasto.com/saegen



Speedy access, optimum space utilisation and a clear storage overview are characteristic of all KASTO storage systems. www.kasto.com/lager



Quick availability of spare parts and individualised support are a high priority. KASTO*retrofit* transforms your trusted systems to meet current demands. www.kasto.com/service\_de



KASTO offers a wide range of digital automation solutions to increase the performance, flexibility and cost efficiency of metal processing and storage. www.kasto.com/smart\_de

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