

Handling Line: Efficient production planning and setup process optimization in one

Production planning and setup are issues of increasing importance for efficient production. The Handling Line recently introduced by HAINBUCH goes beyond conventional setup technologies. It is an innovative system for the storage, transport and setup of clamping devices. The Handling Line not only facilitates the setup process, which is especially important in the case of small lots, but also optimizes upstream and downstream aspects, such as the storage and transport of clamping devices. The entire system integrates seamlessly into the work processes of those who use the centroteX quick change-over interface.

The Handling Line consists of a setup hoist, a mobile crane for the transport and assembly of clamping devices. The monteq changing fixture is compatible with the setup hoist, thus enabling setup of clamping devices from the centroteX series. System accessories for storage and transport with a pallet include clamping device holders, as well as a frame attachment and cover.

Flexible production without an overhead crane

The setup hoist, which is an advanced mobile crane, is the core element of the Handling Line. It allows fast clamping device change-over in any production hall, without an overhead crane. The low base height with a surface area the size of a Euro pallet and a turning radius of 1.7 m allow the setup hoist to approach every machine. Loading from the front is therefore always possible, regardless of the door opening.

Safety prompts ensure stability before starting the actual setup process. The cantilever arm of the setup hoist consists of four single segments, which are connected by a joint. This design allows the arm with the winch to swing 10 degrees to the side, for precise, flush positioning of the clamping device even on hard-to-reach spindles. After the change-over process, the setup hoist is also useful for loading heavy workpieces into the machine. With a lifting capacity of 120 kg, the setup hoist can be used for virtually any clamping device combination. In 3-shift



operations with three change-overs per day, the rechargeable battery for operation of the electric swing arm and winch lasts about a week.

The setup hoist allows preparation of the clamping device for setup at a different location than the machine. When it is time for the change-over, the setup hoist with the required clamping devices is moved to the machine. This gives users of the system more flexibility in both preproduction planning and the production process.

A monteq changing fixture can be mounted on the winch of the setup hoist. This mounting aid enables a sensitive change-over process for consistent accuracy and fast change-over of centroteX clamping devices. A quick-release bolt secures the clamping devices during the setup process. Built-in spring assemblies prevent jamming of the clamping device and the negative transfer of force to the spindle. The swivel mount of the changing fixture simplifies alignment and locking. Even in the case of large and heavy clamping devices, fast and ergonomic clamping device change-over is ensured, with no interference or damage to the spindle.

Storage and transport included in concept

The Handling Line is designed for the entire setup cycle, including storage and transport. Clamping devices can be stored securely and well protected on a pallet. Each pallet is the size of a half Euro pallet. The pallet is placed on the surface of the setup hoist for secure transport. Pallets can be equipped with a stackable frame attachment and cover. This protects them from dust, dirt and damage. Protected storage helps to maintain the precision of clamping devices even after they are used numerous times.

For centroteX clamping devices from HAINBUCH, the Handling Line includes custom-fit clamping device holders. Firmly mounted on the pallet, they prevent the clamping device from tipping or falling during transport. Each pallet has the capacity for the secure storage and transport of two standard clamping devices or three smaller add-on clamping devices, with no



compromises in precision. Clamping devices are removed upward from the pallet using a changing fixture.

[Characters: 4.236]

Photos:



Photo: Handling Line:

The Handling Line, consisting of the setup hoist, a mobile crane, as well as a pallet with clamping device fixtures, a frame attachment and cover, and a monteq changing fixture.



Photo: Handlingline_ device change-over:

The setup hoist enables fast clamping device change-over in any production hall, without an overhead crane.





Photo: setup hoist-cantilever arm:

The cantilever arm of the setup hoist is designed to swing 10 degrees to the side, for precise and flush positioning of clamping devices even on hard-to-reach spindles.



Photo: Handling Line_accessories:

Handling Line accessories for storage and transport with a pallet include clamping device holders, as well as a frame attachment and cover.

PR contact:

Lena Lohmaier
Press and Public Relations
Tel. +49 7144.907-219
Fax +49 7144.907-270
lena.lohmaier@hainbuch.de