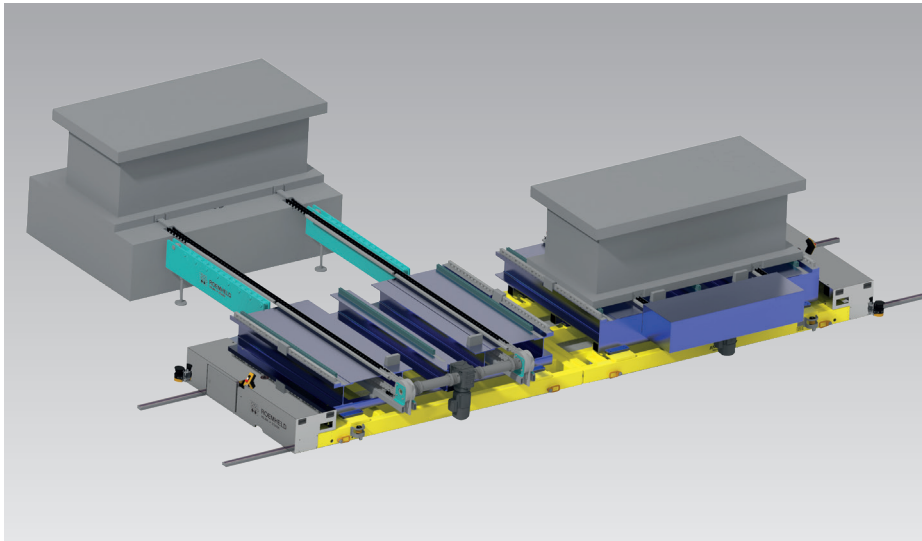




Die Changing Cart RWS, rail-guided

With electric drive and integrated push-pull system

Load of up to 40 t



Advantages

- Safe and gentle transport and changing of the heaviest dies
- Linking of several presses with only one changing table
- The press is free and can manufacture until the moment the die is changed
- Die changing cart with integrated lifting bars and push-pull system
- Simple and central operation of the cart with a remote control

Advantages over automated guided vehicles

- Low energy consumption
- High precision up to ± 0.3 mm
- Small space requirements
- High availability
- Minimal floor requirements

Application

The die changing cart RWS is used for the transport and the change of pressing and punching dies as well as injection and casting moulds up to a weight of 40 t.

Description

The RWS die changing cart is rail-guided, electrically driven and equipped with a special pull-push system in chain design or with a linear actuator.

The changing platform has stable roller rails to facilitate the insertion of the dies onto the press table.

The cart runs on special round rails with extremely low rolling resistance. They offer precise guidance and are insensitive to dirt.

A safety circuit ensures that only the cart in the changing position can move the pull-push system.

To transfer the die to the press, additional consoles are provided to compensate the distance between the press table and the die changing cart.

The RWS die changing cart can link several presses together for a die change, moving back and forth from one press to the next. Standardisation is not necessary. Different die sizes can be easily changed with one system using a standardised base plate. Semi-automatic and fully automatic die changes are possible thanks to the control system that is integrated in the cart and precise positioning. The complete system is rounded out by a variety of clamping technology solutions in the press.

Delivery

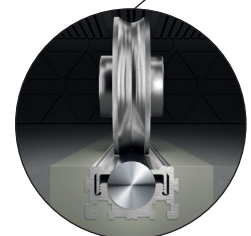
- Die changing carts in the series small up to 15 t, medium up to 25 t and large up to 40 t single die weight (with base plate), travel speed up to 10 m/min
- Integrated control via hand control bottle
- Push-pull system
- Rollers for round rails
- Semi-automatic positioning and manual / mechanical ground staking for locking with simultaneous safety switching
- Power supply via cable drum integrated in the cart

Options

- Tandem or single cart
- Radio remote control
- Integration into the press control system
- Additional safety devices
- Fully automatic system for die change



Basic cart system



Round rails for minimal rolling resistance



Transport cart, movable on round rails

Technical data

Minimal transfer height	[mm]	500
Displacement speeds		
Pull-push chain	[m/min]	2.0
Changing carts	[m/min]	10

Tolerances for installed round rails

Tolerance for track on the entire length of rails	[mm]	±0.5
Tolerance of levelness (height) on 5 m length of the line	[mm]	±1.0
Length tolerance for 3 m length of rails	[mm]	- 1

Recommended floor condition

- Min. thickness of concrete slab: 200 mm
- Min. concrete strength class: C25/30, industrial floor
- ±5 mm tolerance on 5 m length in the line area

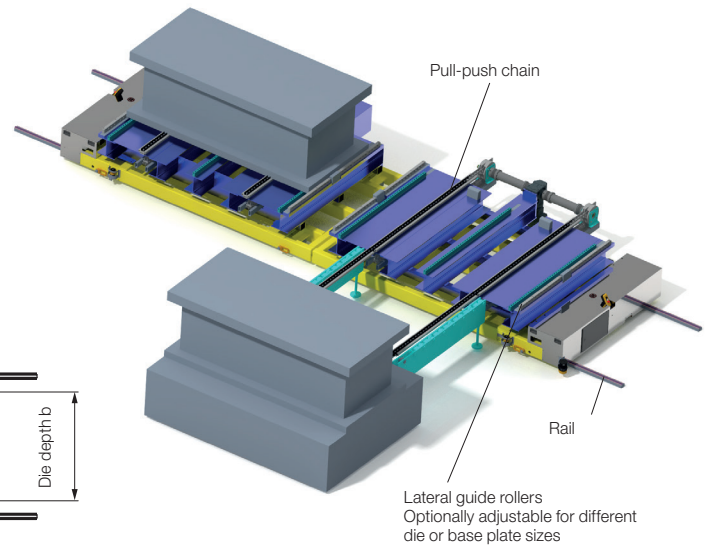
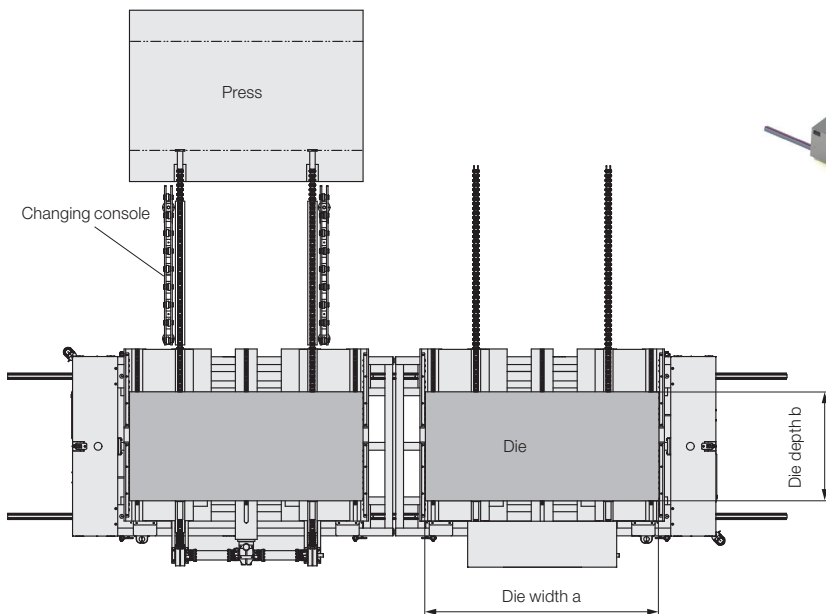
Control

One control unit (tandem with one control unit) is installed in each cart. It is operated using a cabled remote control.

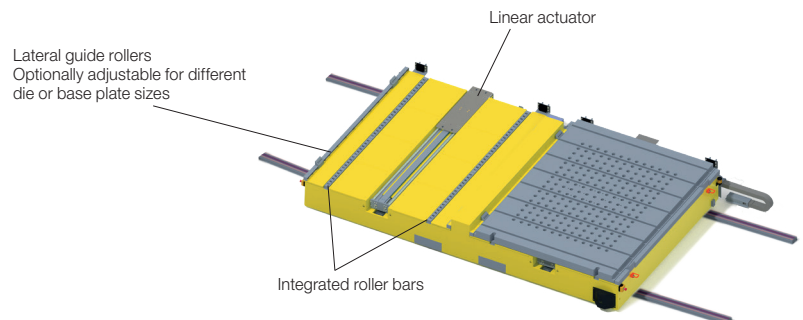
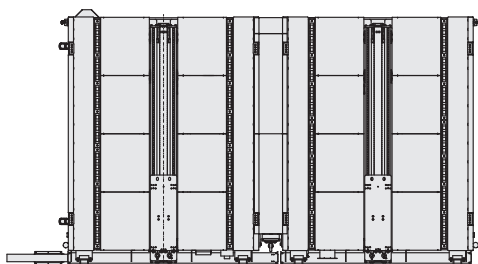
Control functions in dead man operation with automatic creep speed:

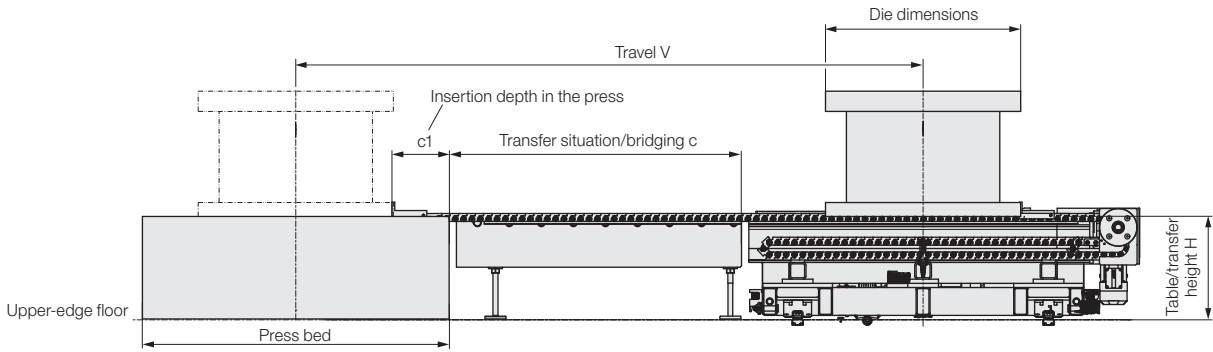
- Movement of the changing cart left/right
- Movement of the push-pull device forward/backward

Die changing cart RWS with pull-push chain for die insertion

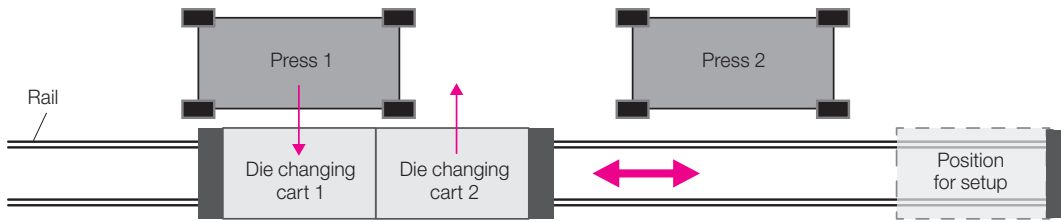


Die changing cart RWS with linear actuator for die insertion

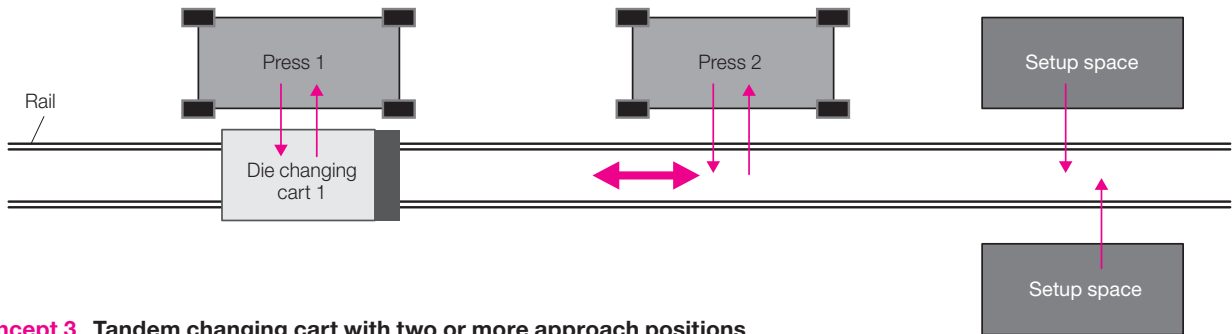




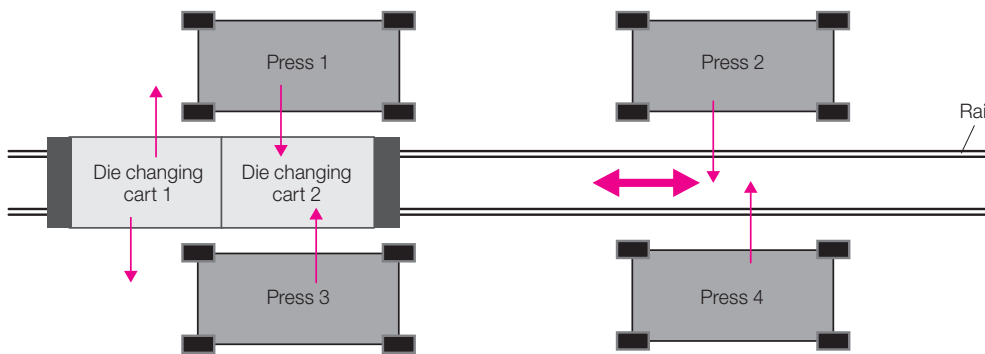
Concept 1 Tandem changing carts with two or more approach positions
Preliminary setup in separate position



Concept 2 Single changing cart with two or more approach positions
With optional setup space



Concept 3 Tandem changing cart with two or more approach positions
For use on opposite presses with equal spacing
The push-pull system travels in two directions.



Concept 4 Single changing cart with rotated travel axis
With or without setup space

