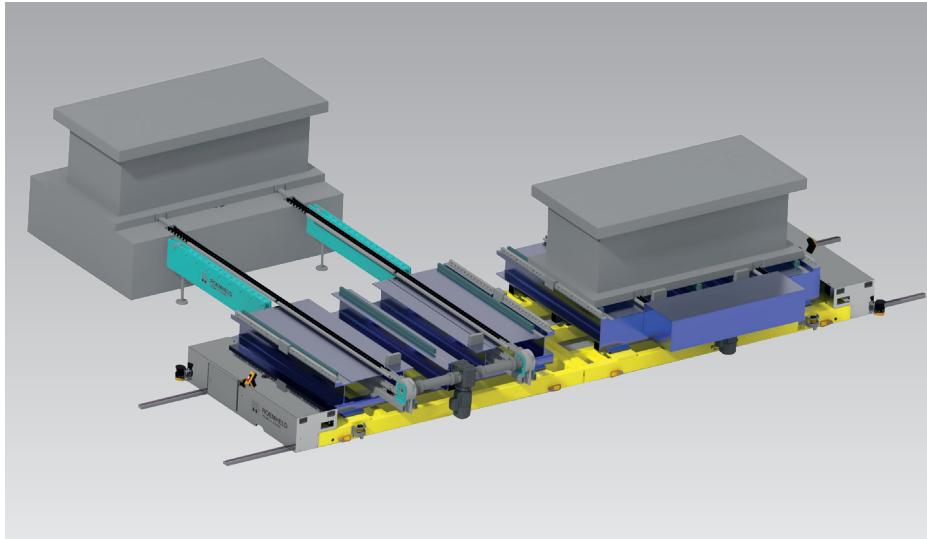




**Die Changing Carts RWS, rail-guided**  
with electric drive and integrated push-pull system  
max. load capacity 100 t



**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 100 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 crane 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 rail-guided in series up to 10, 15, 25, 30 or up to 100 t.
- Plate dimensions 2000x1000 mm, up to max. 4000x1500 mm
- Integrated control via hand control bottle
- Push-pull system
- Semi-automatic positioning and manual / mechanical ground staking for locking with simultaneous safety switching

**Options**

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

**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  $\pm 0.3$  mm
- Small space requirements
- High availability
- Minimal floor requirements



Transport cart, movable on rails

## Technical data

Minimal transfer height	[mm]	500
Displacement speeds		
Pull-push chain	[m/min]	2–4
Changing cart	[m/min]	10–15
Creep speed for positioning	[m/min]	1.5

## Tolerances for installed rails

Tolerance for track on the entire length of rails	[mm]	$\pm 0.5$
Tolerance of levelness (height) on 5 m length of the line	[mm]	$\pm 1.0$
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
- $\pm 5$  mm tolerance on 5 m length in the line area

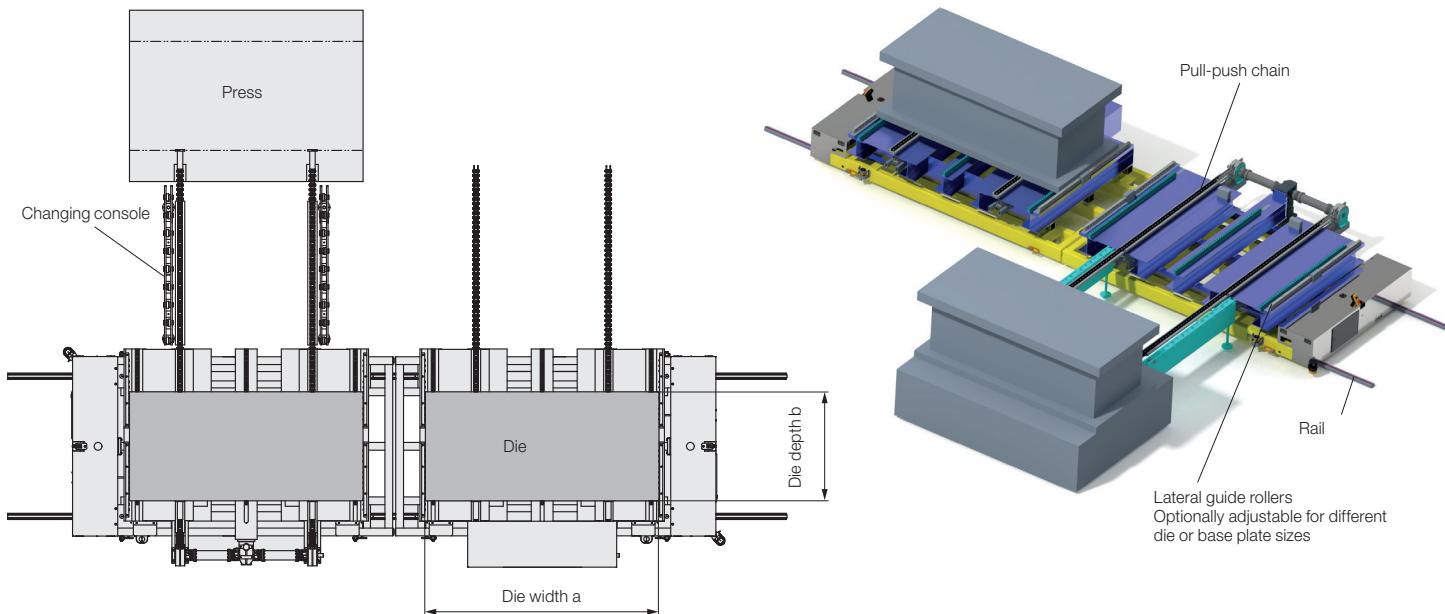
## Control

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

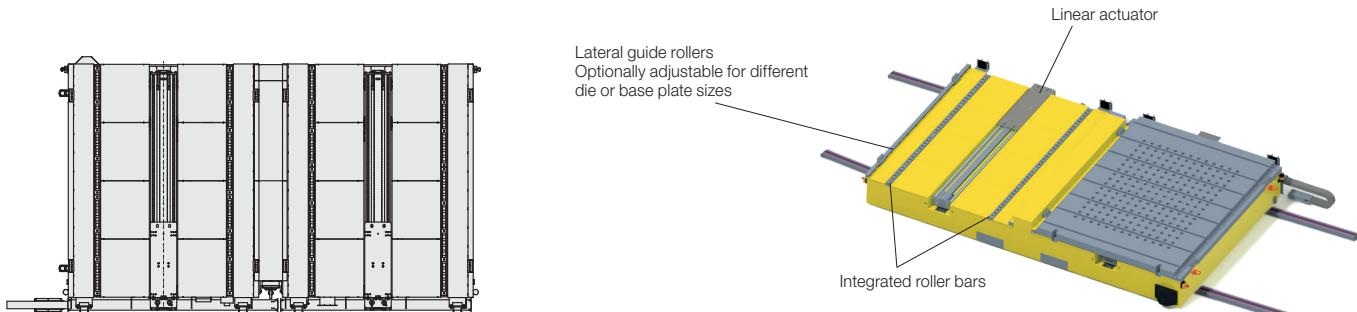
## Control functions in dead man operation with automatic creep speed:

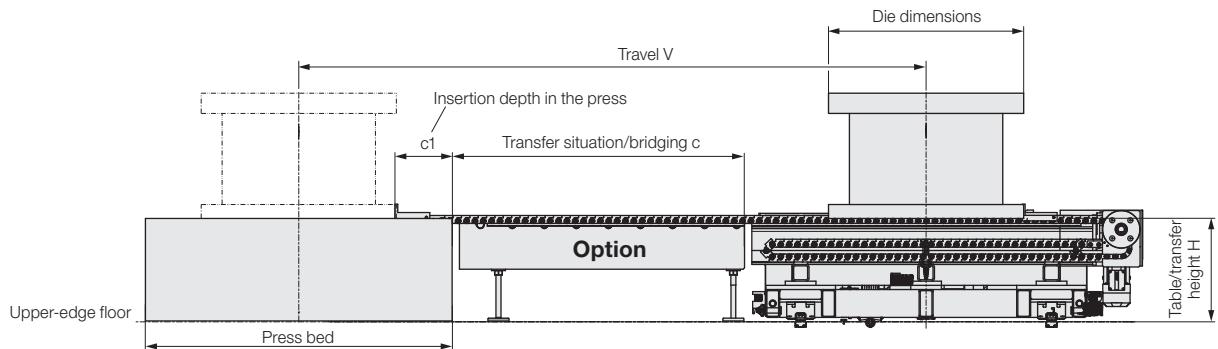
- Movement of the changing cart left/right
- Movement of the push-pull device forward/backward

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

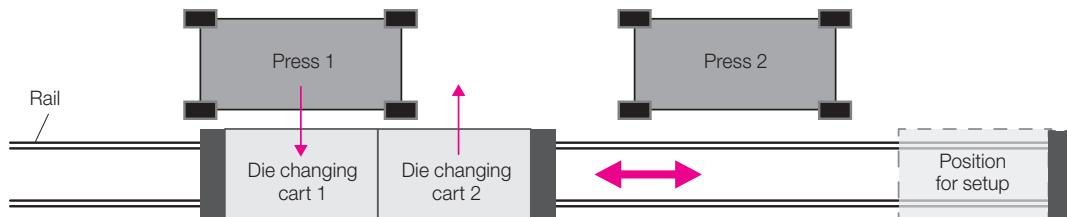


## Die changing cart RWS with linear actuator for die insertion

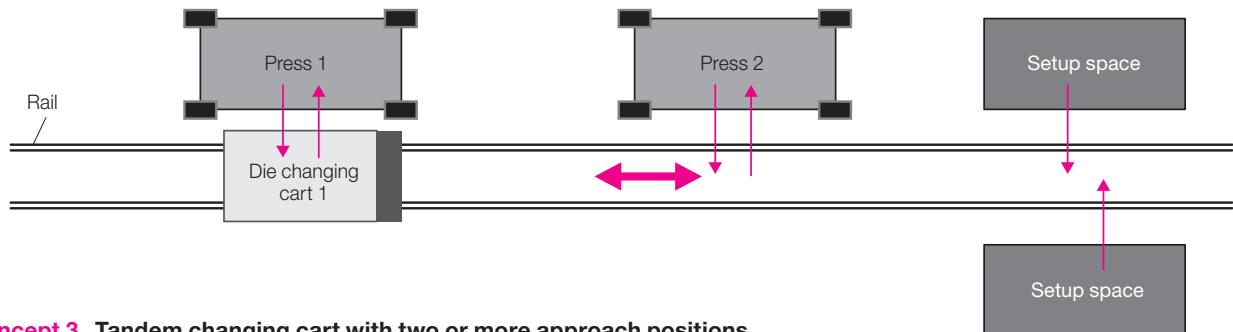




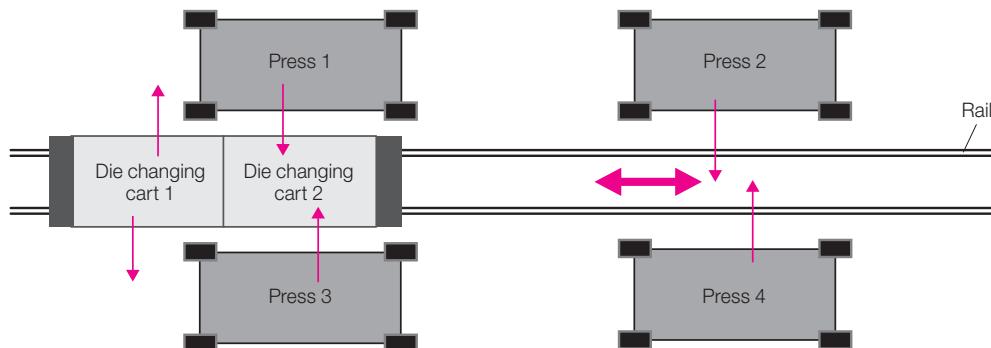
**Concept 1 Tandem changing carts with two or more approach positions**  
Preliminary setup in separate position



**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

