



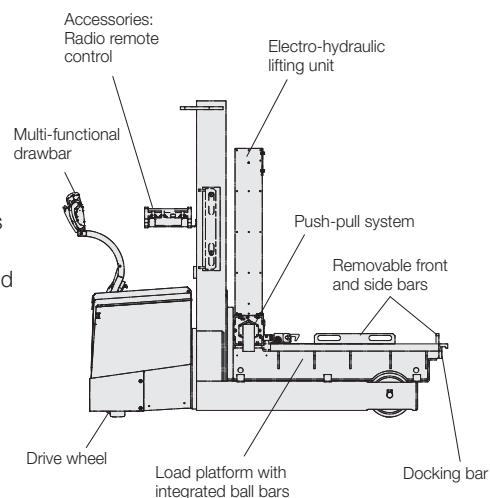
Die Changing Carts RWA 2500/4000/6000

electrically movable, with electro-hydraulic lifting platform,
 push-pull system, max. load capacity 2,500, 4,000 or 6,000 kg



Advantages

- Safe, non-destructive die transport of heavy dies
- Time-saving die change
- Integrated die changing table with hydraulic ball bars and push-pull system
- High degree of safety thanks to docking rails and lowerable ball bars
- Prevention of falling die thanks to inserted and secured front and side bars
- Simple and centralized operation with multi-functional drawbar
- Multi-function display on the drawbar
- Robust vehicle technology
- Modular design with standard drive



Application

Die changing carts RWA 2500/4000/6000 are used for the transport and the change of heavy pressing and punching dies as well as injection and casting moulds.

Description

The die changing cart RWT is an electricaly driven walking and lifting cart, specifically equipped for the safe transport and change of dies.

The electro-hydraulic lifting platform is designed to function as a die changing table with integrated hydraulic ball bars and a push-pull system, which facilitate the automatic insertion of the dies onto the press table.

Safety devices

Insertable front and side bars on the die changing table secure the die on all sides from falling during transport.

For transport, the centre of gravity of the load must be positioned in the centre of the cart and the lifting columns must be completely lowered.

During transport, the balls in the changing table are always lowered and the die is secured against slipping.

Safety docking station

The docking bars on the changing table (included in delivery) and on the press table (accessory) ensure for precise locking of the die changing cart. Ball inserts can be lifted after successful docking to the press table.

Versions

Die changing carts RWA are available with a maximum load capacity of 2,500, 4,000 or 6,000 kg and various equipment.

Power supply

Power is supplied to the electric drive, the lifting platform and the ball bars via an installed 24 V DC battery with 240 Ah (2.5 t cart) / 345 Ah (4-6 t cart).

This battery can be completely charged with the supplied battery charger within 10 hours at 230 V and within 12 hours at 110 V.

Push-pull system

The integrated push-pull system allows the user to automatically extend and retract the die at the push of a button without having to be in the danger zone. The dies are moved at a speed of 33 mm/s. Moving at creep speed enables precise positioning of the dies in the press table.

To load and unload the dies using the push-pull system, the dies must be fitted with die hooks (see accessories on page 3).

Operation

The die changing cart RWA is operated entirely from the multi-functional drawbar.

- Steering by drawbar
- Rotary switch for continuous and sensitive driving (speed control)
- Toggle switch for reduced speed
- Push-button for driving with reduced speed for vertical drawbar position
- Tilting lever for sensitive lifting and lowering of the lifting platform
- Mushroom push-button for lifting/lowering balls
- Tilting lever for shifting dies
- Signal horn and key switch
- Main current safety switch (emergency stop)

Multi-functional display

for display of

- Battery status and operating hours
- Maintenance intervals and error messages

Accessories

see page 3

Optional equipment upon request

see page 4

Product selection

Configuration options at a glance see page 6

Technical data • Dimensions

Technical data

| Max. die weight F_g | [kg] | 2,500 | 4,000 | 6,000 |
|--|--------|------------------|------------------|------------------|
| Platform size, useable W x D | [mm] | 1360 x 935 | 1360 x 935 | 1480 x 1145 |
| Lifting mast | | S5 | S6 | S8 |
| Lifting range | [mm] | 500–1850 | 500–1850 | 550–1850 |
| Stroke of the ball bars | [mm] | 2 | 2 | 2 |
| Max. lifting force/bar | [kN] | 16.5 | 16.5 | 16.5 |
| Load capacity at the load centre of gravity | [kg] | 2500 | 4000 | 6000 |
| Load centre of gravity LSP | [mm] | 400–600 | 400–575 | 500–750 |
| Length base frame l1 | [mm] | 2214 | 2240 | 2511 |
| Length to push-pull system l2 | [mm] | 1350 | 1375 | 1437 |
| Length to lifting mast l3 | [mm] | 955 | 981 | 1042 |
| Height h1 | [mm] | 2160 | 2160 | 2532 |
| Drive-on height h2 | [mm] | 3185 | 3185 | 2860 |
| Min. height platform h3 | [mm] | 500 | 500 | 550 |
| Ground clearance h4 | [mm] | 45 | 45 | 52 |
| Platform width b | [mm] | 1400 | 1400 | 1520 |
| Platform depth t | [mm] | 1150 | 1150 | 1360 |
| Track gauge s | [mm] | 901 | 901 | 1100 |
| Travel length w | [mm] | 1400 | 1400 | 1500 |
| Pull / push force F | [N] | 2500 | 4000 | 6000 |
| Wheel diameter | [mm] | 250 | 300 | 200 |
| Max. driving speed | [km/h] | 5 | 5 | 5 |
| Running performance at full load with 240 Ah battery | [h] | approx. 2.5 | approx. 2 | approx. 1.5 |
| with 345 Ah battery | [h] | | approx. 3.5 | approx. 3 |
| Empty weight* | [kg] | approx. 2250 | approx. 2350 | approx. 2600 |
| Part no. | | 889132500 | 889134000 | 889136000 |

Delivery

- Changing cart with built-in battery
- Battery charger
- Battery filling system Aquamatic
Filling station with electric pump for fast filling of the batteries with water.
- Lifting platform with push-pull system and 6 installed ball bars
- Docking bar on the lifting platform
- Insertable side and front bars

Versions as per customer's request

- Roller bars instead of ball bars
- 8 installed rollers or ball bars
- Individual ball or roller distance
- Individual dimensions of lifting platform

Please contact us.

Accessories

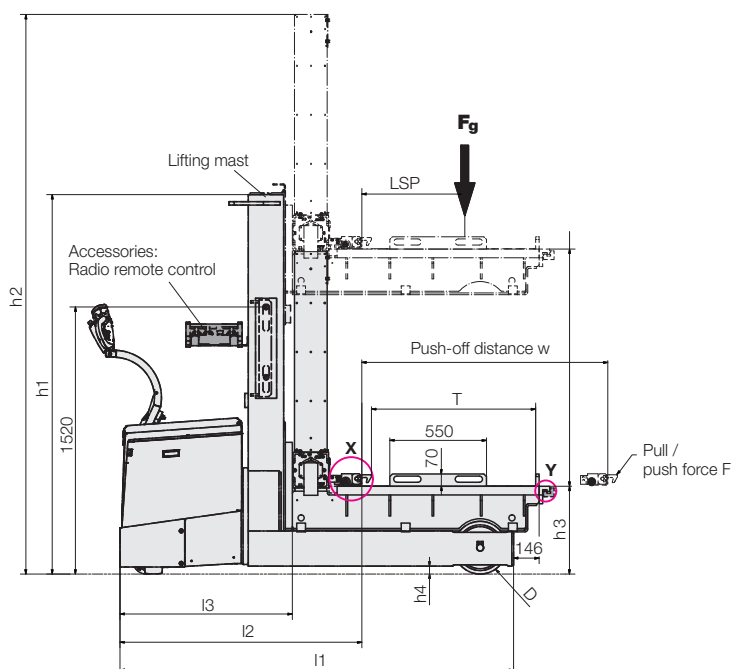
see page 3

Optional equipment

see page 4

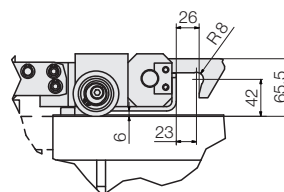
* The empty weight depends on the battery
(2.5 tonnes with 240 Ah battery, 4 / 6 tonnes with 345 Ah battery)

Dimensions



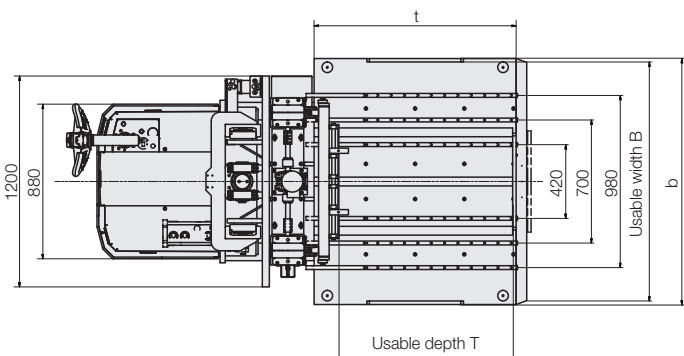
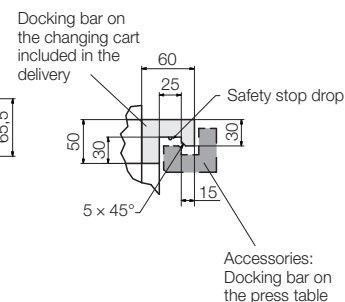
Push-pull docking device

X (1:2)

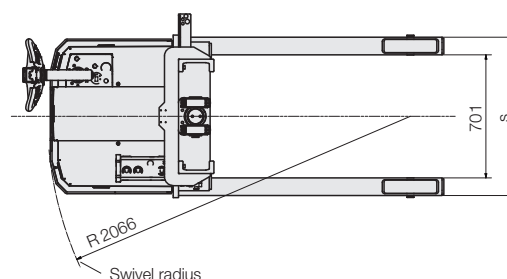


Docking bar

Y (1:2)



without lifting unit



Docking bars

To achieve the exact insertion height on the press table, the lifting platform and press table are fitted with screwable docking bars. A docking bar on the changing cart is included in our delivery.

Docking bar

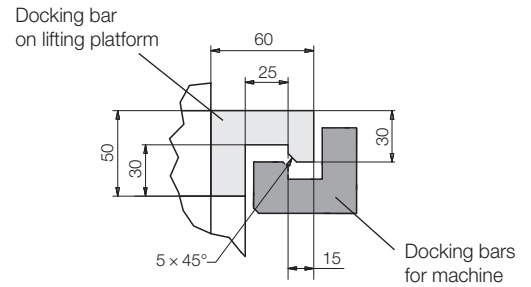
for fixing on the changing cart
L = 1150 mm

Part no. 889130022

Docking bar on other machines/presses

for fixing at the machine/press
L = 576 mm

Part no. 889130023



Docking bar light

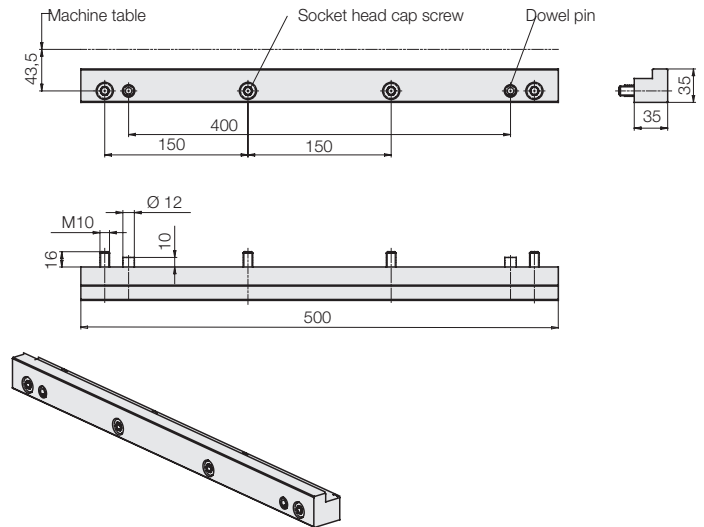
simplified docking bar for fixing at the machine/press
L = 500 mm

Part no. 789140003

Protection plate for docking bar light

protects the surface of the machine/press from paint damage when docking
L = 500 mm

On request

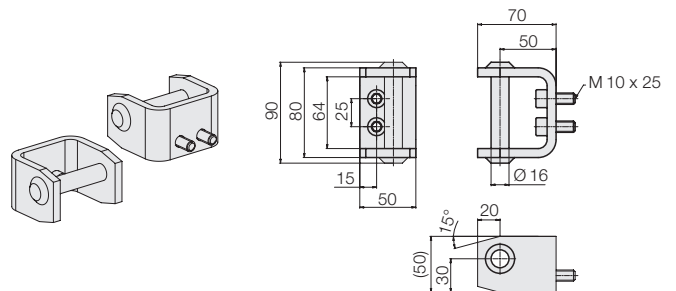


Die hook

for semi-automatic push-pull docking device

To load and unload the dies using the push-pull system, the dies must be fitted with a die hook.

Part no. 7 1836 3000



Battery chargers

E 230 G 24/25 B50FP

Charging time: 10 h (at 240 Ah)
Code class: IP 21

Part no. 889130025

E 110/230 G24/22 B50-FPO-WR

Charging time: 12 h (at 240 Ah)
Code class: IP 21

On request

E 230 G24/35 B50 FP

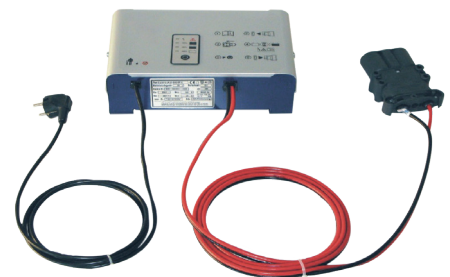
Charging time: 10 h (at 345 Ah)
Code class: IP 21

On request

E 110 G24/40 B525 FP-WR

Charging time: 10 h
Code class: IP 21

On request



Optional Equipment upon Request

Remote control

The die changing cart can be equipped with an additional cable or radio remote control as an option.

These allow the die changing cart to be operated from a safe distance and provide a better view of the docking point in complex docking situations.

With the functions:

- Lifting/lowering
- Driving forwards/backwards
- Chain forwards/backwards (optional)
- Hydraulic bar lifting
- Emergency stop

Cable remote control

(Mounting position see drawing on page 2)

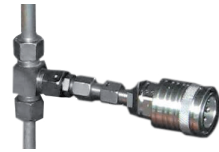


Radio remote control



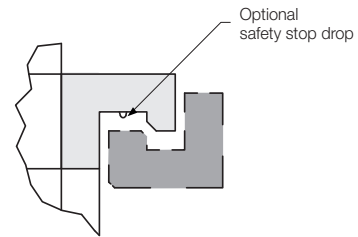
Quick-disconnect coupler for external ball or roller bars

The die changing cart can be equipped with an additional hydraulic control circuit with quick-disconnect coupling (operating pressure 80 bar) as an option for the automatic operation of the hydraulic ball or roller bars in the press table.



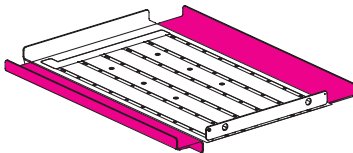
Safety stop drop in the docking bar

The docking bar of the die changing cart can be equipped with a belt switch as an option. This switch prevents further lowering once the docking process is complete and serves as an additional safety precaution to prevent damage to the press/rack system/die changing cart.

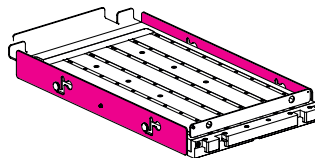


Safety bars for changing tables

Widened lateral die guide facilitates the centric mounting of extra-wide dies

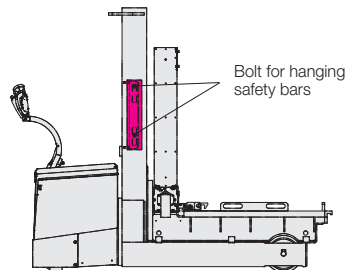


Lateral separator plates can be lowered for dies that are larger than the platform



Storage location for insertable safety bars

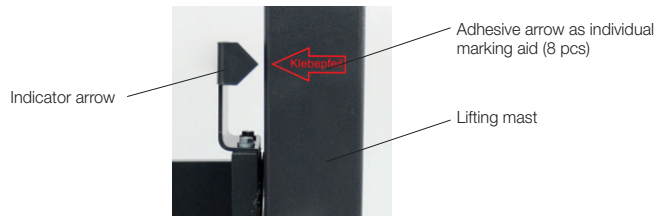
The die changing cart can be equipped with a storage location on the lifting mast for attaching the insertable safety bars as an option. To transport extra-wide dies, the insertable bars can be removed and attached to the side of the cart.



Indicator arrows for position markings

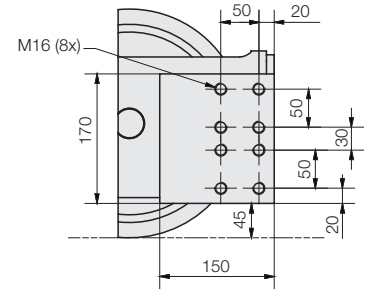
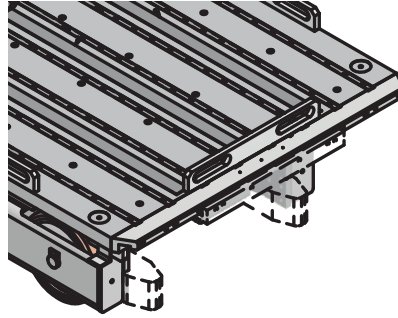
The die changing cart can be equipped with an indicator arrow as an option.

Eight adhesive arrows for position markings made by the customer allow individual die change heights to be marked on the lifting mast, thus reducing the time needed for height adjustment.



Welded-on mounting plate
for attaching a centring aid

The die changing cart is available with mounting plates as an option. They are welded to the base frame and allow the customer to attach a centring aid to the die changing cart.



Product Selection

Configuration options

You can choose the desired version and equipment of the changing cart:

Changing carts

RWA 2500

RWA 4000

RWA 6000

Equipment

Docking bars for other machines/presses **Quantity requested:** _____

Docking bars, light version for other machines/presses **Quantity requested:** _____

Protection plate for docking bars

Die hook

Cable remote control

Radio remote control

Quick-disconnect coupler for external ball/roller bars

Safety stop drop in the docking bar of the changing cart

Widened lateral die guide

Lateral separator plates

Storage location for insertable safety bars

Indicator arrows for position markings

Welded-on mounting plate for centring aid provided by the customer