

Special Superstructures on industrial trucks



Lifting platform



Crane superstructure



Hydraulic tail lift



Tipping body



We have been equipping vehicles with air brake systems since 1980 - for almost as long, we have also been a partner of well-known manufacturers of vehicles for intralogistics, equipping their industrial trucks with air brake systems so that they can safely tow and brake high trailer loads. In recent years, we have developed further for these manufacturers as a body specialist for special customer applications: for example, Birco offers to attach special cranes, lifting platforms, tipping bodies, hydraulic units or tail lifts. The special superstructures are implemented project-specifically according to customer requirements.

Air brake systems on industrial trucks



Air brake system mounted on the roof



Pneumatic connector „Duomatic“



Pneumatic connectors „Standard“
(yellow/red air plugs)



Pneumatic line also at the front

Even big trucks get to their limits when they need to pull and brake one or more trailers with high weights on your company premises - especially on a slope! A solution to this problem is a trailer air brake system installed at the truck.

Like a truck, the electric tractor can safely brake even large trailer loads! Just hitch up and drive off. The air system is low-maintenance and ready for use at any time. Even in winter at sub-zero temperatures.

The compressor is powered directly by the powerful vehicle battery. A pressure gauge on the dashboard provides information about the current supply pressure of the brake system at any time. High-quality workmanship and the use of brake components in OEM quality have underlined the reliability of our products for many years!



Equipment scope:

- Electric compressor 80V with interference suppression
- Antifreeze pump
- Protective cover
- Air container and drain valve
- Pressure gauge in the driver's cab
- Connected to the electro-magnetic actuation of the hand brake

Special features:

- When starting the tractor the system is automatically filled up to the cut-out pressure or - if the pressure drops - below the specified cut-in pressure
- Actuation of the compressed air system by stepping on the brake pedal
- Two-line braking system: if one line fails, its second line still brakes!
- The truck plus trailers are also braked when parking since there is a coupling to the electromagnetic handbrake valve
- The hand brake valve is also activated when the driver leaves his seat **or** presses the emergency brake button **or** removes the ignition key
- The pressure in the system is always available via the pressure gauge in the driver's cab

Safe braking of trailers for intralogistics

Crane Superstructures

Do you need a mobile, compact loading crane to move loads of up to 500kg with a long range? We enable crane arm working radii of up to 5 meters! Depending on the range, loads of up to 1700kg can be lifted and placed on the loading area of the tractor. Upon request, the loading area can be provided with aluminum sidewalls to prevent cargo from falling. Two telescopic supports ensure the stability of the electric tractor. Thanks to the pull-out control unit, the crane operator has everything in view. Further safety features such as "no crane operation without extended supports" or "no moving the tractor without retracted supports" are possible.

The powerful 80V hydraulic unit is installed in the tractor and fed by the vehicle battery. There is no need for an extra crane battery that has to be charged separately! The 20l oil tank is easily accessible. The crane structure only requires approx. 600mm of the loading area length. This leaves up to 2.00 m (depending on the wheelbase) as a loading area.



Crane PC2700 installed without sidewalls



Crane PC1500 installed with sidewalls



Crane PC1500 with low sidewalls



Extended supports

Equipment scope:

- Palfinger crane PC1500 (range up to 3100mm with 440kg load capacity) or PC2700 (range up to 5000mm with 500kg load capacity) mounted on subframe
- 80V hydraulic drive
- a pull-out control unit attached (Pc1500), PC2700 with a second control unit
- 20 liter oil tank
- 2 telescopic support legs
- Auxiliary frame for crane assembly mounted on the chassis and painted in the chassis colour
- Crane technical approval and CE marking for the body

Additional equipment options:

- Installation of a second steering position (PC1500)
- Aluminum side walls attached to the platform, different heights possible
- Swivel limitation for crane operation
- Safety circuits like
 - * It is not possible to move the tractor without retracted supports
 - * It is not possible to operate the crane without the supports extended
 - * Only driving operation / only use of crane
- Mechanical extension for PC1500 to 4200mm with 270kg load capacity
- Extension of the loading area possible

You can find an operating video of truck with crane superstructure on our webpage:
www.blomenroehr.com/birco-bremstechnik

**Safe lifting and
loading of
materials
with long ranges**

BIRCO
BREMSTECHNIK u. HANDELS GMBH

Tail lift with tarpaulin top



BÄR tail lift mounted at rear



Tarpaulin top with roller blinds



Actuation of the tail lift at the rear



Easy loading of the truck

The electric tractor with a hydraulically operated tail lift, tarpaulin structure and aluminum sidewalls is ideal and easy to use for the in-house transport of palletized material, trolleys etc.

This means that you can use the electric tractor to load heavier materials and pallets outdoors - quickly and without straining your back - and then drive them dry to their destination. The roller blinds on the sides and at the rear of the tarpaulin structure allow quick opening and closing.

Power is supplied to the tail lift directly from the powerful vehicle battery. The tail lift is operated at the rear - so the driver can see the area behind the tractor. A safety switch in the dashboard is used to select the "Drive mode" or "Operation tail lift" position. This means that the tail lift can only be operated when the vehicle is standing.



Equipment scope:

- BÄR tail lift with 750kg load capacity, with anti-slip running surface, foot control, flashing lights and roll-off protection; Platform dimensions 1610 x 1350mm(HxW)
- 80V hydraulic unit
- Installation of 2 stable corner posts at the rear as a stop for the tail lift
- Safety switch "Driving mode / operation of the tail lift" in the driver's cab
- Foldable aluminum sidewalls 40cm high on the sides with PVC forklift protection
- Tarpaulin frame with plug-in corner stanchions, frame painted
- Truck tarpaulin made of PVC in RAL colour of your choice with side and rear roller blinds with constant springs

Particularities:

- A jaw coupling can be mounted on the rear of the tractor
- With limit switch: the tractor can only be driven when the tail lift is closed

**Easy loading and
safe transport of
materials**

You can find an operation video of a truck with tail lift on our webpage:
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Diesel forklift with air brake system

Diesel forklifts - for example the Still model RX70-50 - can also be equipped with a compressed air brake system like electric tractors in order to enable them to brake trailers safely even on slopes.

At the forklifts a compressor unit with a 20l air tank is installed on a base plate at the rear - the view to the rear is still guaranteed.

In addition to the components built into the tractor, such as a pressure gauge, drainage valve, protective hood, red / yellow compressed air connections and frost protection pump, a trailer control valve is also installed near the brake pedal under the base plate, which converts the truck's brake signal into a pneumatic signal.



Compressor and tank mounted on a base plate, the rear view is guaranteed



Yellow/red couplings mounted close to the hitch



Diesel forklift RX70-50 with air brake system

HYDRAULIC AGGREGATE

The in-house supply of hydraulic pressure can be implemented on a mobile basis by installing single-circuit or dual-circuit hydraulic units on tractors. Different units with different services and delivery quantities can be offered. The pump is operated by a powerful 80V hydraulic unit from the vehicle battery. The hydraulic unit can also be set up in combination with a compressed air brake system.



Single circuit hydraulic aggregate



Hydraulic aggregate and air brake system



Two circuit hydraulic aggregate

Lifting Platform

Height-adjustable loading platform for conveniently lifting or lowering loads of different types. Roll containers, laundry trolleys, beverage crates and much more can be quickly moved from one height to another. Loading flaps on both long sides with safety grids allow flexible use. Lashing strips or anchor rails for securing loads and an illuminated loading platform make work easier.

Payloads of up to 1500kg are possible! Different parapet heights and platform lengths can be offered.

Equipment scope:

- Hydraulic scissor lifting platform with a load capacity of approx. 1600daN
- 80V hydraulic unit with 25l oil tank installed in the tractor
- two control units attached: one at the rear of the platform, second in the basket
- Protection against trapping made of bellows
- Aluminum side walls about 950mm high attached to the platform
- 2 loading flaps with retractable fall protection on the right and left
- Light band in the cage as well as anchor rail and rod
- Key switch: either lift table operation or drive operation tractor
- CE declaration of conformity for the lifting table and body

You can find an operation video of a truck with lifting platform on our webpage:
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Additional Special Superstructures

Jungheinrich-truck



Tipping body



Tarpaulin top



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