

Operating instructions

99 9212 002 - 06/2000

Please retain for future reference

Shifting carriage TG

1995 models and later

Rating plate

DOKA INDUSTRIE, A-3300 AMSTETTEN
Bezeichnung: HUBWAGEN TG
Max. Tragfähigkeit: 1000 kg
Eigengewicht: 168,0 kg
Art.-Nr.: 582778
Baujahr: CE

DOKA INDUSTRIE, A-3300 Amstetten
Designation: SHIFTING CARRIAGE TG
Max. carrying capacity: 1000 kg
Weight: 168,0 kg
Art. n°: 582778
Model:

Art. n° 582778



Utilisation for designated purpose only:

The shifting carriage TG is a hoisting appliance that may only be used for erecting, striking and horizontal shifting of Doka's Aluxo, Staxo and d2 supporting scaffolds.

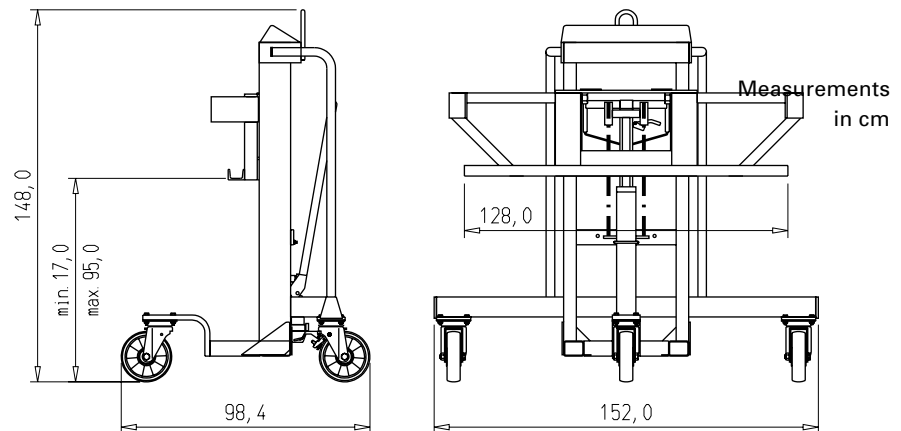
Permissible load: 10kN per shifting carriage

doka
The Formwork Experts



It is forbidden to use the product for anything but its intended purpose!
Doka accepts no liability for products that have been altered!

Drawings



After taking delivery of your shifting carriage TG

Damage in transit

The shifting carriage TG is given thorough inspection and testing before being dispatched from the manufacturer's works.

In order to make sure that no damage has occurred in transit, the shifting carriage TG should be inspected thoroughly as soon as it is delivered.

Any damage must be reported to the sender in writing. Until such complaint has been dealt with, the shifting carriage TG may not be put into service.

Warranty conditions

The warranty shall lapse in the event of overloading or other improper use of the shifting carriage.

Familiarity with the Operating Instructions and the applicable recommendations

User authorisation

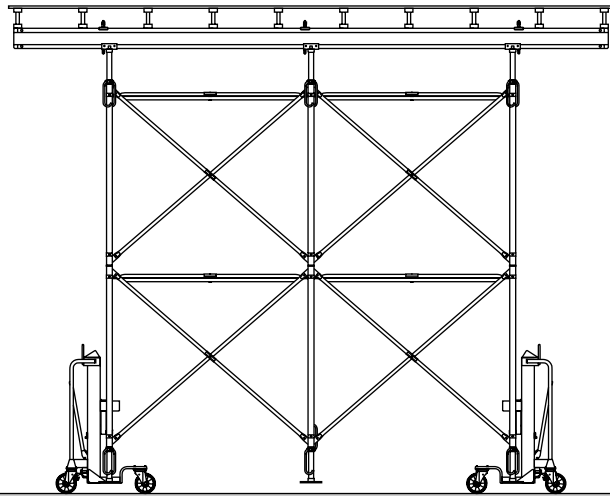
The only persons allowed to operate the shifting carriage TG are those who have been given sufficient instruction in how to use it, and who are familiar with all applicable operating manuals and regulations. The employer must have suitable evidence of the personnel's ability to operate and handle the shifting carriage. Please also observe the VDMA guidelines on proper use of industrial trucks for their designated purpose.

Positioning of the shifting carriage TG

Two separate lifting trolleys TG are needed for shifting a Doka supporting-scaffold assembly (Aluxo, Staxo or d2).

Push the shifting carriage TG up against the front and rear faces of the supporting scaffolds (which must not be under load). Lower the shifting carriage TG so that the slot-in lifting profile reaches under the bottom rung of the scaffold frame. Swivel all the castors to point in the direction in which you want to start wheeling. Push the feet into the frames and secure them against drop-out. Using both shifting carriage TG, evenly lower the scaffold to the desired height.

Shifting procedure



The shifting carriage TG is fitted with 3 swivel castors of diam. 200 mm, two of them with an integral parking brake.

Points that must be observed when shifting

- **Maximum load: 10 kN per shifting carriage!**
- **Only use with Doka Aluxo, Staxo and d2 supporting scaffolds.**
- **Max. gradient of floor: 5 %.**
- **Max. shifting speed: 4 km/h.**
- **The floor must be stable, firm and sufficiently smooth (i.e. not gravel etc.). Keep the floor clean in the area where the supporting scaffold is to be shifted.**
- **Take special care with:**
 - Downward projections from ceiling
 - Steps
 - Wall openings
 - Strong wind
- **Max. configuration that can be transported using 2 shifting carriages TG: tables with 3 cross-frames per section and a max.height of 5.0 m.**
- **It is forbidden for persons to ride on the shifting carriage.**
- **It is forbidden for any other persons to stand in the immediate danger zone (e.g. near the frame feet).**
- **Use of any mechanical assistance for shifting the scaffold is forbidden!**
- **Securing when parked**
After wheeling the shifting carriage to its new position, fix it with its parking brakes so that it cannot be moved accidentally.
- **Long-term parking**
Do not leave the supporting scaffold on the shifting carriage TG if parking it permanently or for a longer period.
- **Hoisting the shifting carriage TG by crane**
Only use the crane hoisting lug provided.
- **Be particularly careful when wheeling the unloaded shifting carriage back to where it is next needed - it can easily topple over!**

Moving the unloaded shifting carriage

Danger sign

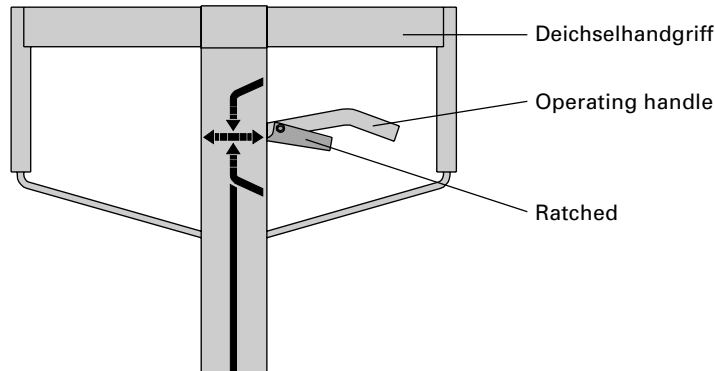


The shifting carriage TG bears a clearly visible warning that it is completely forbidden to ride on the slot-in lifting profile, and forbidden to stay underneath it or to step on it while the scaffold is lifted.

Lifting and lowering(with/without load)

The shifting carriage TG is fitted with a manually operated rapid-action hydraulic pump.

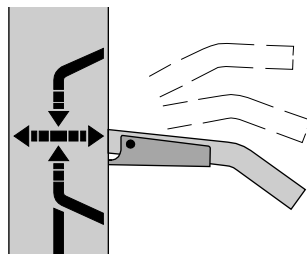
The pump can be switched over between normal and rapid lift. To switch over, shift the operating handle (lever) into the appropriate position.



The 3 lever positions

1. Rapid lift
2. Normal lift
3. Lowering

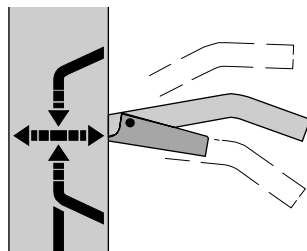
Rapid lift



The hydraulic pump is set to "rapid lift" by releasing the small ratchet. This makes the release handle glide down into the bottom position. It is now possible to lift loads of up to approx. 300 kg by simply pumping up and down with the lever.

With every stroke of the pump, the slot-in lifting profile is raised 54 mm. "Rapid lift" requires higher pump output, which is why it is only possible to lift loads of up to around 300 kg.

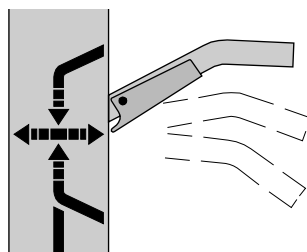
Normal lift



To shift the pump into the high-pressure position, lift the release handle until the ratchet engages. In this position, the rapid-action pump piston is disconnected.

With every stroke of the pump, the slot-in lifting profile is raised 17 mm. Loads of up to 1000 kg can be lifted in this position.

Lowering



To lower the load, **slowly** pull up the release handle. Lower both shifting carriages TG simultaneously and gently. When this is done and you let go of the release handle, this is automatically returned to the middle position.

Hydraulic system - general notes

Venting To vent the lifting cylinder, pump the suspension profile all the way to the top and then rapidly lower it.

Safety precautions The pressure relief valve is set in such a way that the max. loadability of the shifting carriage TG is 10 kN.

It is forbidden to tamper with the setting screw on the pressure relief valve in any way whatever.

Maintenance Change the hydraulic oil:
- after every 1000 operating hours
- at least once a year

The hydraulic system is filled with a hydraulic oil with a viscosity as stipulated by ISO VG 10. The oil is additivised with:

Wynn's Hydraulic System Concentrate

This concentrate is added in a mixing ratio of 2.5:100. The concentrate reduces friction and wear and protects against corrosion.

A ready-to-use hydraulic-oil / additive mixture is available from your dealer.

Hydraulic oil filling volume: 1.2 l

If the slot-in lifting profile can be raised to the highest position, then there is sufficient oil in the system.



Hydraulic oil is harmful to the environment!

For this reason, always properly seal any leaks immediately!

Intercept any leaking hydraulic oil and dispose of it in accordance with the applicable regulations!

Maintenance - general notes

Cleaning & maintenance Clean the shifting carriage TG whenever it has been made dirty. Pay particular attention to the hydraulic system, the moving parts of guides etc., the bearing surfaces of the supporting frame, and the swivel castors.

Any deformed and damaged parts must be replaced immediately, in an expert manner.

For safety reasons, only original spare parts may be used.



Sight check

■ Deformation

■ Missing or illegible rating plate

Before starting up at a new site Lubricate with grease via the lubricating nipples provided. Lubricate the load chain and the deflection pulley with lubricating grease.

Once a year, when lubricating the chain, inspect it carefully for any signs of alteration and damage.

Repairs May only be carried out by the manufacturer!

Troubleshooting

The load is not being lifted, even though you have made several attempts to "pump"

Possible causes:

- The load is too heavy (> 1000 kg)
- Not enough hydraulic oil
- Leaks in the hydraulic tubing
- Air bubbles have got into the hydraulic system
- The valve control system is not working (low-pressure valve core)
- Over-pressure valve faulty (integrated in the low-pressure valve core)
- The valve-face does not shut tightly (high-pressure valve core)

The load is not being lifted to the maximum height

Possible cause:

- Not enough hydraulic oil

The load can only be "pumped upwards" with great difficulty

Possible causes:

- The releasing pin is stuck in the control valve (in the rubber knob or in the valve housing)
- The valve control system is faulty (low-pressure valve core)

The load is being lowered of its own accord

Possible causes:

- Leaks in the hydraulic tubing
- The valve control system is faulty (low-pressure valve core)
- The valve-face does not shut tightly (high-pressure valve core)

The load cannot be lowered

Possible causes:

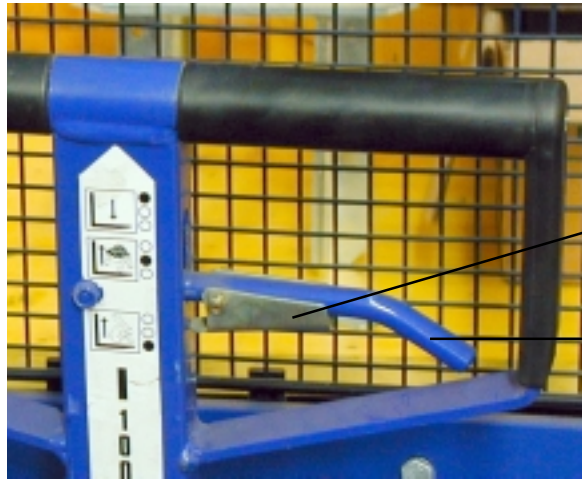
- The setting of the lowering mechanism has been misadjusted
- The releasing pin is stuck in the control valve (in the rubber knob or in the valve housing)
- The valve control system is faulty (low-pressure valve core)

The load is being lifted jerkily and/or "bounces"

Possible causes:

- Air in the hydraulic system
- The lowering mechanism is not adjusted to the optimum settings

Component overview



Ratchet
Operating handle



Filling opening



Bleeder screw
Pump piston
Valve block
High-pressure valve core
Low-pressure valve core

Applicable regulations and standards

Always observe all safety regulations issued by employee safety organisations which apply to the use of our products in the country in which you are operating.

Accident prevention regulations (per VBG* 9a) for load suspension devices used with hoisting appliances.

VDMA guidelines on proper use of industrial trucks for their designated purpose.

DIN 15 429 Load-suspension devices: Supervision in practical use.

The functional/technical instructions in this manual must be followed exactly.

*issued by the German "Bau-Berufsgenossenschaften" occupational safety organisation

Declaration of Conformity

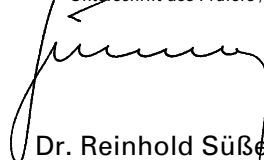
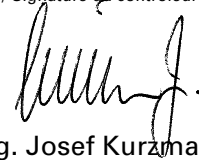
We hereby declare, on our sole responsibility, that the product "Shifting carriage TG", Art.n° 582778, EN 292 and EN 349, and that it meets the stipulations of Directives 98/37/EC.

Amstetten, 01. 06. 2000

Datum / Date / Date

Doka Industrie GmbH
Reichsstraße 23
A-3300 Amstetten

Unterschrift des Prüfers / Signature of tester / Signature du contrôleur

Dr. Reinhold Süßenbacher, Ing. Josef Kurzmann
Executive Management