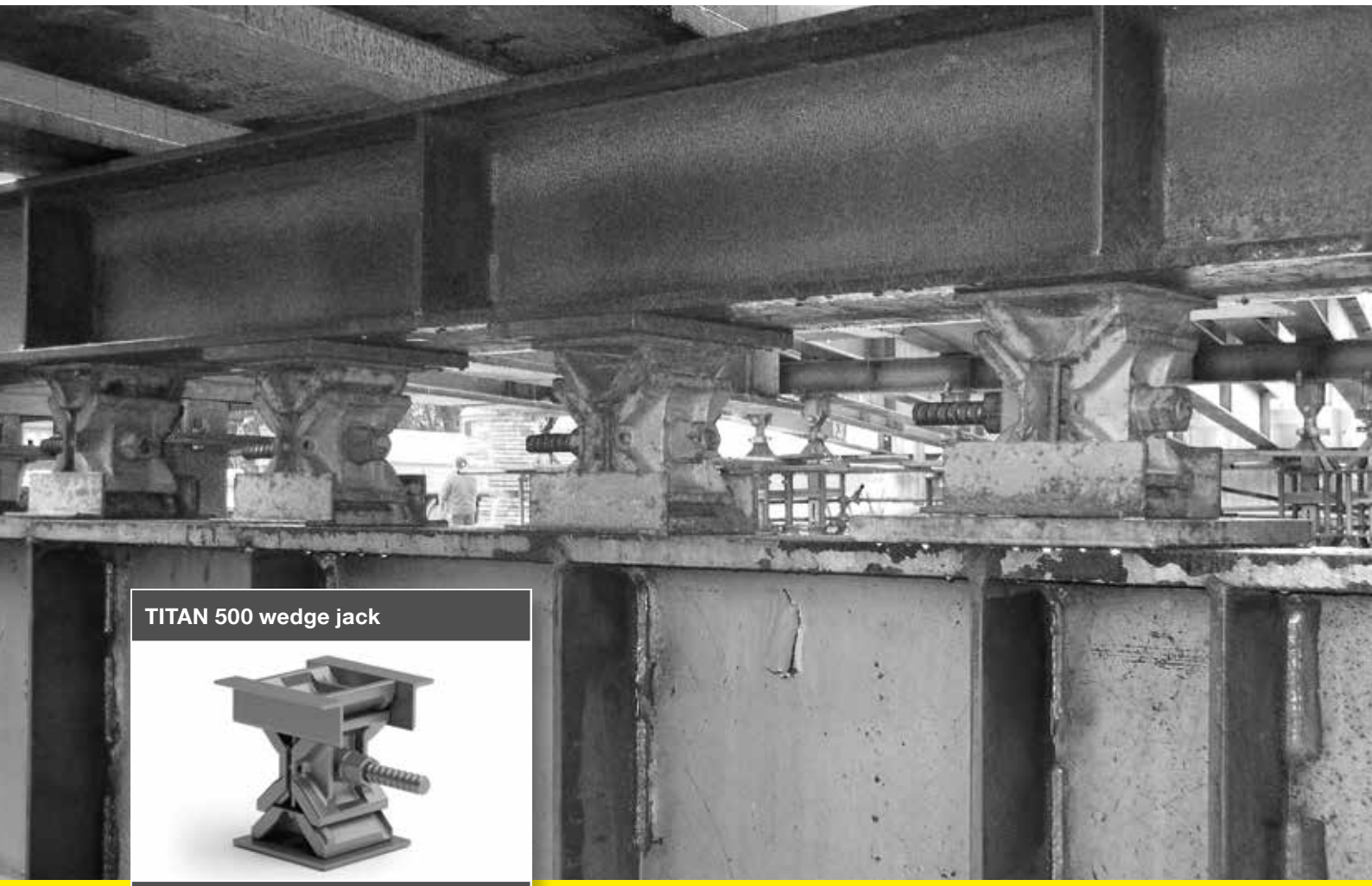
ISCHEBECK TITAN



TITAN 500 wedge jack

TITAN 1000 wedge jack

TITAN wedge jack

The alternative to hydraulic jacks
for heavy-duty falsework
- inexpensive and robust
- up to 1000 kN vertical load

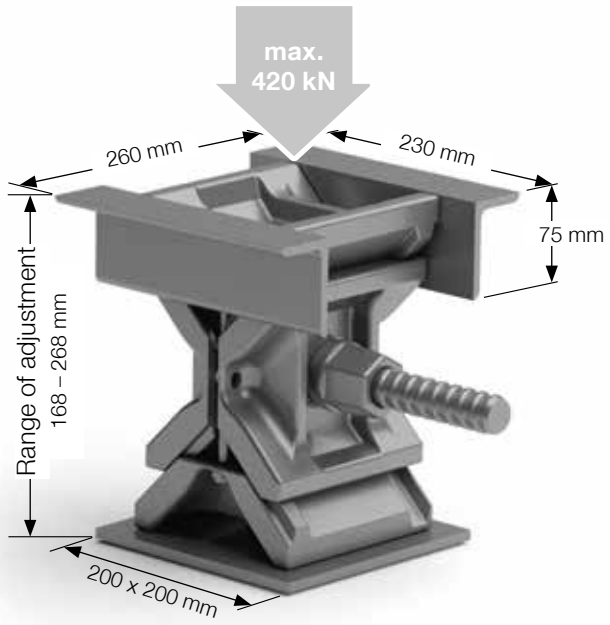
with verified typical calculations for many common applications

TITAN 500 and TITAN 1000 wedge jacks

Wedge jacks are used for supporting cross-beams or similar falsework members or single props made from rolled steel sections or typical heavy-duty falsework props. The falsework components can be attached to the wedge jack with, for example, beam clamps. Wedge jacks for such applications should be placed on essentially firm, even surfaces with minimal chance of rotation, e.g. concrete pad foundations, raft foundations, ground beams, steel brackets, etc.

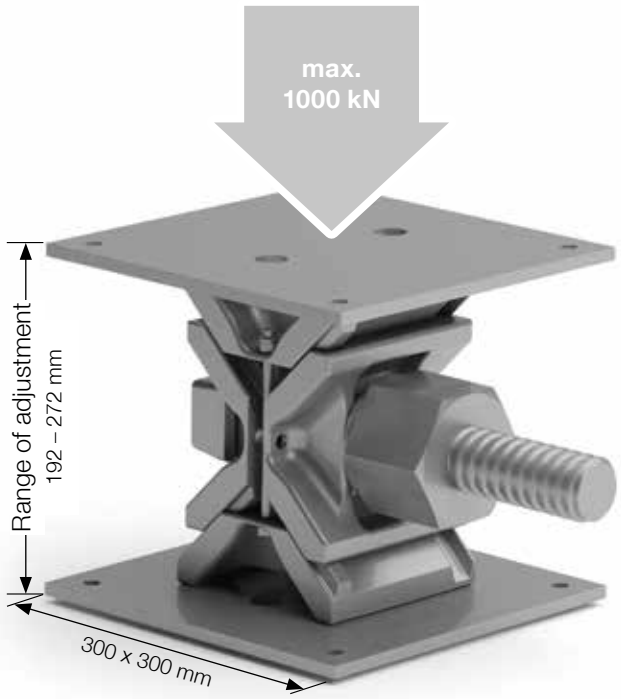
The main advantages of wedge jacks:
- exact height adjustment
- low settlement
- easy handling
- individual parts dip-coated for corrosion protection
- unaffected by water (unlike sand jacks)
- less expensive than hydraulic systems

TITAN 500 with welded angle head plates on both sides, welded base plate and robust, forged anchor bolt.



Weight	29.5 kg
Part No.	0120350001

TITAN 1000 with plates welded to top and bottom wedges and robust, forged anchor bolt.



Weight	53.3 kg
Part No.	0120350003

No hydraulics needed for adjusting height or lowering
Raising just a little is possible up to a vertical load of approx. 40 kN.
The wedge jack can be released for lowering under load using a ring spanner (46AF/80AF) and a 2 kg hand-held hammer or a torque multiplier (manual/electric) with step-down gear (preferably 1:15).

with ring spanner

AF 46	Part No. 0620350006
AF 80	Part No. 0620350004

with torque multiplier

manual	Part No. 0620350007
electric (not shown)	Part No. 0620350008

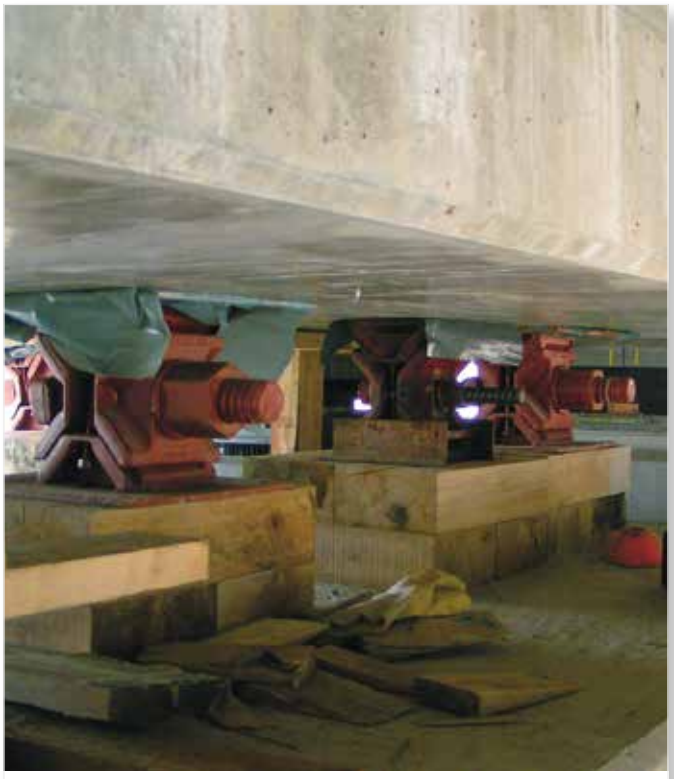
Also suitable for horizontal or eccentric loads

Wedge jacks can be used to support and transfer both concentric and eccentric vertical loads and, to a limited extent, horizontal forces, too. The loadbearing capacity depends on the support conditions. The figure shows the loads/forces using a TITAN 1000 as an example. A wedge jack may not be used to resist an eccentric vertical load and simultaneous horizontal forces in the same elevation.

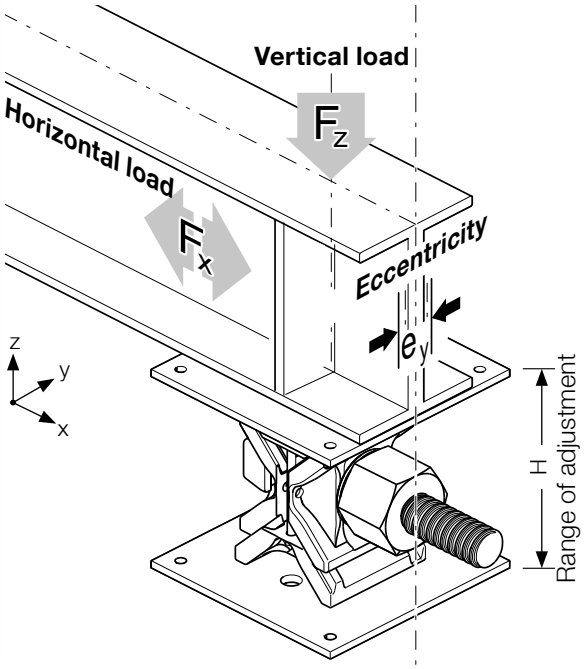
Permissible loads* according to DIN EN 12812 and DIN EN 1993. The resistances specified must be compared with the characteristic load of the structure.

	TITAN 500		TITAN 1000	
Range of adjustment H [mm]:	min. 168	max. 268	min. 192	max. 272
Vertical load perm. F_z (incl. γ_M, γ_F)	max. 420 kN		max. 1000 kN	
Horizontal load perm. F_x, perm. F_y	$0.14 \cdot F_z$	$0.11 \cdot F_z$	$0.15 \cdot F_z$	$0.12 \cdot F_z$
Eccentricity perm. e_x, perm. e_y	30 mm	12 mm	26 mm	10 mm

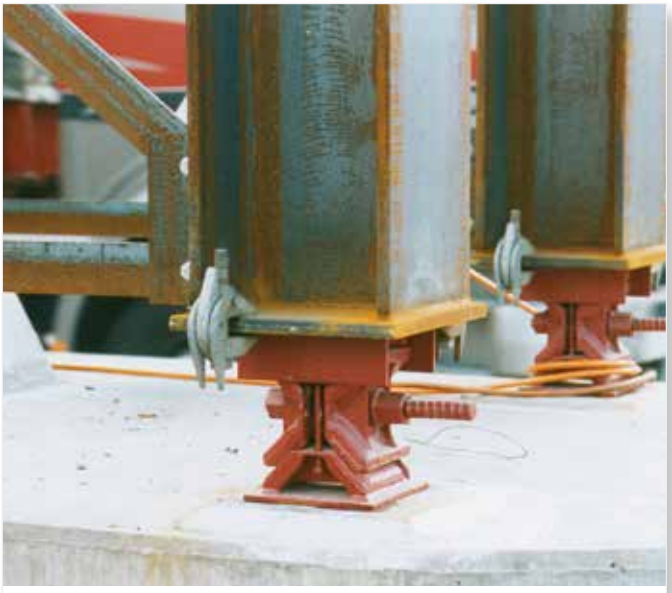
* Always comply with the instructions for installation and use. The loadbearing capacity depends on the support conditions.



Bridge over River Mulde, Dessau
TITAN 500 and TITAN 1000 wedge jacks being used to support precast concrete elements.



Relieving
When using several wedge jacks in a row, these are relieved from outside to inside alternately by turning each one through a quarter turn (corresponds to approx. 3 mm each time).



Support for single props
The wedge jack is positioned in such a way that the line of action of the vertical load passes through the centroids of the prop and the jack.
When using props made from rolled steel sections, the load must be transferred via end plates welded to the sections. Beam clamps should be used as well to secure the positions of the components.

TITAN universal beam clamp
Forged body for high clamping force with low weight.
Maximum permissible load for
- single-lap joint: perm. R = 3 kN
- double-lap joint: perm. R = 4.5 kN
- 5–70 mm clamping capacity

Weight	1.60 kg
Part No.	0620350009

National Technical Approval
8.34.-873

The photos reproduced in this brochure represent momentary snapshots of work on building sites. It is therefore possible that certain facts and circumstances do not fully correspond to the technical (safety) requirements.

Falsework and Formwork systems

Trench lining systems

Geotechnical solutions

Certified Management-System to DIN EN ISO 9001:2015 DVS ZERT

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