

CarlStahl®



LOAD SUSPENSION EQUIPMENT

Tongs
Crossheads
Grabs
C Hooks

www.carlstahl-nordgreif.de

LOAD SUSPENSION EQUIPMENT

Carl Stahl NORDGREIF



Carl Stahl NORDGREIF The specialist in the north.

Security is our utmost priority. For this reason, all Carl Stahl Nordgreif lifting equipment meets the latest accident prevention regulations from „Operating Lifting equipment BGR 500“ and the latest machine guidelines and the new EU standard. All our lifting equipment is CE-designated and is supplied with factory certification.

Technology and know-how to your advantage: use of fine-grain structural steels, construction and manufacture using cutting edge technology results in extremely durable lifting equipment even under extreme pressure. We build using CAD, two or three-dimensional.

Our lifting equipment is manufactured and supplied in accordance with DIN 15428 or DIN EN-13155, DIN 15018.

Tangible quality for one-off and series production.

Carl Stahl Nordgreif has many years' experience in the lifting equipment field. Our activities are focussed particularly on developing and manufacturing tailor-made solutions for grab, pincer and crosshead technology. We also plan and develop special solutions for extremely diverse applications. Our strength lies in customer-oriented advice and individual planning according to your requirements.

This catalogue gives you an overview of our series products and customer-specific special constructions. We are also giving you a brief glimpse into the array of complex load suspension solutions that we have realised internationally.

Take us at our word!



Tailored to you and classified by industry.

For Carl Stahl Nordgreif the customer takes centre stage.

Therefore, the catalogue contains an overview oriented by industry and application, which enables you to assign your required applications and specifications more simply to our series products and individually realised complex load suspension solutions.

Direct, customer-oriented and efficient in planning, advising and manufacturing.

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The Carl Stahl Company Group with 50 sites worldwide - your skilled partner.

Wire Industry

Steel Industry

Aluminium Industry

Paper Industry

Containers

Car Industry

Special Constructions

Crossheads

Forklifts
C Hooks

Drum grabs

Handling Technology

LSE APPLICATIONS

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LSE WIRE INDUSTRY

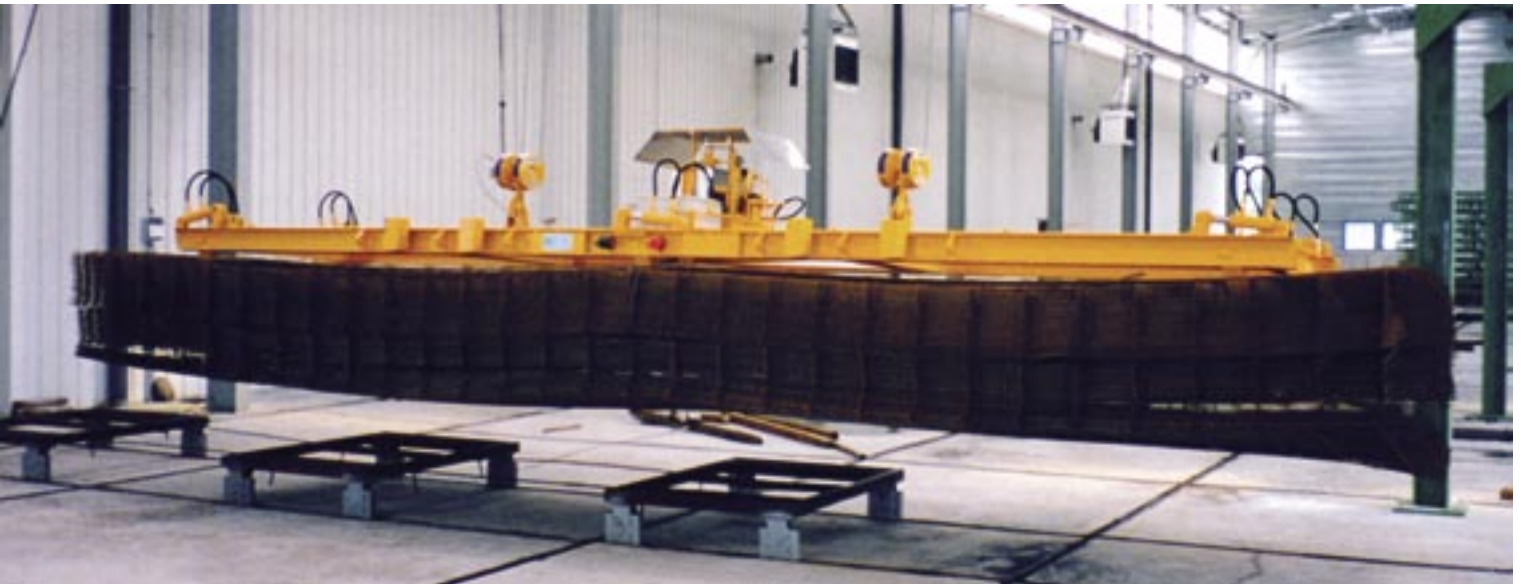


Solutions for the wire industry -

Nothing is more constant than change. The demands on commercial properties are always changing. Therefore, companies in the construction industry concentrate on problem-oriented solutions, which are precisely oriented to the demands of modern architecture and cost-efficient manufacturing.

The strong growth potential in the construction industry over the last few years poses new, innovative challenges on production and logistics. Increasing production quantities require efficient lifting equipment, which is developed and produced specifically for structural steel meshes and wire coils.

Your advantage: industry-specific know-how in advising, planning and manufacturing.



Wire Coil Inner Tongs
Wire Coil Inner Tongs
Crossheads

Wire Coil Outer Tongs

Coil tongs

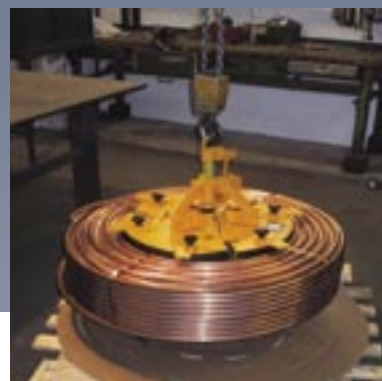
Wire Coil Hooks
Coil Tilters

Tilting Tables

Structural Steel Mesh Grabs

Structural Steel Mesh Crossheads

Adjustable Crossheads /
Telescopic Crossheads for
Steel Bands



LSE WIRE INDUSTRY COIL INNER TONGS



Wire coil inner tongs wide opening, particularly heavy steel works design



3-arm wire coil inner tongs, type DCIZ-3-650, for grabbing bound wire coils of up to 5 t net weight



Wire coil inner tongs with electromagnetic opening and closing device and leading-in funnel



2-arm wire coil inner tongs, type DCIZ-2-650, designed with round ram attachment



4-arm wire coil inner tong, special construction with roller-supported parallel motion



Wire coil inner tong for loose wire collars



Wire coil inner tong in 4-times combination with adapter crosshead

LSE WIRE INDUSTRY

COIL INNER TONGS



Special crosshead with flange-mounted wire coil inner tongs in steel works design, adjust grab width individually by hand using spindle and crank handle

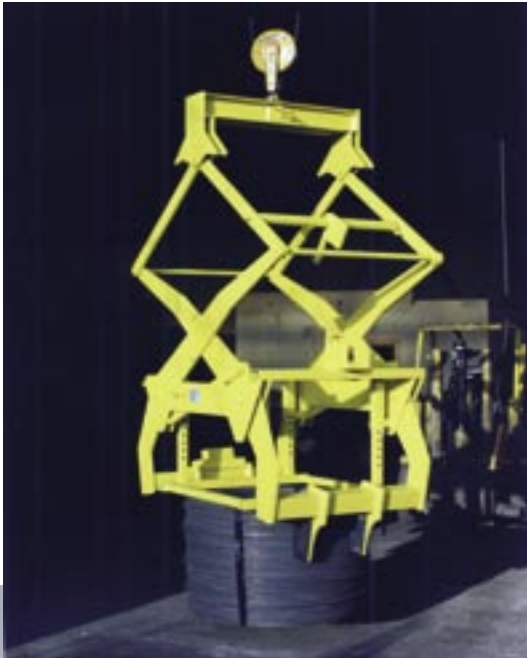


Design as above, but with grabbed coils



Special crosshead with 4-times arrangement of wire coil inner tongs and electromagnetic release device. Grab width can be adjusted individually by hand using roller chassis and locking pin.

LSE WIRE INDUSTRY COIL OUTER TONGS



Wire coil outer tongs, large design with very large internal height, also suitable for laying unwound coils at high winch heights.



Wire coil outer tongs, small design, suitable for laying coils on bobbin winders.



Wire coil inner tongs in very narrow special construction, also with large internal height

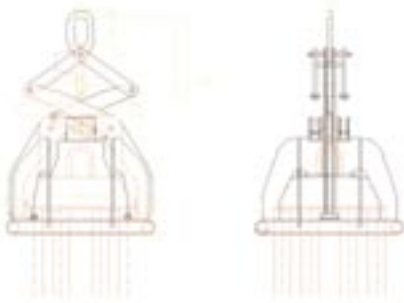
LSE WIRE INDUSTRY COIL TONGS

Special Solutions

Naturally, we also offer you solutions for horizontal transport and special coils.



Coil tongs for vertical transport



Coil tongs with step-by-step motion



Coil tongs for vertical transport,
each with load capacity of up to 5 t

LSE WIRE INDUSTRY
**C HOOKS, TILTING TABLES
TURNING EQUIPMENT**



3-arm C hooks for wire coils



Electromotive coil turning station with turning drive and lifting table



Electromotive tilting table for turning coils up to 90°

LSE WIRE INDUSTRY

STRUCTURAL STEEL MESH GRABS



Structural steel mesh grabs, mechanical opening and closing, elec. internal adjustment and slewing gear



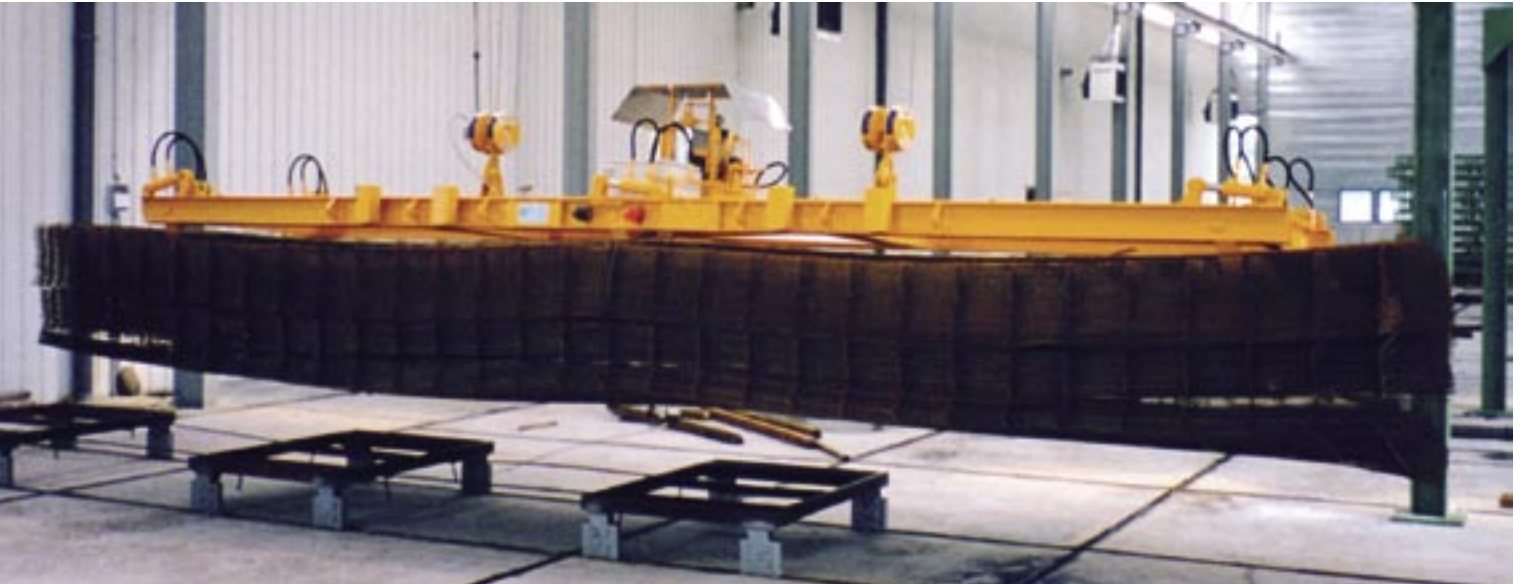
Simple mechanical structural steel mesh grab with automatic step-by-step motion and manual table height adjustment using crank handle



Structural steel mesh grab with individual cross adjustment

LSE WIRE INDUSTRY

STRUCTURAL STEEL MESH GRABS



Electrohydraulic structural steel mesh grab, internal grab



Electrohydraulic structural steel mesh grab, internal grab, with horizontal slewing gear with feet adjustable by length and cross for the different mesh types



Electrohydraulic structural steel mesh grab, internal grab, with slewing gear and pulley attachment, grab width adjustable by length and cross, mobile feet, with electronic internal height adjustment for different mesh lifting heights



Electrohydraulic structural steel mesh grab, internal grab, with slewing gear and pulley attachment, grab width adjustable by length and cross, mobile feet, with electronic internal height adjustment for different mesh lifting heights

LSE **STEEL** INDUSTRY



Solutions for the steel industry -

The steel industry is characterised by clearly increased production volumes despite international competition. The resulting high production cycles mean an extreme demand on hot operation.

The demands on load suspension equipment in their production lifecycle are changing accordingly. Therefore, steel industry companies are concentrating increasingly on solutions, which are precisely tailored to these extreme demands and guarantee cost-efficient manufacturing.

The slab tongs, block tongs, drum transport crossheads and coil hooks developed by us are efficient lifting equipment, which are developed and manufactured specifically for the steel industry.

Your advantage: industry-specific know-how in advising, planning and manufacturing.



Slab Tongs

Coil Hooks

Block Tongs

Tilting Tables

Billet Tongs

Sheet Stack Grabs

Profile Tongs

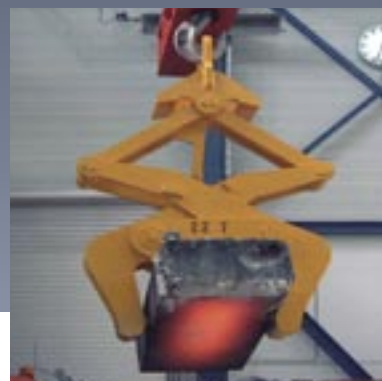
Forklifts

Drum Transport Tongs
for Doubling and
Working Drums

Convector Sheet Tongs

Drum Transport Crossheads

Coil Grabs, Horizontal,
Vertical, Slit Tongs



LSE STEEL INDUSTRY SLAB TONGS



Electrohydraulic slab tongs with electronic lifting mechanism and hydraulic table height adjustment, but with two-point attachment



Electromotive four-times slab tongs with electric lifting mechanism and electric table height adjustment



Mechanical block tongs for hot operation



Mechanical block tongs, designed as four-bar tongs
and adjustable grab width

LSE STEEL INDUSTRY BLOCK TONGS



Electrohydraulic block tongs for round block transport with movable backs, suitable for vertical transport and for laying blocks in hot operation



Billet tongs for hot transport



LSE STEEL INDUSTRY

DRUM TRANSPORT TONGS



Mechanical drum transport tongs with electrohydraulic hold-down function to secure the construction units against torsion



LSE STEEL INDUSTRY
DRUM TRANSPORT TONGS



Electrohydraulic working drum transport tongs with hold-down function for construction units



Electromotive doubling drum transport crossheads

LSE STEEL INDUSTRY

DOUBLING DRUM TRANSPORT CROSSHEADS



Electromotive doubling drum transport crossheads with mobile grab pins for the construction units

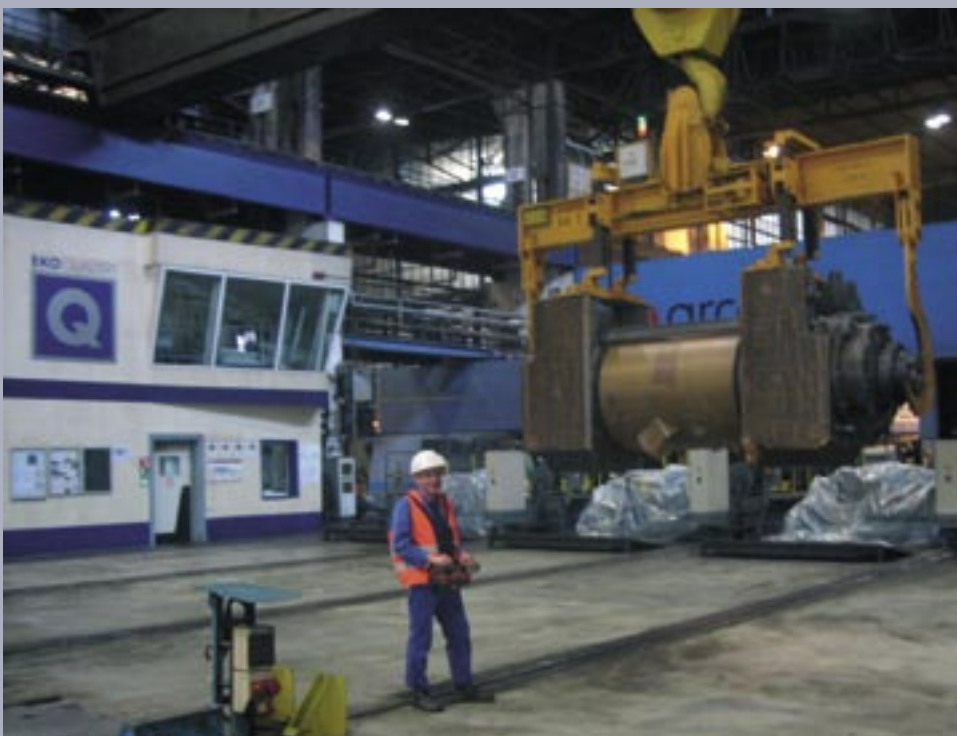


Electromotive doubling drum transport crossheads with mobile grab pins for the construction units

LSE STEEL INDUSTRY WORKING DRUM TRANSPORT CROSSHEADS



Electromotive doubling drum transport crossheads for grabbing doubling drums with construction units

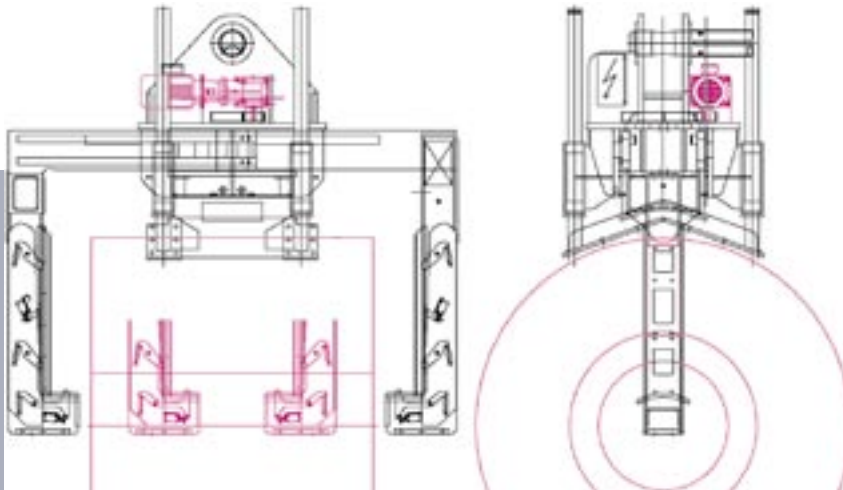


LSE STEEL INDUSTRY

TELESCOPIC COIL GRABS



Telescopic coil grabs without slewing gear



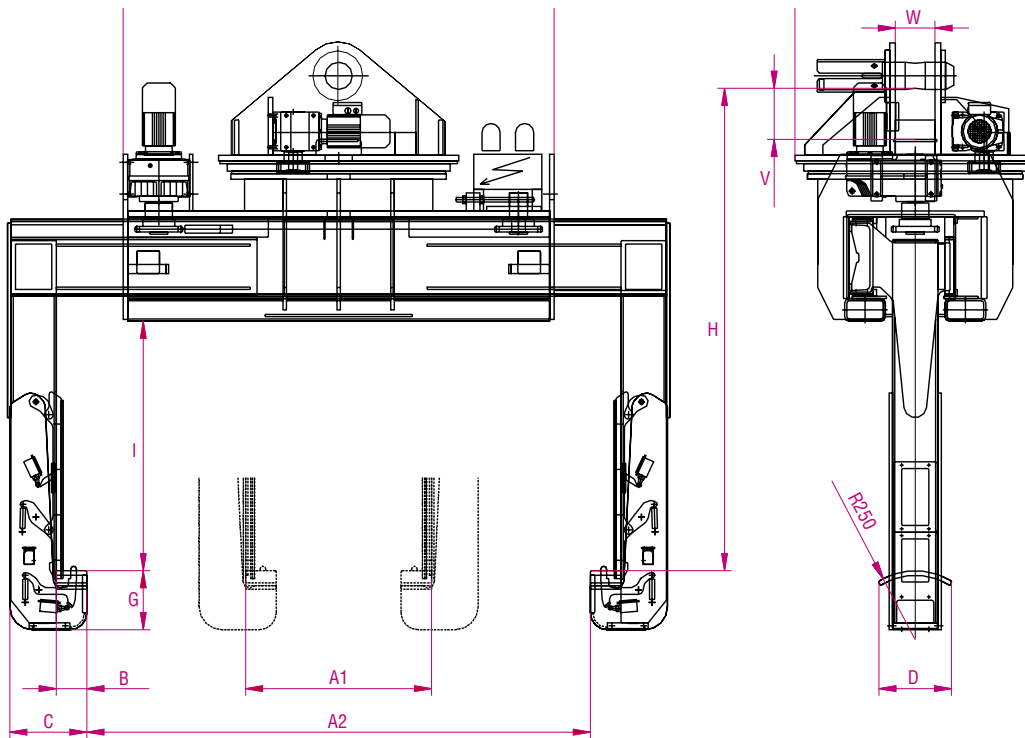
Electromotive telescopic coil grabs with horizontal slewing gear, with light barriers to capture the coil internal diameter



Telescopic coil grabs with integrated weighing mechanism



Telescopic coil grabs with slewing gear



Telescopic coil grabs, suitable for transporting coils with horizontal axis. Grabbing is effected on the internal diameter. Electromotive opening and closing.

The standard design includes a motor above roller chains with lateral starting contact banks and contact banks in the feet support to prevent unauthorised opening in the presence of a load. A contactor control is included in our delivery.

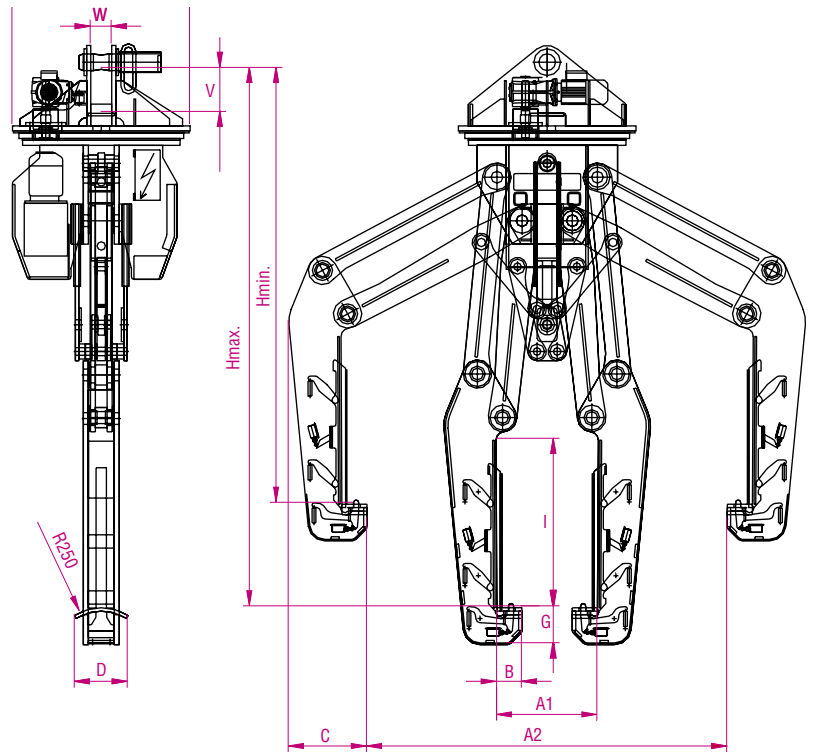
Moreover, the telescopic coil grab can also be equipped with the following motor types:

- Trapezium spindle
- Steering rack motor
- Electrohydraulic motor



Load capacity t	Dimensions approx. (mm)											Own Weight kg		Type Part No.	
	A1	A2	B	C	D	E	F	G	H	I	V	W	without Slewing gear		with Slewing gear
10	400	1750	120	280	240	600	1400	200	1300	750	120	100	1200	1800	TCG 10
15	500	1800	120	300	300	750	1400	220	1350	800	130	120	1500	2050	TCG 15
20	600	2000	120	360	300	750	1450	240	1400	800	130	150	1850	2300	TCG 20
25	600	2000	120	385	320	800	1550	260	1600	800	200	160	2000	2500	TCG 25
30	600	2000	120	385	320	840	1750	300	1600	900	200	200	2100	3100	TCG 30
35	600	2200	120	385	320	880	1750	300	1800	900	240	200	2300	3450	TCG 35
40	600	2200	150	410	340	930	1800	330	1900	950	300	220	2500	3700	TCG 40
45	600	2200	150	410	340	1000	1800	330	2000	1000	300	240	2800	3800	TCG 45

LSE STEEL INDUSTRY TELESCOPIC COIL GRABS



Parallelogram coil grabs have a very large grab range and remain small side-ways-on even when lifting large grab widths, so this type of grab can be used in small spaces for coils stocked on top of one another, e.g. for loading and unloading ships.

The drive is electrohydraulic, standard design with disconnecting contact banks on the side and contact banks in the feet support to prevent unauthorised opening in the presence of a load.

Each type can also be equipped with electromotive or electrohydraulic horizontal slewing gear.



Load capacity t	Dimensions approx. (mm)											Weight (kg)		Type Part No.	
	A1	A2	B	C	D	E	G	H _{min.}	H _{max.}	I	V	W	non rotating		rotating
10	250	1650	120	280	300	600	220	1800	2000	750	100	100	1500	1800	PCG 10
15	300	1650	120	300	300	700	220	2000	2300	800	130	120	1800	2050	PCG 15
20	400	2000	120	320	300	700	240	2200	2600	800	130	150	2000	2300	PCG 20
25	400	2000	120	350	320	730	260	2200	2600	800	200	160	2200	2500	PCG 25
30	450	2100	120	400	320	800	300	2400	2800	900	200	200	2700	3100	PCG 30
35	450	2100	120	450	320	850	300	2400	2800	900	240	200	3000	3450	PCG 35
40	450	2200	150	450	340	900	330	2400	2800	950	300	220	3200	3700	PCG 40
45	450	2200	150	480	340	1000	330	2500	2900	1000	300	240	3500	3900	PCG 45

Additional equipment:

- Integrated slewing gear for precise positioning of the tongs
- Securing to prevent unauthorised opening when loaded
- Lateral start disconnection
- Indicator lamps for closing travel + load is on
- Photo sensors to recognise the coil inner diameter
- Automatic lubrication
- Welded-on hooks
- Weighing equipment



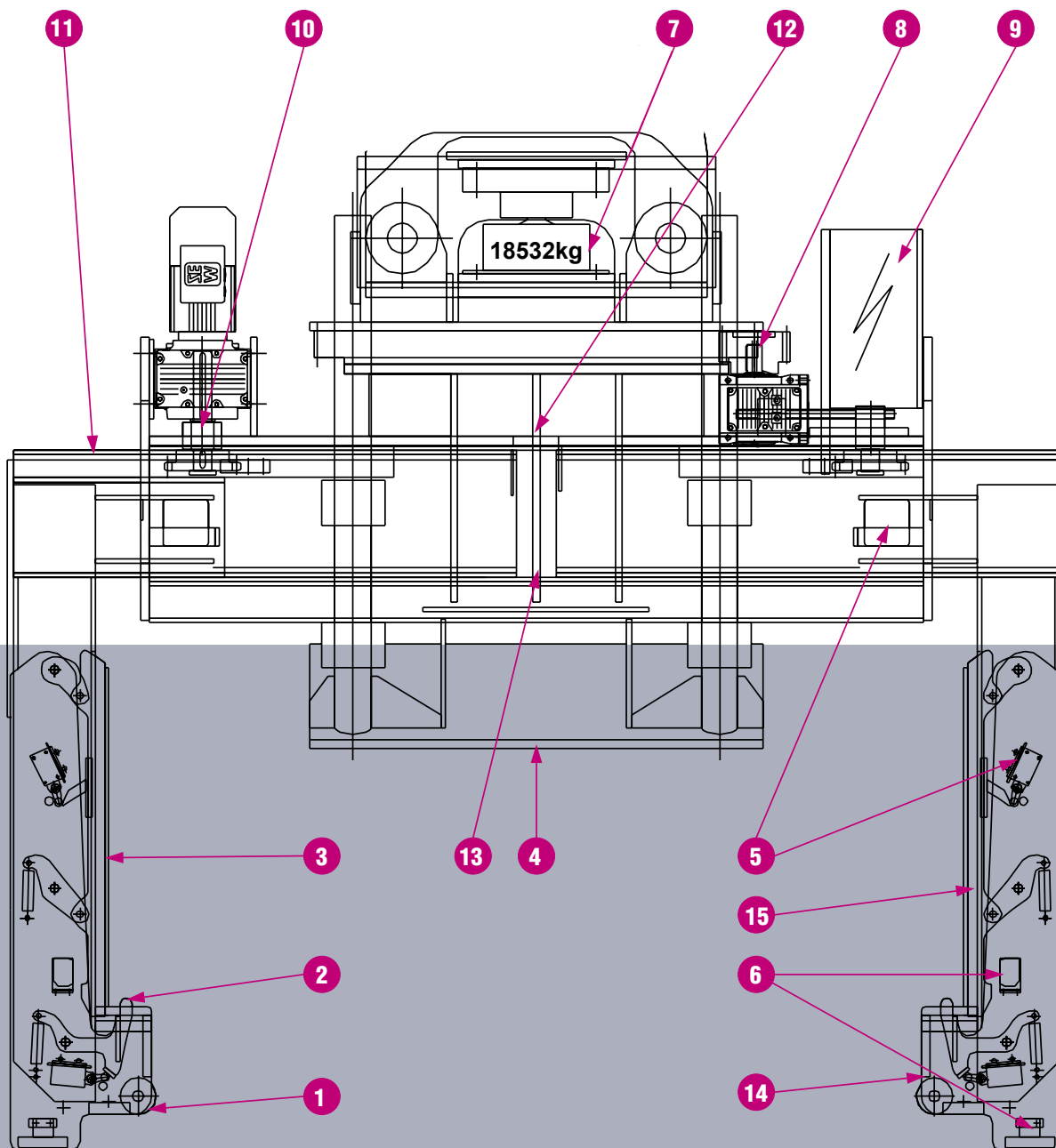
Parallelogram coil grabs

Additional equipment:

- Electromagnetic turnable drive unit with slewing range disconnection 0°-355° above roller end switch
- Securing to prevent unauthorised opening when loaded
- Lateral start disconnection - Photo cells for internal diameter recognition
- Hinged support feet
- Protective rollers to prevent material damage
- V support block as hold-down device



LSE STEEL INDUSTRY SPECIAL ACCESSORIES



- | | | |
|---------------------------|------------------------------|---------------------------------|
| 1 Start rollers | 6 Light barriers | 11 Automatic lubrication |
| 2 Contact pusher | 7 Weighing equipment | 12 Sensor for tilt |
| 3 Contact bank | 8 Slewing gear | 13 Welded-on hooks |
| 4 Hold-down device | 9 E cases | 14 Hinged support feet |
| 5 End switch | 10 Roller chain drive | 15 Special contact banks |



Horizontal slewing gear



Side contact banks



Feet contact banks to prevent unauthorised opening when loaded



Light barriers / photo sensors



Hinged support feet



Special contact banks



Welded-on hooks



Weighing equipment



Automatic lubrication



Wheel-away foot



Light barriers



Position lamp

LSE STEEL INDUSTRY COIL HOOKS



Multiple coil hooks

This coil hook can take up to nine wire coils and is equipped with 2 retention points for twist-lock bolting.



C 33 tipping coil hooks

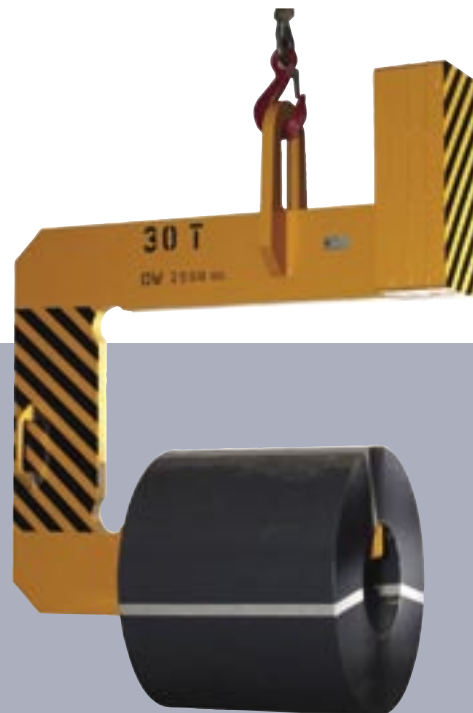
Suitable for tipping and straightening steel band rings or loop coils.

See page 72 for more coil hooks and technical details.



C hook suspension gear for paired use

Suitable for coil or thick-wall pipe transport.



C 30 coil hooks with counterweight balance

Stable welded steel construction of high quality steel for extreme use. The constructive alignment of the balancing weight means the support plate remains horizontal both when empty and loaded.

We also make in-between sizes and special designs.



LSE STEEL INDUSTRY TILTING TABLES



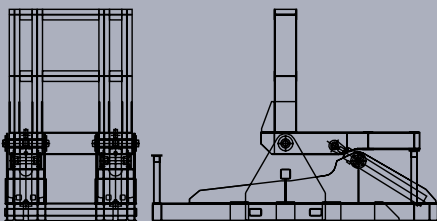
Electrohydraulic tilting tables to tip coils by 90° up to a load capacity of 40 t



Electrohydraulic tilting table



Electromotive angle tilting table



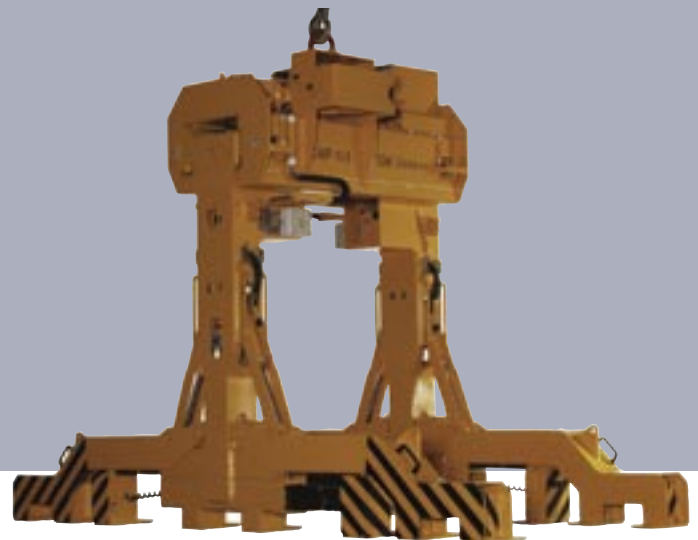
LSE STEEL INDUSTRY SHEET STACK GRABS



Electromotive telescopic sheet stack grabs with fixed under-grab feet



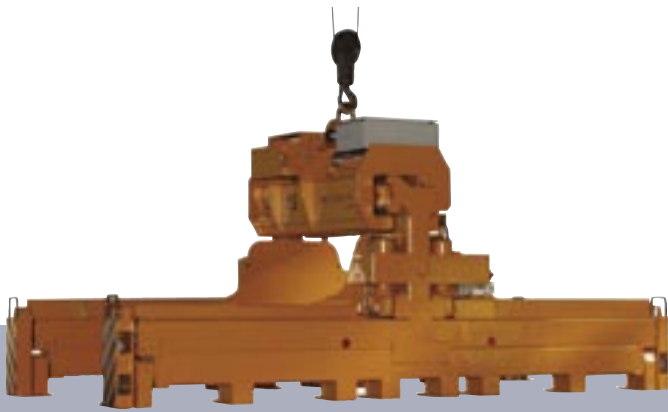
Electromotive telescopic sheet stack grabs with fixed central grab feet, with additional, manually removable grab feet and electrohydraulically retractable outer grab feet



LSE STEEL INDUSTRY SHEET STACK GRABS



Electromotive telescopic sheet stack grabs with fixed grab feet and with two additional wheel-away grab feet - the outer ones can be wheeled away individually. Steering is effected via SPS, the individual feet settings can be programmed and automatically wheeled in and out.

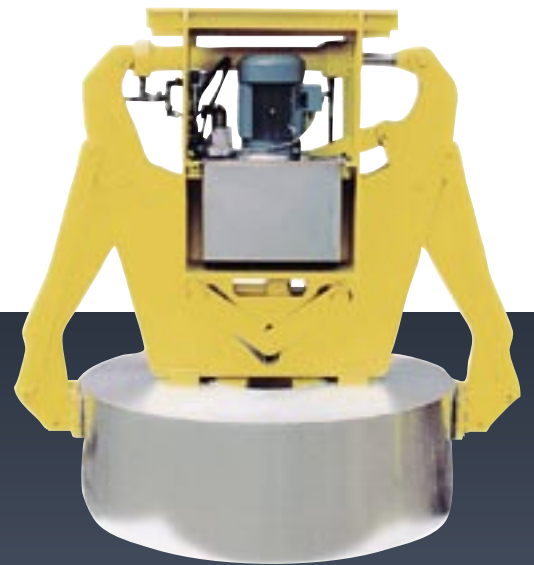


LSE STEEL INDUSTRY
CONVECTOR SHEET TONGS



Mechanical convector sheet tongs to grab convector sheets in annealing plants.

LSE ALUMINIUM INDUSTRY



Solutions for the aluminium industry -

As in steel works, already increased production volumes increased demands on the production process. Because of the low load-bearing capacities of the material thicknesses and greater construction volumes, special solutions had to be realised in this industrial sector. There are also partly sensitive surfaces on special products that must be protected accordingly.

Therefore, aluminium industry companies are increasingly concentrating on solutions, which are precisely tailored to these special demands and, e.g. using special overlays, guarantee efficient manufacture in the grab range of the lifting equipment.

The slab tongs and coil tongs developed by us are lifting devices, which have been specifically developed and manufactured for the aluminium industry.

Your advantage: industry-specific know-how in advising, planning and manufacturing.



Slab Tongs

Block Tongs

Coil Tongs,
Horizontal / Vertical



LSE ALUMINIUM INDUSTRY DOUBLE BLOCK TONGS



Electrohydraulic double block tongs for aluminium blocks, designed with electromotive slewing gear and pulley attachment



LSE ALUMINIUM INDUSTRY
VERTICAL COIL TONGS



Single vertical coil tongs,
mechanical design



Double vertical coil tongs, hydraulic design

LSE PAPER INDUSTRY

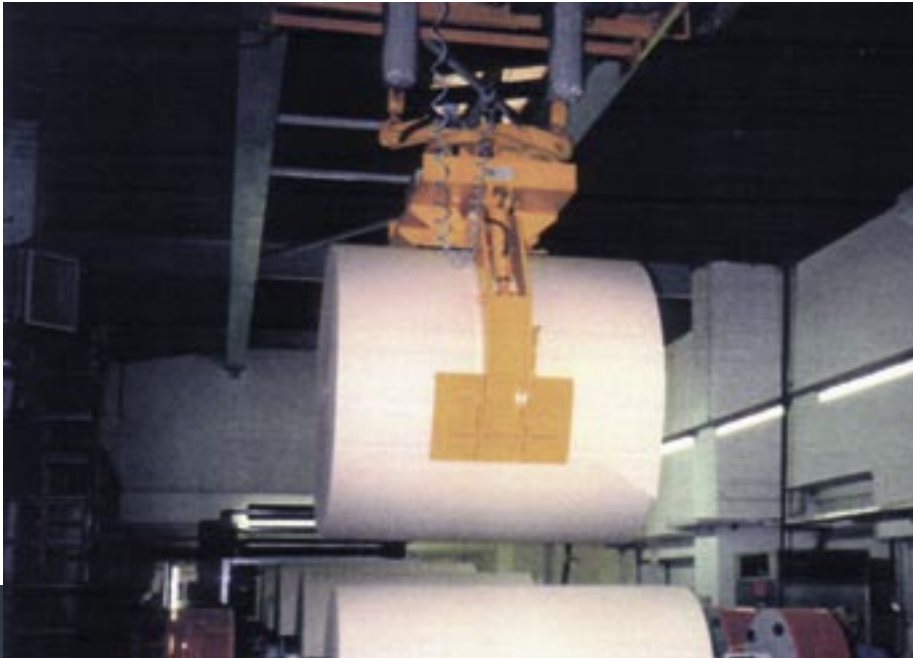


Solutions for the paper industry -

The paper industry is experiencing clearly increased production volumes thanks to increased demand internationally. The demands on lifting equipment are increasing. Therefore, we are developing solutions that are specifically developed for the high weights of the materials and their sensitive surfaces. Thus, cost-efficient manufacture can even be guaranteed for a sensitive material like paper.

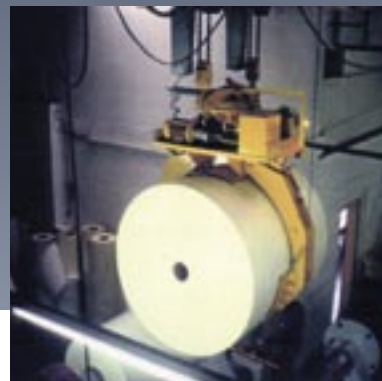
The paper roll tongs and tambur crossheads developed by us are efficient lifting devices, which are specially developed for the paper industry.

Your advantage: industry-specific know-how in advising, planning and manufacturing.



Paper Roll Tongs
Mechanical, Electrical, Hydraulic

Tambur Crossheads



LSE PAPER INDUSTRY

PAPER ROLL TONGS



Electrohydraulic paper roll tongs with slewing gear



Electrohydraulic paper roll grabs with 90 degree slewing gear
Mechanical long hook crosshead



Tambur crossheads with electric slewing gear
(shown without hook)



Mechanical long hook crossheads

LSE CONTAINERS



Solutions for container handling -

There have been standardised transport containers for almost 100 years. Yet today's standard container comes from the 1950s. Today, the container has conquered the world and the amount of goods transported by container increases every year.

Efficiency and speed of handling is becoming increasingly important in the transport and logistics market. These increased demands on lifting equipment require perfect solutions in container handling.

The specially developed spreaders, banking frames and container crossheads are precisely tailored to the requested needs and guarantee fast turnaround of goods.

Your advantage: industry-specific know-how in advising, planning and manufacturing.



Mechanical 40' banking frames with manual twist-lock bolting above reel chain

Banking Frames

Container Crossheads

Spreaders
Mechanical, Electrical,
Hydraulic



LSE CONTAINERS

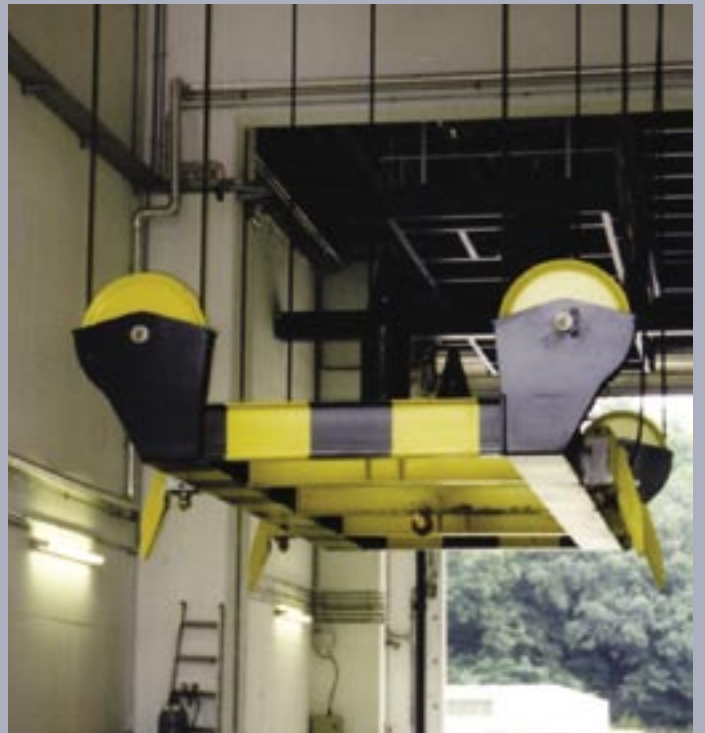
CONTAINER SPREADERS



Container spreaders with central bolting



Container spreaders with BFD adapters



Container spreaders with central bolting



Electrohydraulic container spreaders for 20' ISO containers and interchangeable bodies



Container spreaders electrohydraulically telescopic from 20' to 40'



Electrohydraulic container spreaders for 20' ISO containers and interchangeable bodies

LSE **CAR** INDUSTRY

Solutions for the car industry -

Increasing automation in the car industry requires new solutions for lifting equipment.

Particularly for tool grabs for press tools to load board grabs. Here, the very smooth and oily surfaces require care - therefore, we develop special hold-down equipment.

Efficiency and speed in regular production processes also present increased demands. The specially developed tool grabs, board load forklifts and tool strippers are designed precisely to the needs of the car industry and guarantee smooth production.

Your advantage: industry-specific know-how in advising, planning and manufacturing.





Tool Grabs
board lifts

Special Grabs
Tool Strippers



LSE CAR INDUSTRY TOOL GRABS



Electromotive tool grabs
for the car industry



LSE CAR INDUSTRY BOARD LIFTS



Electrohydraulic board lifts with hold-down function and grab width adjustment



LSE CAR INDUSTRY BOARD LIFTS



Board lifts with mechanical hold-down function



Electromotive tool stripping equipment to rotate press tools

LSE SPECIAL CONSTRUCTIONS

HEAVY LOAD CROSSHEADS

TURNING EQUIPMENT



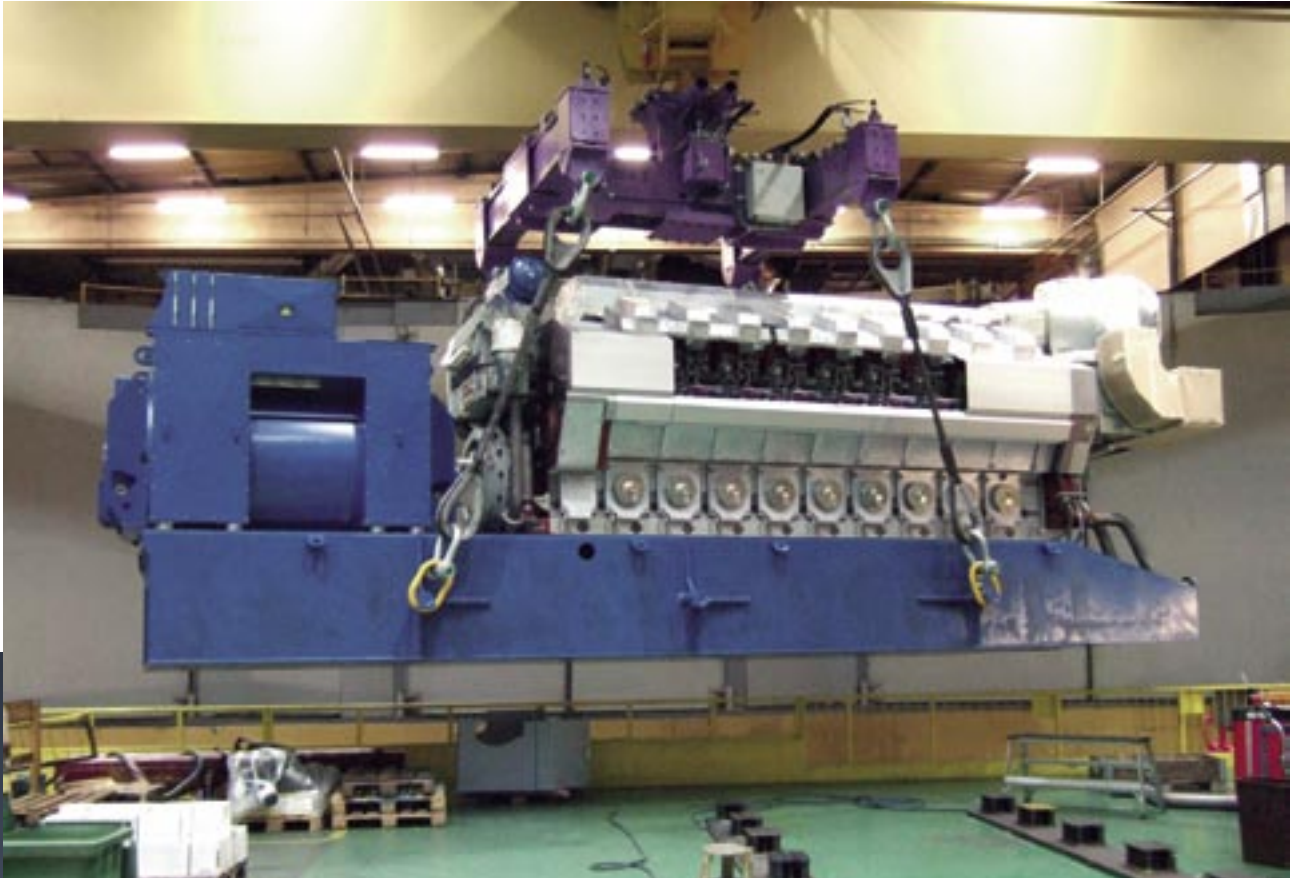
Special constructions

The progressive automation in manufacturing requires multifunctional special solutions. A particular challenge is manipulating several levels and axles.

Individual solutions tailored to the processes guarantee lifting of the highest efficiency and speed in regular production processes.

The special constructions described on the following pages represent just a fraction of the possible individual solutions.

Your advantage: cross-industry know-how in advising, planning and manufacturing.



Heavy Load Crossheads

Turning Equipment

LSE SPECIAL CONSTRUCTIONS

TURNING EQUIPMENT



Electrohydraulic turning equipment for 20 t static press tools



LSE SPECIAL CONSTRUCTIONS TURNING EQUIPMENT



Electromotive turning equipment for assembly purposes

Electromotive beam turning equipment for rolled steel sections



LSE **CROSSHEADS** **FORKLIFTS** **C HOOKS**



Crossheads, Forklifts and C Hooks –

Crossheads offer symmetrical load suspension in principle and, thus, better load distribution. The large range of requirements in the different industries requires a broad range of rigid, adjustable, frame, telescopic and long crossheads.

Lifting different materials also requires an extensive selection of forklifts and C hooks. Carl Stahl Nordgreif offers you a complete range of individual or series products.

The specially developed crossheads, forklifts and C hooks are designed precisely to the needs of the industry and guarantee smooth production processes.

Your advantage: industry-specific know-how in advising, planning and manufacturing.





CROSSHEADS

Long Hook Crossheads
 TA/TAV/TB/TBV Stays
 Rigid Crossheads
 Adjustable Crossheads
 Boom Crossheads
 Forklift Crossheads
 Special Crossheads
 Long Crossheads
 Rotating Crossheads
 Telescopic Crossheads
 H Crossheads / 4-Pt. Crossheads
 Tambur Crossheads
 Turning Crossheads

FORKLIFTS

Manual
 Automatic
 Stand Lifts
 Board lifts

C HOOKS

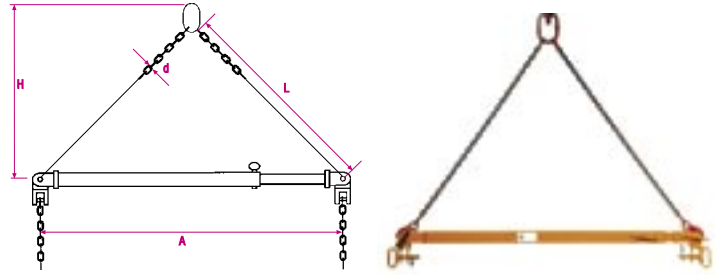
Counterweights
 Coil Tilting Hooks
 Chain Suspensions
 Spring Balances

LSE CROSSHEADS

TA/TAV/TB/TBV Stays, rigid and adjustable

Type TA: Spreader, fixed with rocker for passage of chain. Special model in adjustable version.

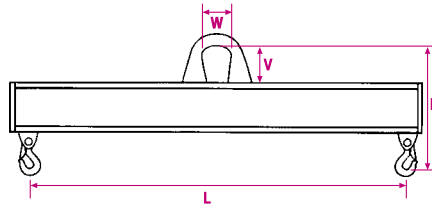
Type TB: Spreader, adjustable with slider; for descending chain mobile on all sides. Available also in fixed version.



Load capacity (kg) 90° Head angle	Chain gauged (mm)	Dimensions (mm)		Type/Part No. with slider		Type/Part No. with rocker	
		Fixed version A	Adjustable version A min - A max	fixed	adjustable	fixed	adjustable
1400	6	1000	1000 - 1500	7TA06	7TAV06	7TB06	7TBV06
2800	8	1000 - 1500	1200 - 2000	7TA08	7TAV08	7TB08	7TBV08
4500	10	1000 - 1500	1200 - 2000	7TA10	7TAV10	7TB10	7TBV10
7100	13	1000 - 1500	1200 - 2000	7TA13	7TAV13	7TB13	7TBV13
11200	16	1250 - 2500	1900 - 2500	7TA16	7TAV16	7TB16	7TBV16

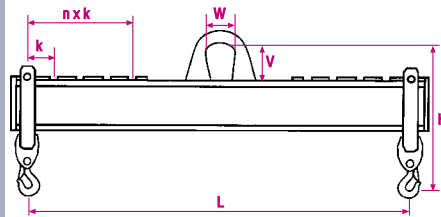
T20/T21 crossheads, rigid and adjustable

Rigid crosshead type T 20: crosshead with rotatable security eye hooks. This crosshead is a robust load construction. Grading and calculation are effected in accordance with DIN 15018.



The welded steel construction is exclusively made using inspected welds. The adjacent table shows our standard range.

Adjustable crosshead Type T 21: Designed with two adjustable stays and security eye hooks. Crosshead attachment for single hooks. Further load capacities and sizes on request.

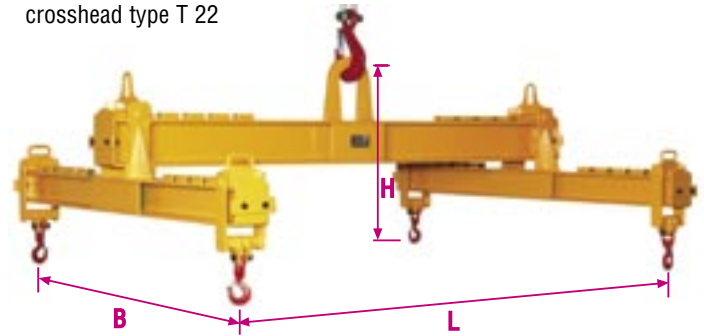


Load capacity (kg)	Dimensions approx. (mm)							Weight approx. (kg)		Type Part No.	Type Part No.
	L fixed	L adjustable	n x k	H fixed	H adjustable	V	W	fixed	adjustable	fixed	adjustable
1000	1000	1000 - 500	2 x 125	380	400	120	55	20	25	7T20.010.001	7T21.010.001
1000	2000	2000 - 1000	4 x 125	380	400	120	55	30	38	7T20.010.002	7T21.010.002
1000	3000	3000 - 1000	4 x 250	400	420	120	55	50	60	7T20.010.003	7T21.010.003
1000	5000	5000 - 1000	8 x 250	400	450	120	55	120	150	7T20.010.005	7T21.010.005
1600	1000	1000 - 500	2 x 125	400	420	130	60	25	30	7T20.016.001	7T21.016.001
1600	2000	2000 - 1000	4 x 125	400	420	130	60	40	50	7T20.016.002	7T21.016.002
1600	3000	3000 - 1000	4 x 250	430	450	130	60	60	75	7T20.016.003	7T21.016.003
1600	5000	5000 - 1000	8 x 250	450	500	130	60	200	230	7T20.016.005	7T21.016.005
2500	2000	2000 - 1000	4 x 125	510	610	150	75	63	75	7T20.025.002	7T21.025.002
2500	3000	3000 - 1000	4 x 250	510	610	150	75	90	110	7T20.025.003	7T21.025.003
2500	5000	5000 - 1000	8 x 250	580	680	150	75	210	230	7T20.025.005	7T21.025.005
2500	6300	6300 - 1300	10 x 250	600	700	150	75	250	280	7T20.025.006	7T21.025.006
5000	2000	2000 - 1000	4 x 125	630	730	190	90	75	100	7T20.050.002	7T21.050.002
5000	3000	3000 - 1000	4 x 250	680	780	190	90	135	160	7T20.050.003	7T21.050.003
5000	5000	5000 - 1000	8 x 250	760	860	190	190	325	360	7T20.050.005	7T21.050.005
5000	8000	8000 - 2000	6 x 500	660	750	190	190	800	850	7T20.050.008	7T21.050.008
6300	3000	3000 - 1000	4 x 250	700	800	210	95	180	220	7T20.063.003	7T21.063.003
6300	4000	4000 - 1000	6 x 250	730	890	210	95	230	260	7T20.063.004	7T21.063.004
6300	5000	5000 - 1500	7 x 250	800	900	210	95	420	470	7T20.063.005	7T21.063.005
6300	6300	6300 - 1300	10 x 250	820	920	210	95	500	560	7T20.063.006	7T21.063.006
10000	3000	3000 - 1000	4 x 250	890	1000	250	120	220	280	7T20.100.003	7T21.100.003
10000	5000	5000 - 1000	4 x 500	820	950	250	120	580	650	7T20.100.005	7T21.100.005
10000	8000	8000 - 2000	6 x 500	800	920	250	120	1200	1350	7T20.100.008	7T21.100.008
10000	10000	10000 - 3000	7 x 500	850	980	250	120	1800	1950	7T20.100.010	7T21.100.010
16000	3000	3000 - 1000	4 x 250	920	1080	300	135	400	500	7T20.160.003	7T21.160.003
16000	5000	5000 - 1000	8 x 250	950	1100	300	135	600	720	7T20.160.005	7T21.160.005
16000	8000	8000 - 2000	6 x 500	1050	1200	300	135	800	950	7T20.160.008	7T21.160.008
16000	10000	10000 - 3000	7 x 500	1150	1300	300	135	2400	2650	7T20.160.010	7T21.160.010

T22 boom crosshead adjustable

Boom crossheads adjustable crosshead type T 22

Load capacity (kg)	Dimensions approx. (mm)			Weight approx.(kg)	Type Part No.
	Length max	Width max.	H		
1000	2000 - 1000	1000 - 500	600	90	7T22.010.021
2500	2000 - 1000	1000 - 500	640	140	7T22.025.021
2500	3000 - 1000	2000 - 1000	710	230	7T22.025.032
5000	3000 - 1000	2000 - 1000	860	340	7T22.050.032
5000	4000 - 1000	2000 - 1000	880	450	7T22.050.042
5000	5000 - 1500	2500 - 1000	900	600	7T22.050.052
7500	5000 - 1500	2500 - 1000	1100	680	7T22.075.052
7500	6000 - 2000	3000 - 1000	1150	980	7T22.075.063
10000	4000 - 1000	2500 - 1000	1200	775	7T22.100.042
10000	6000 - 2000	3000 - 1000	1250	1150	7T22.100.063
15000	6000 - 2000	3000 - 1000	1450	1400	7T22.150.063



T23 crossheads for skeleton containers

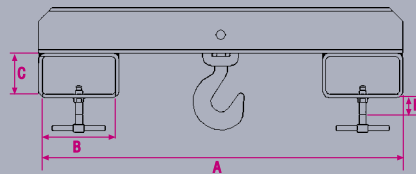
Rigid crossheads with four drum hooks. Designed with a mobile and a rigid hook pair.

Load capacity (kg)	Dimensions approx. (mm)					Weight kg	Type Part No.
	B	H	I	L	V		
1000	600	360	150	1200	120	40	7T23.10.108
1500	600	380	160	1200	120	45	7T23.15.108
3000	600	450	160	1200	150	65	7T23.30.108



T24 Forklift lifting beams

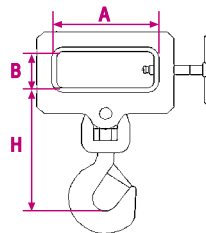
Double attachment lifting beam with rotating hook for forklifts. Rigid design with low clearance. Dimensions A, B and C can also be manufactured to your specifications.



Load capacity (kg)	Dimensions approx. (mm)				Weight approx.(kg)	Type Part No.
	A	B	C	H		
1000	500	120	60	140	10	7T24.010
1500	500	140	60	160	15	7T24.015
2000	600	160	80	200	20	7T24.020
3000	600	200	100	200	30	7T24.030

T25 Forklift shoes

Single attachment shoe with rotating hook for forklifts. Dimensions A and B are variable.



Load capacity (kg)	Dimensions approx. (mm)			Weight approx.(kg)	Type Part No.
	A	B	H		
1000	120	50	160	5	7T25.010
1500	140	60	180	6	7T25.015
2000	160	60	200	8	7T25.020
3000	180	80	220	10	7T25.030

LSE CROSSHEADS

SPECIAL CROSSHEADS



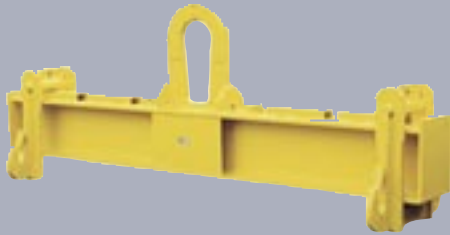
Adjustable load crossheads with two-sided balance compensator



Rope compensation crossheads with variable attachment head



Weight-optimised long crossheads



Load crossheads with lateral welded-on hooks



Adjustable crossheads with rotating hook attachment



Special crossheads with concrete lifting pins



Electromotive rotating crossheads for 2-crane operation

LSE CROSSHEADS

SPECIAL CROSSHEADS



Electromotive turning crosshead with grid adjustment



Electromotive horizontal slewing gear



Crossheads with special attachments



Balance crosshead with integrated electro chain gear to shorten the suspension chain



Concrete sleeper grab for 30 sleepers of different lengths

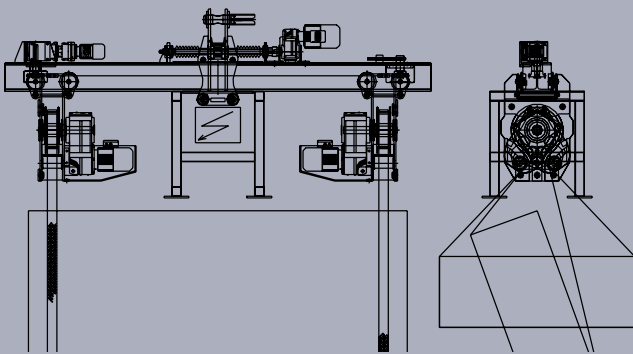


Electromotive tambur crosshead

LSE CROSSHEADS ELECTROMOTIVE TURNING CROSSHEADS



Electromotive turning crosshead with adjustable grid



Turning crosshead as ancillary equipment - direct current supplied to the starter battery



Turning crosshead with chain adjustment



Turning crosshead with worm gear pair drive



Electromotive turning crosshead

LSE LIFTING EQUIPMENT MANUAL / AUTOMATIC

L41 forklifts with balancing weights

Type L41: forklift with balancing weight.
The forklift remains horizontal when laden and unladen.
The transport belts must be applied at the centre of gravity.



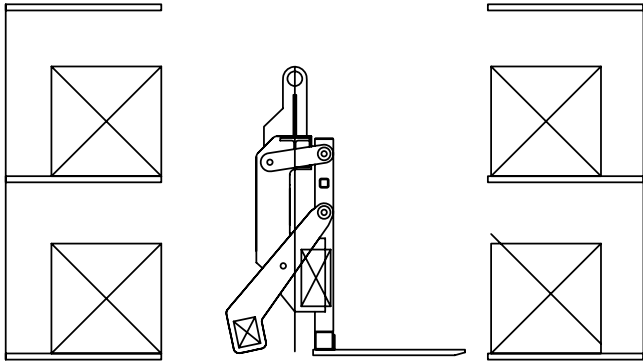
L42 forklifts with spring weight balance and adjustable teeth

The centre of gravity balance is effected using a gas pressure spring. Additionally, the load teeth here are adjustable so all popular pallet types and stacking boxes can be lifted. An internal height adjustment can also be supplied for all types.

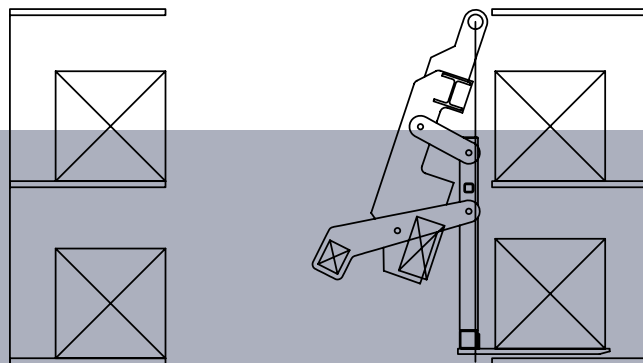
Transport hooks with manual hold-down devices.



LSE LIFTING EQUIPMENT FORKLIFTS STAND LIFTS



Start-up position



Lifting position



Stand control device with automatically movable counterweight



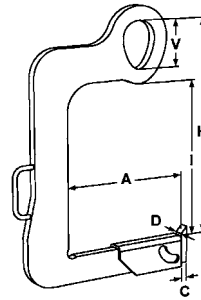
Transport hooks with manual hold-down devices



LSE C HOOKS COIL HOOKS

Type C 33 tipping coil hooks

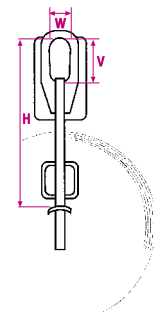
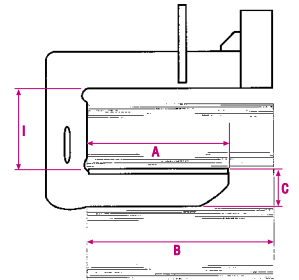
Suitable for tipping and straightening steel band rings and coils.
These must be well bound and be sitting on squared beams.
Very simple handling.



Load capacity in t	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	C	D	I	H	V		
0,5	100 - 200	8	60	400	520	100	10	7C33.005.002
1,0	100 - 200	10	70	450	600	120	12	7C33.010.002
1,0	200 - 300	10	70	500	650	120	16	7C33.010.003
2,5	100 - 200	12	70	500	680	150	20	7C33.025.002
2,5	200 - 300	12	70	500	680	150	25	7C33.025.003
3,0	250 - 350	15	80	550	730	150	30	7C33.030.003
4,0	250 - 400	20	90	600	840	190	40	7C33.040.004
5,0	350 - 500	25	100	650	900	190	50	7C33.050.005

C 30 coil hooks with counterweight balance

Stable welded steel construction of high quality steel for extreme use. The constructive alignment of the balancing weight means the support plate remains horizontal both when empty and loaded.
We also make in-between sizes and special designs.



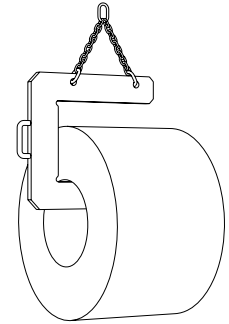
Load capacity in t	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	B	A	C	I	H	V x W		
0,5	150 - 300	225	60	400	520	100 x 50	12	7C30.005.003
0,5	250 - 500	375	70	400	520	100 x 50	20	7C30.005.005
0,5	375 - 750	565	75	400	520	100 x 50	28	7C30.005.007
0,5	500 - 1000	750	80	400	520	100 x 50	40	7C30.005.010
1,0	150 - 300	225	75	450	600	120 x 55	20	7C30.010.003
1,0	250 - 500	375	80	450	600	120 x 55	30	7C30.010.005
1,0	375 - 750	565	100	450	600	120 x 55	48	7C30.010.007
1,0	500 - 1000	750	110	450	600	120 x 55	60	7C30.010.010
2,5	150 - 300	225	90	500	680	150 x 75	35	7C30.025.003
2,5	250 - 500	375	110	500	680	150 x 75	60	7C30.025.005
2,5	375 - 750	565	135	500	680	150 x 75	80	7C30.025.007
2,5	500 - 1000	750	140	500	680	150 x 75	120	7C30.025.010
5,0	375 - 750	565	160	550	780	190 x 90	165	7C30.050.007
5,0	500 - 1000	750	180	550	780	190 x 90	220	7C30.050.010
5,0	625 - 1250	940	200	550	780	190 x 90	280	7C30.050.012
5,0	750 - 1500	1125	220	550	925	190 x 90	435	7C30.050.015
7,5	375 - 750	565	200	550	830	230 x 110	220	7C30.075.007
7,5	500 - 1000	750	230	550	830	230 x 110	290	7C30.075.010
7,5	625 - 1250	940	230	550	830	230 x 110	400	7C30.075.012
7,5	750 - 1500	1125	250	550	830	230 x 110	490	7C30.075.015
10	375 - 750	565	230	600	910	250 x 120	270	7C30.100.007
10	500 - 1000	750	230	600	910	250 x 120	400	7C30.100.010
10	625 - 1250	940	270	650	960	250 x 120	500	7C30.100.012
10	750 - 1500	1125	290	650	960	250 x 120	680	7C30.100.015
15	500 - 1000	750	290	750	1120	300 x 135	600	7C30.150.010
15	625 - 1250	940	290	750	1120	300 x 135	780	7C30.150.012
15	750 - 1500	1125	320	700	1070	300 x 135	1000	7C30.150.015
15	1000 - 2000	1500	350	700	1070	300 x 135	1500	7C30.150.020
20	500 - 1000	750	300	850	1310	380 x 180	850	7C30.200.010
20	625 - 1250	940	320	850	1310	380 x 180	1000	7C30.200.012
20	750 - 1500	1125	330	800	1260	380 x 180	1250	7C30.200.015
20	1000 - 2000	1500	370	800	1260	380 x 180	1700	7C30.200.020
25	625 - 1250	940	360	850	1400	450 x 210	1200	7C30.250.012
25	750 - 1500	1125	360	850	1400	450 x 210	1500	7C30.250.015
25	1000 - 2000	1500	400	850	1400	450 x 210	2000	7C30.250.020
30	750 - 1500	1125	380	950	1550	500 x 220	1900	7C30.300.015
30	875 - 1750	1320	400	950	1550	500 x 220	2100	7C30.300.017
30	1000 - 2000	1500	420	950	1550	500 x 220	2450	7C30.300.020



C31 coil hooks with chain attachment

Type C31: the net weight of the C hook can be kept down thanks to the chain attachment.

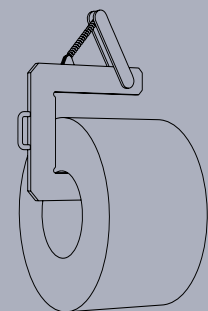
Load capacity in t	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	B	A	C	I	H	V x W		
2,5	375 - 750	565	135	500	1500	135 x 75	75	7C31.025.007
2,5	500 - 1000	750	140	500	1600	135 x 75	110	7C31.025.010
5,0	375 - 750	565	160	550	1500	180 x 100	150	7C31.050.007
5,0	500 - 1000	750	180	550	1600	180 x 100	200	7C31.050.010
5,0	625 - 1250	940	200	550	1700	180 x 100	280	7C31.050.012
5,0	750 - 1500	1125	220	550	1900	180 x 100	350	7C31.050.015
7,5	375 - 750	565	200	550	1600	200 x 110	200	7C31.075.007
7,5	500 - 1000	750	230	550	1600	200 x 110	300	7C31.075.010
7,5	625 - 1250	940	230	550	1900	200 x 110	400	7C31.075.012
7,5	750 - 1500	1125	2501	550	2150	200 x 110	490	7C31.075.015
10	375 - 750	565	230	600	1700	200 x 110	270	7C31.100.007
10	500 - 1000	750	230	600	1800	200 x 110	400	7C31.100.010
10	625 - 1250	940	270	650	1900	200 x 110	500	7C31.100.012
10	750 - 1500	1125	290	650	2200	200 x 110	680	7C31.100.015
15	500 - 1000	750	290	750	2000	300 x 160	600	7C31.150.010
15	625 - 1250	940	290	750	2100	300 x 160	780	7C31.150.012
15	750 - 1500	1125	320	700	2200	300 x 160	1000	7C31.150.015
15	1000 - 2000	1500	350	700	2500	300 x 160	1500	7C31.150.020
20	500 - 1000	750	300	850	2100	340 x 180	850	7C31.200.010
20	625 - 1250	940	320	850	2200	340 x 180	1000	7C31.200.012
20	750 - 1500	1125	330	800	2500	340 x 180	1250	7C31.200.015
20	1000 - 2000	1500	370	800	2700	340 x 180	1700	7C31.200.020



C32 coil hooks with spring centroidal balance

Type C32: the automatic spring centroidal balance facilitates lifting of different coil weights without moving the centre of gravity. the automatic spring centroidal balance facilitates lifting of different coil weights without moving the centre of gravity.

Load capacity in t	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	B	A	C	I	H	V x W x X		
2,5	500 - 1000	750	140	500	1250	175 x 75 x 35	90	7C32.025.010
5,0	375 - 750	565	160	550	1250	175 x 75 x 40	110	7C32.050.007
5,0	500 - 1000	750	180	550	1300	190 x 90 x 40	125	7C32.050.010
5,0	625 - 1250	940	200	550	1300	190 x 90 x 40	145	7C32.050.012
5,0	750 - 1500	1125	220	550	1400	190 x 90 x 45	160	7C32.050.015
7,5	375 - 750	565	200	550	1500	230 x 110 x 50	135	7C32.075.007
7,5	500 - 1000	750	230	550	1550	230 x 110 x 50	150	7C32.075.010
7,5	625 - 1250	940	230	550	1550	230 x 110 x 50	200	7C32.075.012
7,5	750 - 1500	1125	250	550	1650	230 x 110 x 55	250	7C32.075.015
10	375 - 750	565	230	600	1500	250 x 120 x 55	230	7C32.100.007
10	500 - 1000	750	230	600	1600	250 x 120 x 55	250	7C32.100.010
10	625 - 1250	940	270	650	1650	250 x 120 x 60	300	7C32.100.012
10	750 - 1500	1125	290	650	1700	250 x 120 x 60	380	7C32.100.015
15	500 - 1000	750	290	750	1700	300 x 135 x 70	400	7C32.150.010
15	625 - 1250	940	290	750	1750	300 x 135 x 70	430	7C32.150.012
15	750 - 1500	1125	320	700	1800	300 x 135 x 75	550	7C32.150.015
15	1000 - 2000	1500	350	700	1900	300 x 135 x 75	700	7C32.150.020
20	500 - 1000	750	300	850	1900	380 x 180 x 80	400	7C32.200.010
20	625 - 1250	940	320	850	1950	380 x 180 x 80	500	7C32.200.012
20	750 - 1500	1125	330	800	2000	380 x 180 x 85	700	7C32.200.015
20	1000 - 2000	1500	370	800	2100	380 x 180 x 85	950	7C32.200.020



LSE DRUM GRABS CRADLE GRABS



Cradle grabs with manual stacking machine



Cradle grabs with manual stacking machine



Cradle grabs with step-by-step motion and electronic monitoring of the closing



Cradle grabs with manual stacking machine for frontal lifting of stackable cradles

LSE DRUM GRABS SPINDLE GRABS



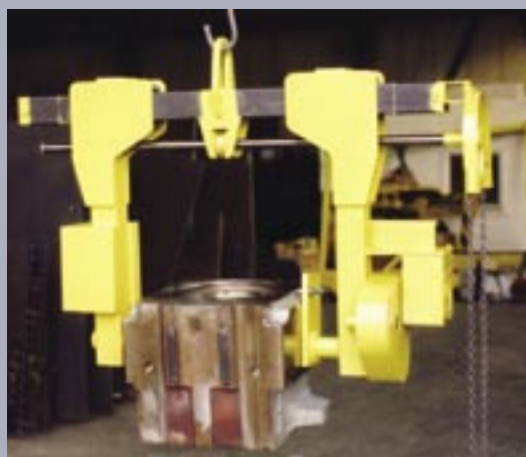
Spindle grabs for foil rolls



Spindle grabs for sheet boards with mobile grab feet



Spindle grabs with electromotive drive for opening and closing



Spindle grabs with turning gear and reel chain wheel

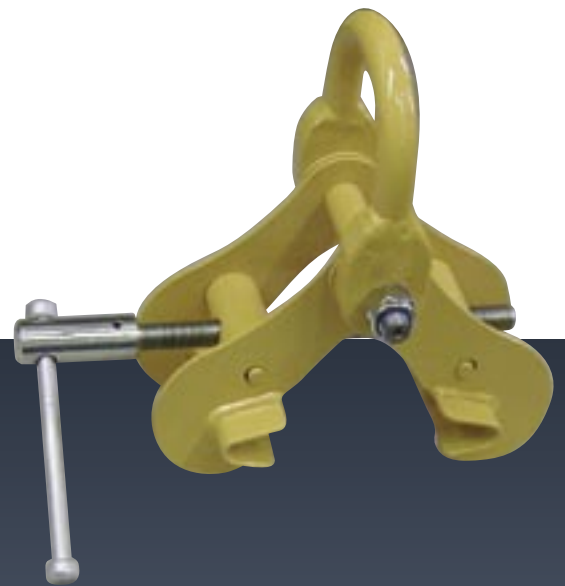
LSE HANDLING

Solutions for handling –

In the handling sector, we offer an entire system of diverse tongs and clamps for perfect load suspension. The large range of loads in the different industries requires special solutions.

Carl Stahl Nordgreif offers you a complete range of individual or series products for handling. The specially developed tongs and clamps are designed precisely to the requirements -whether drum handling, lifting clamps or inner tongs - all guarantee a smooth production process.

Your advantage: industry-specific know-how in advising, planning and manufacturing.





DRUM HANDLING

Drum Tongs
Horizontal / Vertical
Drum Gear
Drum Collars
Drum Turning Tongs

LIFTING CLAMPS

Safety Clamps
Sheet Clamps
Beam Clamps
Screw Clamps
Concrete Pipe Clamps

TONGS

Round Profile
Rectangular Profile
Logs
Rails

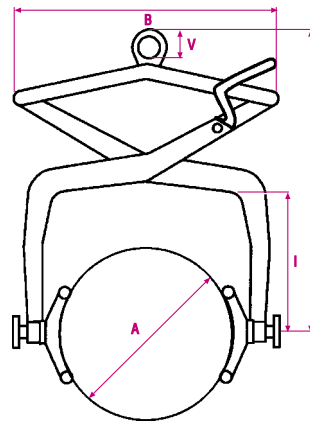
Cardboard
Turning
Stone Blocks
Bales
Boxes
Inner Tongs

LSE DRUM HANDLING

DRUM TONGS HORIZONTAL / VERTICAL

Z64 drum tongs for vertical or horizontal drums

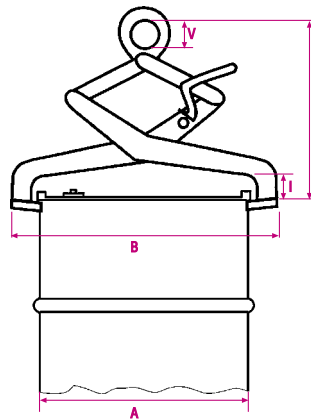
Drum tongs to transport horizontal or vertical drums in accordance with DIN 66 43 with movable grab jaws and rotating interlock and opening lever. Grab width equipped for constant drum diameter; also suitable to turn filled drums.



Load capacity (kg)	Dimensions approx. (mm)					Weight approx. (kg)	Type Part No.
	A	B	H	I	V		
250	560	1400	1500	600	60	60	7Z64.002.056
250	640	1400	1500	600	60	60	7Z64.002.064
500	560	1400	1500	600	70	70	7Z64.005.056
500	640	1400	1500	600	70	70	7Z64.005.064

Z59 drum tongs

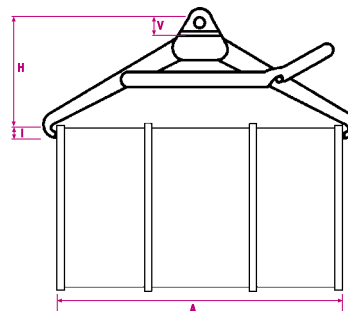
Drum tongs for vertical steel drums. This is a simple, robust tong for grabbing under the drum edge. Designed with opening lever.



Load capacity (kg)	Dimensions approx. (mm)					Weight approx. (kg)	Type Part No.
	A	B	H	I	V		
250	470 - 560	700	400 - 480	50	60	10	7Z59.002.056
250	560 - 640	800	430 - 530	50	60	12	7Z59.002.064
500	470 - 560	700	400 - 500	50	80	12	7Z59.005.056
500	560 - 640	800	430 - 530	50	80	15	7Z59.005.064

Z63 drum tongs for horizontal drums

Tongs for roll channel drums in accordance with DIN 66 43 and 66 35, which have a low construction height and automatically locking opening lever.



Load capacity (kg)	Dimensions approx. (mm)				Weight approx. (kg)	Type Part No.
	A	H	I	V		
250	760 - 910	400 - 500	30	60	10	7Z63.002.091
500	760 - 910	400 - 500	30	70	12	7Z63.005.091

LSE DRUM HANDLING DRUM GEAR



Drum gear (FHZ) to straighten, transport and tip steel drums



Drum collars (Z66) for vertical lifting

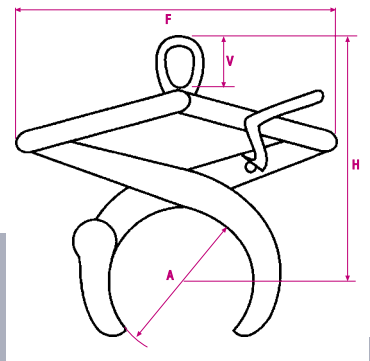
ROUND PROFILE / RECTANGULAR PROFILE

Z50 round profile tongs

Round profile tongs for horizontal transport of round materials of every kind, equipped as standard with an automatic opening lever. All round profile tongs are available with a protective covering for sensitive transport goods. All tongs are available as a special design with step-by-step motion. We make all in-between sizes, even for higher loads and altered grab widths.



Load capacity (kg)	Dimensions approx. (mm)					Weight approx.(kg)	Type Part No.
	A	B	F	H	V		
250	40 - 150	200	400	300 - 500	65	6	7Z50.002.015
250	60 - 250	250	600	400 - 800	65	11	7Z50.002.025
500	40 - 200	300	500	350 - 700	75	15	7Z50.005.020
500	100 - 350	300	700	500 - 800	75	25	7Z50.005.035
500	200 - 500	400	900	600 - 900	75	35	7Z50.005.050
1000	60 - 250	300	700	450 - 700	80	28	7Z50.010.025
1000	100 - 350	300	800	500 - 800	80	35	7Z50.010.035
1000	200 - 500	400	950	600 - 900	80	50	7Z50.010.050
1000	300 - 800	440	1400	900 - 1400	80	130	7Z50.010.080
1000	800 - 1200	500	2400	1400 - 2400	80	200	7Z50.010.120
2500	60 - 250	330	700	500 - 800	95	50	7Z50.025.025
2500	100 - 350	330	850	550 - 900	95	60	7Z50.025.035
2500	200 - 500	400	1000	650 - 1000	95	72	7Z50.025.050
2500	300 - 800	440	1400	900 - 1400	95	240	7Z50.025.080
2500	800 - 1200	600	2450	1400 - 2500	95	360	7Z50.025.120

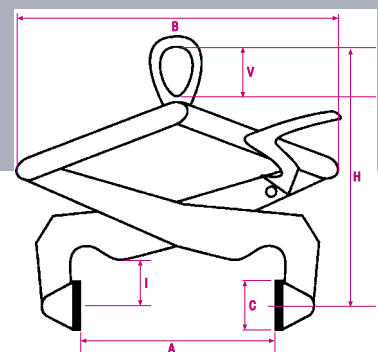


Z51 rectangular profile tongs

The grab jaws of the rectangular profile tongs are equipped with an extremely abrasion-proof protective cover. They are particularly suitable for transporting goods made from steel, concrete and wood. However, the goods must be free from fat and oil to ensure trouble-free grabbing. The force of pressure of the tongs is calculated so that the friction factor between the protective cover and the goods may not be less than 0.75 μ . Please make a special request in the case of oily goods. All rectangular profile tongs are equipped with an opening lever. We make all in-between sizes, also with higher load capacities and other grab ranges. The grab jaws can be equipped as a special design with hardened round anchor plates for oily or moist goods.

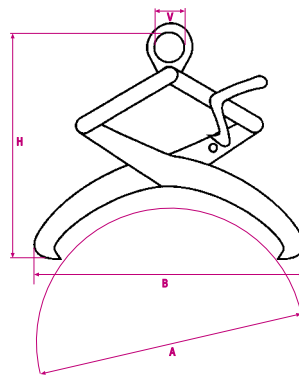


Load capacity (kg)	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	C	H	I	V		
250	20 - 60	370	75	300 - 360	75	65	7	7Z51.002.006
250	50 - 125	400	75	300 - 450	75	65	10	7Z51.002.012
250	115 - 260	560	75	380 - 650	75	65	14	7Z51.002.026
250	250 - 500	850	75	500 - 1000	75	65	18	7Z51.002.050
500	20 - 60	380	75	300 - 360	75	75	10	7Z51.005.006
500	50 - 125	400	75	300 - 450	75	75	12	7Z51.005.012
500	115 - 260	480	75	380 - 670	75	75	16	7Z51.005.026
500	250 - 500	850	75	500 - 1000	80	75	22	7Z51.005.050
1000	50 - 125	500	100	360 - 500	90	75	23	7Z51.010.012
1000	150 - 260	600	100	430 - 700	90	80	28	7Z51.010.026
1000	250 - 500	850	100	500 - 1000	110	80	40	7Z51.010.050
1000	480 - 750	1000	100	500 - 1100	110	80	60	7Z51.010.075
1000	730 - 1000	1000	100	600 - 1200	110	80	70	7Z51.010.100
2500	150 - 300	900	120	600 - 800	150	95	70	7Z51.025.030
2500	250 - 500	1100	120	700 - 1200	150	95	90	7Z51.025.050
2500	480 - 750	1100	120	700 - 1200	150	95	110	7Z51.025.075



Z62 log tongs

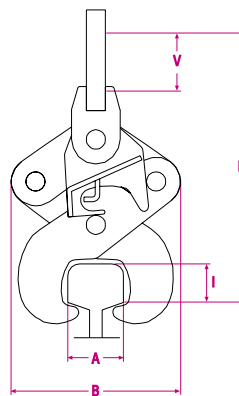
Tongs with large grab width and low outer dimensions for transporting logs. The grab points can be changed from a load capacity of 2,500 kg. Designed with opening lever.



Load capacity (kg)	Dimensions approx. (mm)				Weight approx.(kg)	Type Part No.
	A	B	H	V		
500	200 - 500	650	500 - 700	85	12	7Z62.005.050
1000	300 - 800	1100	750 - 900	85	23	7Z62.010.080
2500	300 - 800	1150	750 - 900	95	60	7Z62.025.080
2500	400 - 1000	1400	900 - 1200	95	85	7Z62.025.100
5000	500 - 1000	1500	900 - 1200	95	130	7Z62.050.100

Z60 rail tongs

Rail tongs for transporting Vignoles rails type S and UIC and crane rails, very stable design with opening lever, combined with defensive latch, i.e. the rail tongs cannot open on the ground in the grab state despite stress relief or hitting the ground.



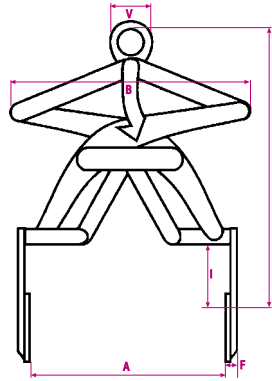
Load capacity (kg)	Dimensions approx. (mm)					Weight approx.(kg)	Type Part No.
	A	B	H	I	V		
1000	15 - 85	350	400	50	90	15	7Z60.010.008
2000	15 - 85	380	450	80	90	20	7Z60.020.008
4000	15 - 95	380	450	80	90	25	7Z60.040.009

LSE TONGS

CARDBOARD / TURNING TONGS

Z61 cardboard tongs

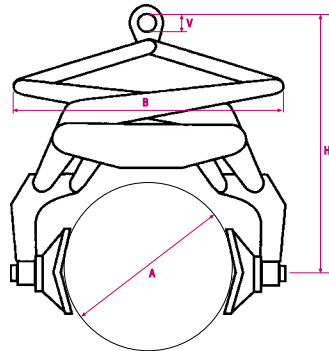
Parallel tongs with extremely large and narrow grab jaws with rubber profile cover, which guarantees large pressure distribution. Particularly suitable for cardboard boxes that are very close together. These tongs have an opening lever.



Load capacity (kg)	Dimensions approx. (mm)					Weight approx. (kg)	Type Part No.
	A	B	F	H	I		
125	100 - 300	15	700	570 - 950	125	60	7Z61.001.030
125	200 - 400	15	700	570 - 950	125	60	7Z61.001.040
125	300 - 500	15	700	570 - 950	125	60	7Z61.001.050
125	400 - 600	15	700	570 - 950	125	60	7Z61.001.060
125	500 - 700	15	700	570 - 950	125	60	7Z61.001.070
125	600 - 800	15	700	570 - 950	125	60	7Z61.001.080
125	700 - 900	15	700	570 - 950	125	60	7Z61.001.090
125	800 - 1000	15	700	570 - 950	125	60	7Z61.001.100

Z58 turning tongs

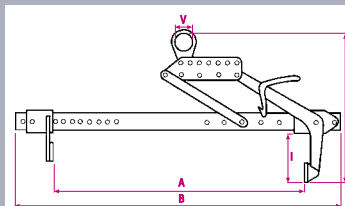
These turning tongs are suitable for straightening, turning or rotating transport goods. These are parallelogram tongs; the grab jaws open and close in parallel. The grab jaws can be rotated and with 90° locking they enable perfect adjustment to the goods. These turning tongs are equipped with an opening lever.



Load capacity (kg)	Dimensions approx. (mm)					Weight approx. (kg)	Type Part No.
	A	B	H	I	V		
125	150 - 250	600	500 - 900	250	60	25	7Z58.001.025
125	250 - 350	600	550 - 950	300	60	29	7Z58.001.035
250	150 - 300	700	600 - 1050	300	60	34	7Z58.002.030
250	300 - 450	700	650 - 1100	350	60	39	7Z58.002.045
500	300 - 450	720	700 - 1150	350	70	48	7Z58.005.045
500	450 - 600	720	800 - 1250	400	70	58	7Z58.005.060
1000	450 - 600	800	850 - 1300	430	85	72	7Z58.010.060
1000	650 - 800	800	950 - 1500	550	85	83	7Z58.010.080

Z65 profile tongs for stone blocks

Adjustable profile tongs with very large span range. The desired grab widths and centres of gravity are quickly adjusted using locking pins. Low construction height. Designed with opening lever. The grab jaws are equipped with a protective cover.



Load capacity (kg)	Dimensions approx. (mm)					Weight approx. (kg)	Type Part No.
	A	B	H	I	V		
250	200 - 650	900	600	150	60	25	7Z65.002.065
250	200 - 800	1050	600	150	60	28	7Z65.002.080
500	200 - 800	1050	600	175	70	35	7Z65.005.080
500	200 - 1000	1250	700	175	70	40	7Z65.005.100
1000	200 - 1000	1300	700	200	80	65	7Z65.010.100

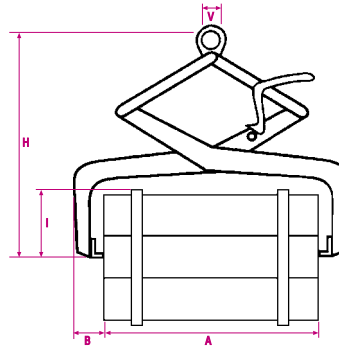
LSE TONGS

BALE / BOX / CASE TONGS



Z52 tongs for bales and boxes

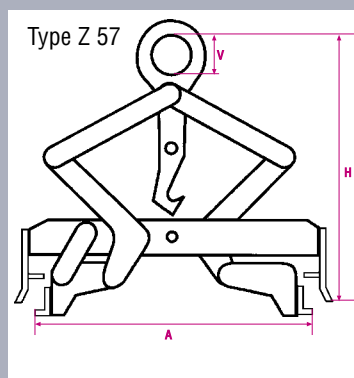
Tongs for transporting pressed paper or material bales, boxes and wooden planks. Simple robust pincer construction with opening lever.



Load capacity (kg)	Dimensions approx. (mm)					Weight approx. (kg)	Type Part No.
	A	B	H	I	V		
250	250 - 500	80	400 - 650	150	65	12	7Z52.002.050
500	250 - 500	80	400 - 650	150	70	15	7Z52.005.050
500	300 - 650	80	450 - 720	180	70	18	7Z52.005.065
1000	600 - 1000	110	700 - 950	200	80	38	7Z52.010.100
1000	800 - 1200	110	900 - 1050	220	80	45	7Z52.010.120

Z56 / Z57 stock box tongs

Stock box tongs to lift warehouse stacking boxes. Type Z 56 outward and type Z 57 inward grabbing. For type Z 56 grabbing occurs on the box seam, for type Z 57 it is underneath the reinforced seam. So that the tongs do not open when the stacking box is joggled or hits the ground, the grab arms are tensioned with a draw spring.



Load capacity (kg)	Greifweite in mm	Dimensions approx. (mm)			Weight approx. (kg)	Type Part No.
		A	H	V		
100	300	380	320	65	6	7Z56.001.030
100	450	530	320	65	6	7Z56.001.045
200	300	380	320	65	6	7Z56.002.030
200	450	530	320	65	6	7Z56.002.045
100	300	320	320	65	8	7Z57.001.030
100	450	470	320	65	8	7Z57.001.045
200	300	320	320	65	8	7Z57.002.030
200	450	470	320	65	8	7Z57.002.045

LSE LIFTING CLAMPS

SAFETY CLAMPS

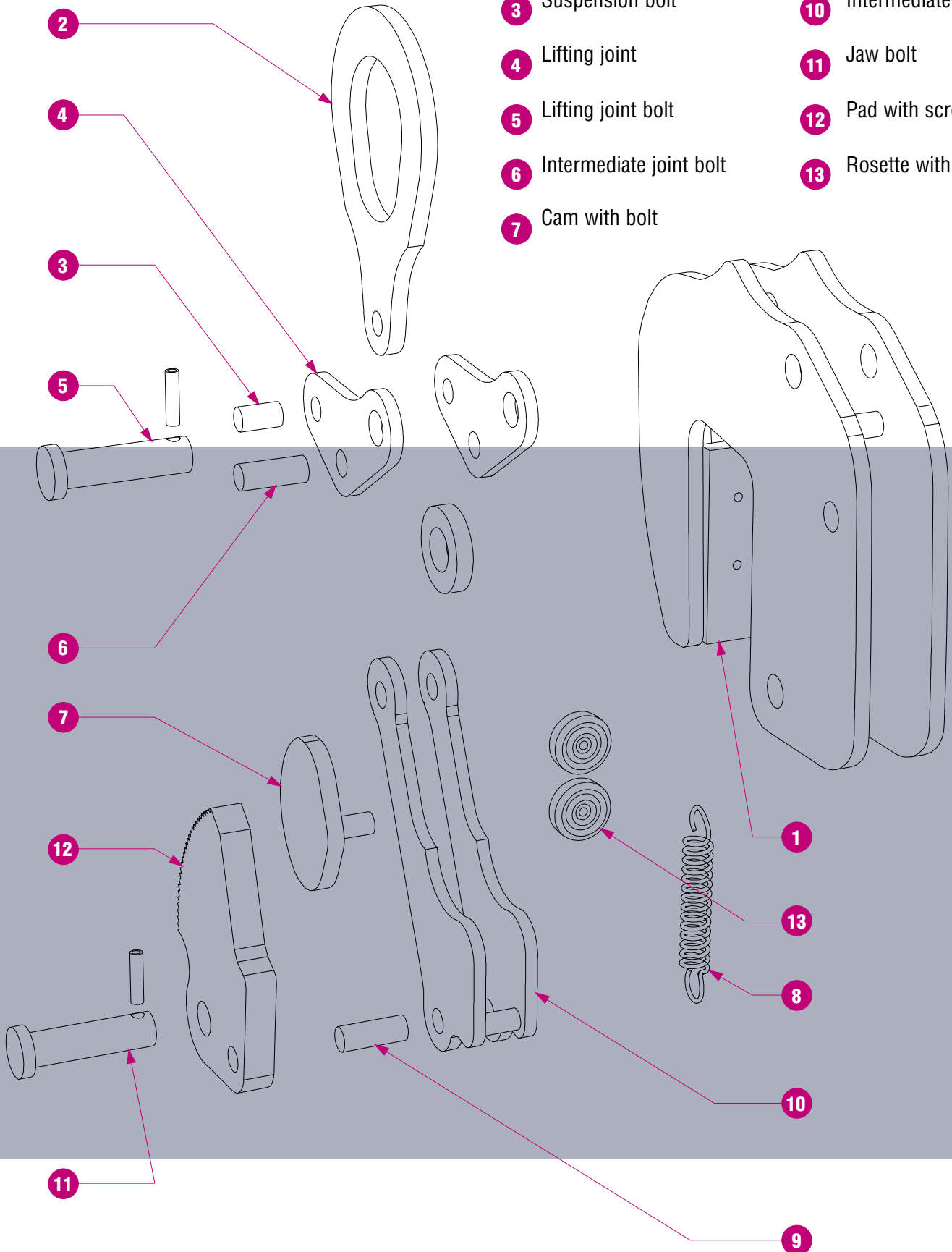
For load train for diagonal pull

I		<p>K11</p>	<p>K24</p>	<p>K27</p>	
II			<p>K12</p>	<p>K13</p>	<p>K19</p>
III			<p>K16</p>	<p>K26</p>	
IV			<p>K15</p>	<p>K17</p>	
V		<p>K22</p>	<p>K23</p>		

Load: 100% 75% 50%

**Replacement parts list for housing types
K10, K11, K12, K13,
K16, K20, K22, K23, K24**

- 1** Body
- 2** Lifting eye
- 3** Suspension bolt
- 4** Lifting joint
- 5** Lifting joint bolt
- 6** Intermediate joint bolt
- 7** Cam with bolt
- 8** Spring
- 9** Intermediate joint bolt
- 10** Intermediate joint
- 11** Jaw bolt
- 12** Pad with screw
- 13** Rosette with screw



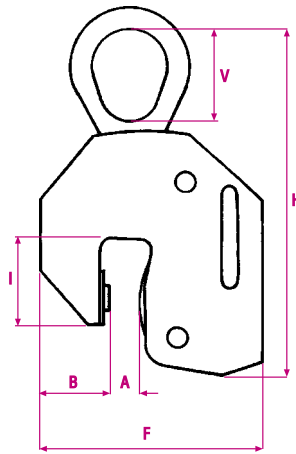
LSE SAFETY CLAMPS

VERTICAL SHEET TRANSPORT

K10 safety clamps for vertical sheet transport and for turning and straightening

The clamps are very suitable for vertical sheet transport of individual sheets. To guarantee secure handling the clamps have a tension mechanism, which presses the serrated grab pawl against the sheet to be lifted before the actual lifting process using spring resistance and, in so doing, prevents the clamps from slipping. Therefore, it is not possible to open the lifting clamp for unintentional loads.

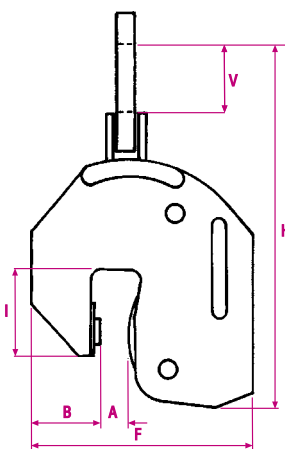
Because of the micro-serrated round anchor plates and the pawl, a microform closure arises, as the anchor plates and pawl press on the material of the load. Therefore, even small grab tracks must be taken into account on the load. The sheet surface or thickness must be less than HRC 40. The load bearing capacity of the clamps is reduced in the event of diagonal pull. We recommend using the pair method for longer sheets, a 2-leg attachment or in combination with a coupling crosshead.



Load capacity (kg)	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	F	H	I	V		
200	0 - 15	28	95	150	45	40	1,5	7K10.002.015
200	10 - 25	28	105	150	45	40	1,5	7K10.002.025
750	0 - 15	34	100	185	45	50	2,5	7K10.007.015
1000	0 - 20	58	160	240	65	75	4	7K10.010.020
1000	0 - 50	65	230	300	115	75	8	7K10.010.050
1000	0 - 75	65	250	360	110	75	12	7K10.010.075
1500	0 - 20	58	165	250	65	75	5	7K10.015.020
2500	0 - 30	65	200	290	85	85	7	7K10.025.030
2500	0 - 50	65	230	320	115	85	10	7K10.025.050
2500	0 - 75	70	265	340	115	85	16	7K10.025.075
2500	25 - 100	70	290	340	115	85	16	7K10.025.100
3000	0 - 30	70	210	335	90	85	12	7K10.030.030
5000	0 - 50	80	250	340	115	100	15	7K10.050.050
5000	25 - 75	80	275	380	125	100	16	7K10.050.075
5000	50 - 100	85	350	540	150	100	24	7K10.050.100
5000	50 - 150	85	400	540	150	100	25	7K10.050.150
10000	0 - 50	110	320	420	125	100	24	7K10.100.060
10000	50 - 100	110	360	450	135	110	30	7K10.100.100

K11 safety clamps with gimballed attachment

The basic design of this clamp is like the aforementioned clamp of the K10 type, but this clamp also has a gimballed hinge to apply lateral force better.



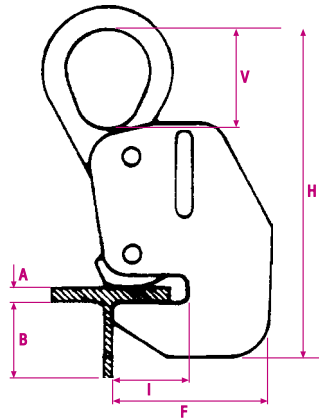
Load capacity (kg)	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	F	H	I	V		
200	0 - 15	28	95	150	45	40	2	7K11.002.015
750	0 - 15	34	100	185	45	50	3	7K11.007.015
1000	0 - 20	58	160	240	65	75	5	7K11.010.020
1500	0 - 20	58	165	250	65	75	5,5	7K11.015.020
2500	0 - 30	65	200	290	85	85	8	7K11.025.030
5000	0 - 50	80	250	340	115	100	17	7K11.050.050

LSE SAFETY CLAMPS BEAMS / GIMBALLED



K12 safety clamps for beam profiles

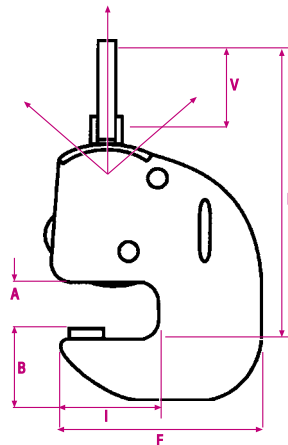
Type K12 with safety lock. Can be locked in open and closed position. Particularly suitable for horizontal transport. The suspension eyes are at the beam's centre of gravity. Universal applications, also in pairs on the face of steel beams. Can also be supplied with gimballed attachment. This design is particularly suitable for paired attachment of welded steel constructions.



Load capacity (kg)	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	F	H	I	V		
1000	5 - 20	60	195	280	85	75	10	7K12.010.020
2500	8 - 30	85	280	380	140	85	17	7K12.025.030
5000	10 - 50	105	360	460	150	100	33	7K12.050.050
10000	10 - 60	115	380	600	150	110	60	7K12.100.060

K21 safety clamps for beams and profiles with gimballed attachment

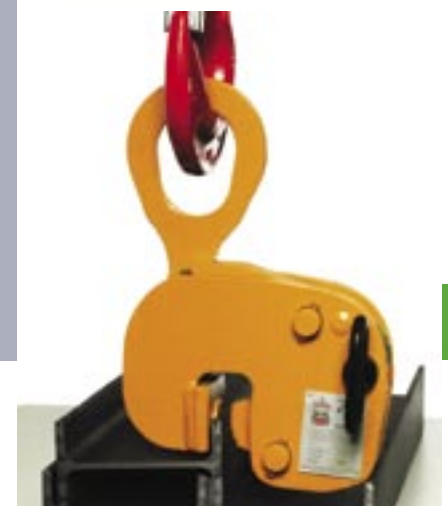
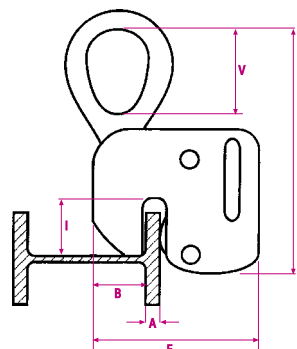
Bearer clamp with safety lock and spring tensioning. This lifting clamp is particularly suitable for lateral diagonal pull because of the gimballed attachment. The attachment can be moved in all directions, so tensile loading is possible from all sides. As a result, this type is particularly suitable for transporting long beams, profiles and steel constructions. For lateral shunt loading the load capacity is reduced as per the sketch. Paired use in the two-bar attachment is possible without spreader crosshead for longer structural steel elements.



Load capacity (kg)	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	F	H	I	V		
1000	5 - 20	65	195	300	85	70	10	7K21.010.020
2500	5 - 30	80	230	350	105	85	15	7K21.025.030
3500	10 - 35	85	260	390	110	85	31	7K21.035.035
4500	10 - 40	95	320	450	120	100	37	7K21.045.040
6000	15 - 50	105	380	480	130	100	40	7K21.060.050

K13 safety clamps for beam profiles

Type K13 with safety lock. Can be locked in open and closed position. Particularly suitable for transport of T, Double-T and U beams in vertical flange bearing. Because of their high force of pressure, these lifting clamps are excellent for turning beams.



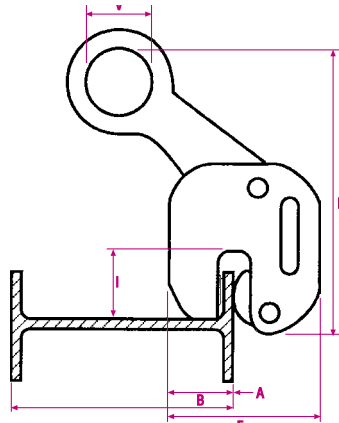
Load capacity (kg)	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	F	H	I	V		
1000	5 - 15	70	195	230	60	75	6	7K13.010.015
2500	10 - 27	90	235	310	70	85	10	7K13.025.030
4000	10 - 32	90	280	400	75	85	15	7K13.040.032

LSE SAFETY CLAMPS

BEAM TRANSPORT

K20 safety clamps for beam transport and storage

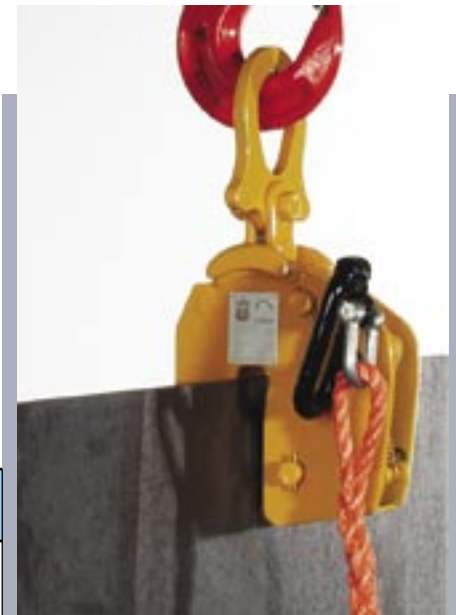
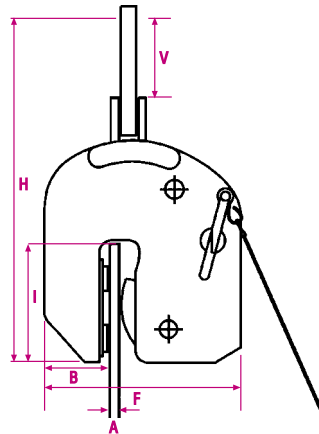
The beam safety clamps type K 20 are particularly suitable for horizontal beam transport and getting beams in and out of storage. It can be locked in open and closed position.



Load capacity (kg)	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.	
	A	für Trägerbreiten	B	F	H	I			V
500	5 - 15	80 - 160	50	130	200	42	60	5	7K20.005.015
1000	5 - 25	100 - 220	60	175	300	60	70	7	7K20.010.025
2500	5 - 28	200 - 380	70	220	400	75	85	15	7K20.025.028

K24 safety clamps for sheet piles with remote unlocking

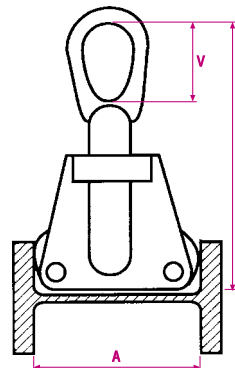
The safety clamps for sheet piles are suitable for turning sheet piles by 90°. It has remote unlocking, whereby the lifting clamps can be unlocked from the floor using a cable winch at big heights.



Load capacity (kg)	Dimensions approx. (mm)					Weight approx.(kg)	Type Part No.	
	A	B	F	H	I			V
2500	1 - 12	65	200	350	120	85	8	7K24.025.012
5000	1 - 20	85	250	500	155	100	18	7K24.050.020
7000	1 - 25	95	280	580	160	120	25	7K24.070.025
10000	1 - 25	110	330	650	160	120	35	7K24.100.025

K19 inner beam clamps

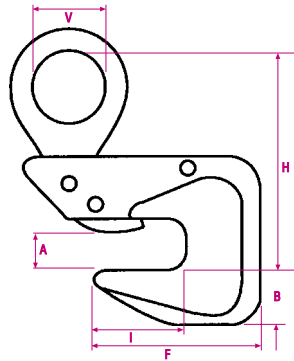
Lifting clamps type K 19 as inward grabbing lifting clamp for wide flange beams, which are to be stacked inside one another and close together.



Load capacity (kg)	Dimensions approx. (mm)			Weight approx.(kg)	Type Part No.
	A	H	V		
500	100 - 120	220	60	3	7K19.005.012
1000	120 - 160	280	70	6	7K19.010.016
1500	140 - 180	300	75	8	7K19.015.018
3000	180 - 220	350	85	12	7K19.030.022

K22 safety clamps for sheets, profiles and pipes

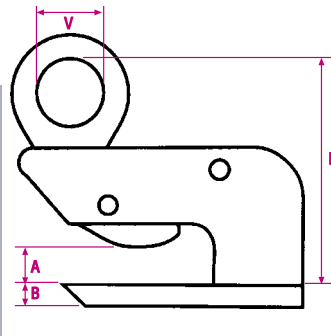
Universal lifting clamps for horizontal transport of sheets, plates and profiles. The housing is slit for frontal suspension of beams. With safety lock - can be locked in open and closed position. The slope angle may only be up to max. 60° for paired use. See table on page 84 to reduce the bearing load.



Load capacity (kg)/Stck.	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	F	H	I	V		
500	0 - 25	50	155	180	60	60	4	7K22.005.025
1000	0 - 25	50	190	200	60	60	6	7K22.010.025
1500	0 - 30	60	210	260	80	75	10	7K22.015.030
3000	0 - 40	70	230	300	90	85	15	7K22.030.040
4000	0 - 40	75	260	330	100	95	18	7K22.040.040

K23 safety clamps for plates, sheets and profiles

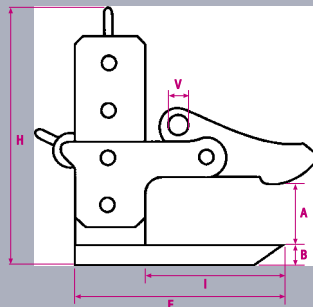
Lifting clamps for horizontal transport of sheets, plates and profiles. Designed with safety lock. The grab cams are pressed against the sheet using spring tensioning. This guarantees a secure grip even in the event of stress relief or hitting the ground. The slope angle may only be up to 60° for paired use.



Load capacity (kg)/Stck.	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	F	H	I	V		
500	0 - 20	10	160	180	75	60	5	7K23.005.020
1000	0 - 25	10	170	190	80	60	6	7K23.010.025
1500	0 - 35	20	190	230	95	75	9	7K23.015.035
2000	0 - 40	25	220	290	110	75	12	7K23.020.040
3000	5 - 45	30	240	330	120	80	15	7K23.030.045
4000	10 - 50	50	240	360	120	80	20	7K23.040.050

k18 safety clamps for sheet boards

Bearer clamps for horizontal transport of sheets and sheet boards. The grab range can quickly be adjusted from 0 - 420 mm using a locking pin. Each clamp range is 60 mm. These lifting clamps are equipped for use in pairs. The permitted lateral diagonal pull is max. 10°. The bearing force must be reduced in accordance with the slope angle (see table page 84).



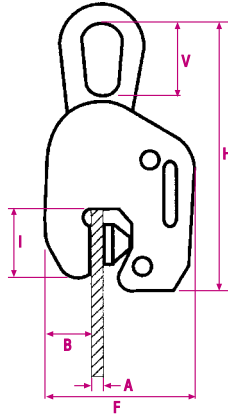
Load capacity (kg)/Paar	Dimensions approx. (mm)						Weight kg / unit	Type Part No.
	A	B	F	H	I	V		
1000	0 - 150	12	170	250	110	25	10	7K18.010.150
1500	0 - 300	15	180	400	110	25	12	7K18.015.300
3000	0 - 180	20	200	300	120	30	12	7K18.030.180
3000	0 - 300	20	200	420	120	30	14	7K18.030.300
3000	0 - 420	20	200	550	120	30	15	7K18.030.420
6000	0 - 180	30	230	350	120	30	18	7K18.060.180
6000	0 - 300	30	230	470	120	30	21	7K18.060.300

LSE SAFETY CLAMPS

SCREW CLAMPS

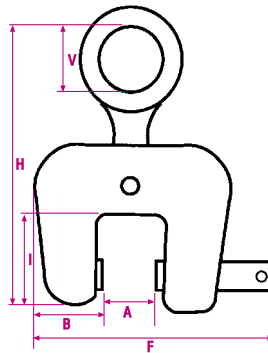
K16 safety clamps with smooth grab plates

Bearer clamps with safety lock and smooth, large pressure plate for sheets with sensitive surfaces for vertical transport and straightening or tilting by 90°. These bearer clamps have high force of pressure. They are purely activated by gravity, but are only suitable for dry, clean and lubricant-free surfaces. From a load capacity of 2.5 t, the grab range is preadjusted using a locking screw.



K26 Screw Clamps

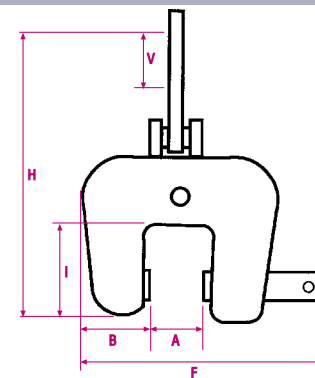
Universal screw clamps for lifting, turning by 180° and pulling sheets, beams and steel constructions. Equipped with movable, round pressure plates - result is good clamping through wedge effect.



Load capacity (kg)	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	F	H	I	V		
500	0 - 19	50	170	240	60	60	4	7K26.005.019
1000	0 - 30	55	200	260	60	60	5	7K26.010.030
1500	0 - 35	65	250	350	70	60	8	7K26.015.035
2000	0 - 100	70	400	380	80	70	9	7K26.020.100
3000	0 - 50	75	350	380	100	70	10	7K26.030.050
5000	0 - 80	90	400	450	110	75	20	7K26.050.080
6000	0 - 65	100	380	490	120	80	23	7K26.060.065

k27 Screw Clamps

Screw clamps with lateral movable suspension eyes. Designed like type K 26; particularly suitable for rolling sheets on rounding machines.



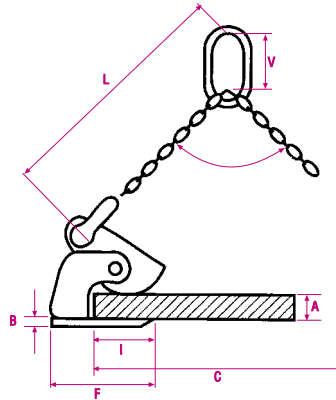
Load capacity (kg)	Dimensions approx. (mm)						Weight approx.(kg)	Type Part No.
	A	B	F	H	I	V		
1000	0 - 30	55	200	300	60	60	6	7K27.010.030
1500	0 - 35	65	250	400	70	60	10	7K27.015.035
3000	0 - 50	75	350	450	100	70	12	7K27.030.050
6000	0 - 65	100	380	550	120	80	25	7K27.060.065

LSE SAFETY CLAMPS HORIZONTAL SHEET TRANSPORT



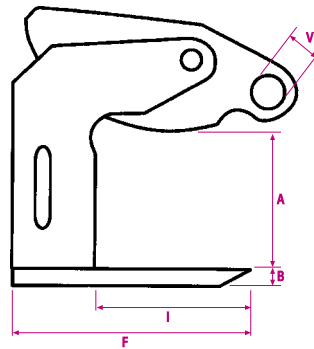
K15 safety clamps for horizontal sheet transport

These lifting clamps are equipped for use in pairs. Particularly suitable for transporting stable sheets, sheet boards and steel plates. The serration of the pawl ensures secure grab of the sheets even on a diagonal slope. We recommend 2-pair bearer clamps combined with a cross-head for long sheets. The bearing load is reduced with a slope angle greater than 60°.



K15 safety clamps for horizontal sheet transport

These lifting clamps are equipped for use in pairs. They have a large grab range and, therefore, are very well suited to transporting thick and fine sheet boards.



Caution:

With lifting clamps for horizontal transport, the load capacity is reduced in accordance with the working angle. This applies to alltypes.

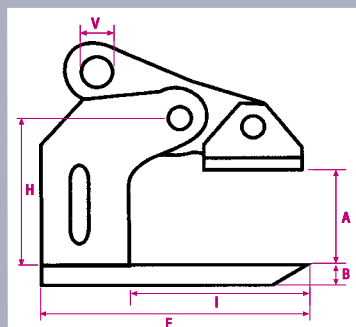
Working angle	Load capacity
30° - 60°	100 %
60° - 90°	70 %
90° - 120°	50 %

Pair capacity (kg)	Dimensions approx. (mm)					Wight kg / unit	Type Part No.
	A	B	F	I	V		
2500	5 - 100	15	230	140	25	13	7K15.025.100
2500	50 - 150	15	230	140	25	15	7K15.025.150
5000	5 - 100	20	250	140	31	20	7K15.050.100
5000	50 - 150	30	270	165	31	25	7K15.050.150
5000	100 - 250	30	270	165	31	30	7K15.050.250
7500	100 - 250	50	290	170	36	35	7K15.075.250



K17 safety clamps with protective cover

Bearer clamps for use in pairs of plates and sheets with sensitive surfaces. The pressure plate is equipped with a protective cover.



Pair capacity (kg)	Dimensions approx. (mm)						Wight kg / unit	Type Part No.
	A	B	F	H	I	V		
250	0 - 30	10	150	100	100	17	3	7K17.002.030
500	0 - 30	12	160	120	100	17	5	7K17.005.030
1000	0 - 40	15	200	160	130	17	7	7K17.010.040
2500	0 - 50	20	220	180	130	25	10	7K17.025.050



LSE SAFETY CLAMPS

CONCRETE PIPE CLAMPS

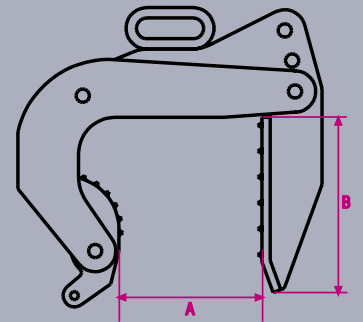
K28 concrete pipe attachment

The 3-leg concrete pipe attachment is suitable for vertical transport of concrete rings.

The grab range can be adjusted using locking pins.



Load capacity (kg)	Dimensions approx. (mm)		Grab range	Weight approx.(kg)	Type Part No.
	A max.	B			
1500	120	170	40 - 120	40	7K28.015.120
3000	180	260	50 - 180	60	7K28.030.180
3000	220	260	90 - 220	75	7K28.030.220



To: Carl Stahl Nordgreif GmbH Tel: 040 / 8 39 15 26 Fax: 040 / 8 39 14 27 Email: hamburg@carlstahl.com	Sender: Contact person: Tel.: Fax: e-mail:
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Required load suspension equipment:

Description of the load (indicate material):

Information on Load

Weight (kg)	min.	.....	max.	.....
Length (mm)	min.	.....	max.	.....
Width (mm)	min.	.....	max.	.....
Height (mm)	min.	.....	max.	.....
Outside diameter (mm)	min.	.....	max.	.....
Inside diameter (mm)	min.	.....	max.	.....

Load position	<input type="checkbox"/> horizontal <input type="checkbox"/> vertical	load movement	<input type="checkbox"/> lifting horizontal <input type="checkbox"/> ° rotation
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Load surface	<input type="checkbox"/> dry – pressure sensitive <input type="checkbox"/> wet – pressure sensitive	<input type="checkbox"/> dry – not pressure sensitive <input type="checkbox"/> wet – not pressure sensitive
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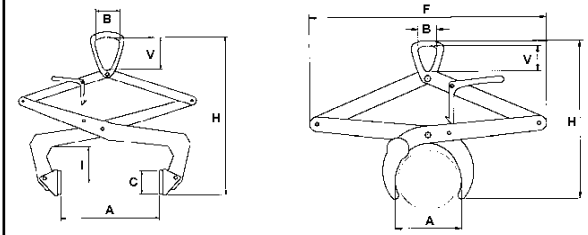
Option of load pick-up	<input type="checkbox"/> by clamping	<input type="checkbox"/> by wrap-around
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Information on Lifting Gear

Type of existing crane	<input type="checkbox"/> overhead crane <input type="checkbox"/> portal crane	load capacity t
		lifting height m

Crane hook	<input type="checkbox"/> simple hook no. DIN 15041	<input type="checkbox"/> double hook no. DIN 15042
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Information on Load Suspension Devices

Operating mode	<input type="checkbox"/> with ratchet lever <input type="checkbox"/> with automatic step mechanism	
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Dimensions for fig. 1 and fig. 2	width F max. mm	internal height I max. mm	
	structural height H max. mm	jaw C x C	mm
	Width F max. mm		
Suspension eye	height V max. mm	width B max. mm	

FAX ENQUIRY FORM CROSSHEADS

To: Carl Stahl Nordgreif GmbH Tel: 040 / 8 39 15 26 Fax: 040 / 8 39 14 27 e-mail: hamburg@carlstahl.com	Sender: Contact person: Tel.: Fax: e-mail:
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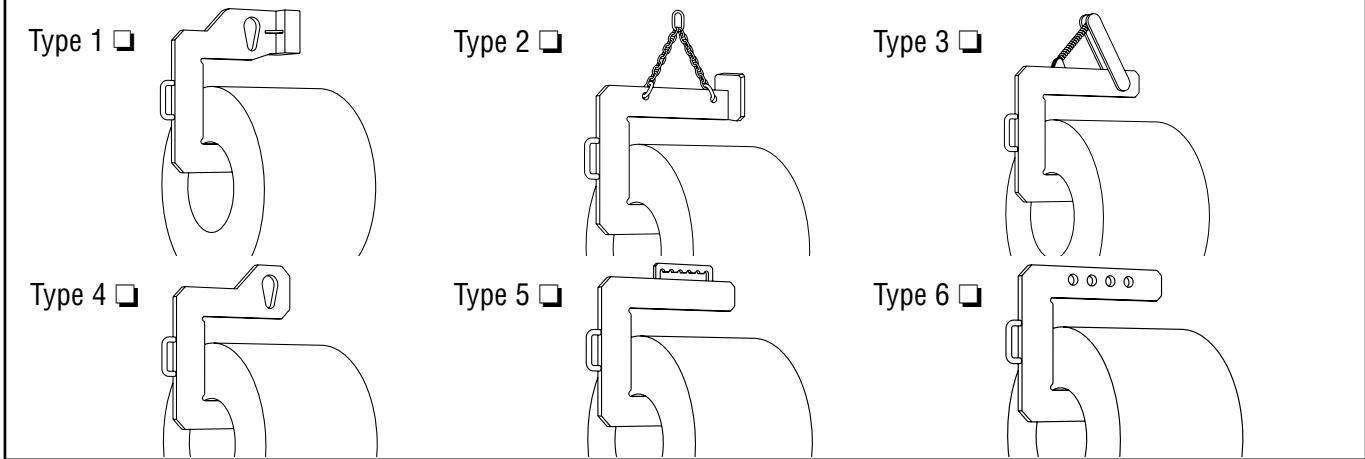
Lifting eye types	Hook types
Type 1 <input type="checkbox"/> Type 2 <input type="checkbox"/> Type 3 <input type="checkbox"/>	Type 1 <input type="checkbox"/> Type 2 <input type="checkbox"/> Type 3 <input type="checkbox"/>
Type 4 <input type="checkbox"/> Type 5 <input type="checkbox"/> Type 6 <input type="checkbox"/>	Type 4 <input type="checkbox"/> Type 5 <input type="checkbox"/> Type 6 <input type="checkbox"/>

Main beam	
Load capacity kg Grid (RL n° x mm) n° mm L min mm L max mm	
Cross beam	
Grid (RB n° x mm) n° mm B min mm B max mm	

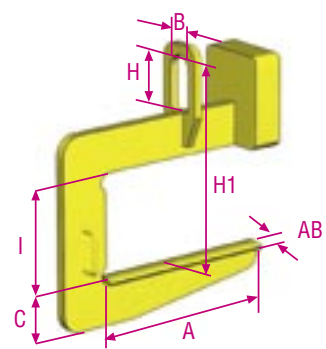
Lifting eye	Height H max. mm Width B max. mm Hook-no:
Other Information	H1 = max. height main lifting beam mm H2 = overall height mm
Other Requirements	..... ..... .....

<p>To:</p> <p>Carl Stahl Nordgreif GmbH</p> <p>Tel: 040 / 8 39 15 26</p> <p>Fax: 040 / 8 39 14 27</p> <p>e-mail: hamburg@carlstahl.com</p>	<p>Sender:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Contact person:</p> <p>Tel.:..... Fax:</p> <p>e-mail:.....</p>
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C-hook types



C-hooks dimensions

Main dimensions		
Load capacity kg	
RM = grid dimensions number mm spacing	
A = supporting surface	..... mm
AB = supporting width	..... mm
B = coil length	..... mm
I = coil inside height	..... mm
Lifting eye	Height H max. mm Width B max. mm C-hook-no.:	
H1 = max. height of the C-hook	..... mm C = prong height mm
Z = prong width mm	
Area of Application	
Other requirements	



LOAD SUSPENSION EQUIPMENT

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