

Lifting clamps and grabs

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- Whether for sheet metal, girders, rails or other structural steel elements ...
- Whether for 0.3t or 100t ...
- Whether for horizontal or vertical transport...
... this is where you will find the correct clamp or grab.
- PFEIFER-RENFROE lifting clamps are designed according to American safety standards and therefore last demonstrably longer, meaning that they are cost effective and safe, especially for tough operating conditions. 40 years of sales success on four continents for PFEIFER-RENFROE lifting clamps are its proof.
- PFEIFER-RENFROE, the safest way of lifting steel!

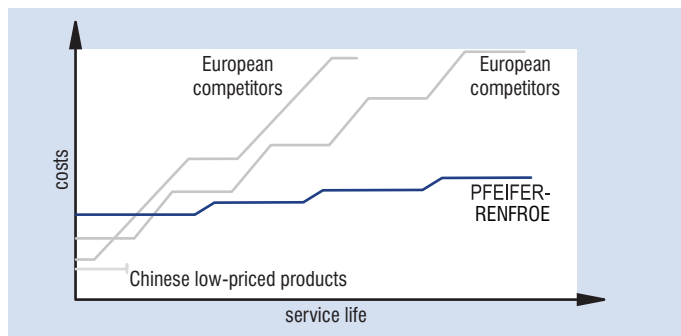
Interesting facts about the use of lifting clamps

“Low-priced” could become dangerous!

The lifting clamps by PFEIFER-RENFROE comply with the European Standard EN 13155, with ASME B30.20 and with the Australian Standard AS 4991. As a result the clamps meet the highest and hardest requirements across the world. Our lifting clamps are the best on the global market and are characterised by long life cycles, reliability and the maximum possible safety. PFEIFER-RENFROE lifting clamps are the perfect choice because of the following factors:

- low wear
- economic spare part kits
- 100% CE-conformity

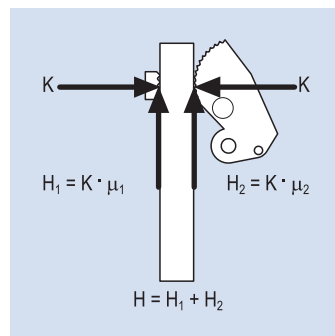
PFEIFER-RENFROE lifting clamps are an economic choice, because “low-priced” can get expensive!



Working principle of a lifting clamp

The lawmaker demands a minimum safety factor of 2 for lifting clamps, which means $H=2 \times G$.

This is only achievable if $\mu_1 = \mu_2 = 1.0$. As a result the cams have to penetrate the surface of the load. Gripping elements of PFEIFER-RENFROE have a hardness of up to 600 HB. For safety reasons the permissible load hardness is limited to 300 HB. The exact hardness of steel sheets is usually not defined on site. Some competitors allow a load hardness of 345 HB together with low-quality gripping elements. Whom you trust, is for you to decide.

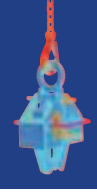


PFEIFER-RENFROE advantages

- ▶ Very long service life due to use of quenched fine-grained structural steels
- ▶ Economically priced spare part kits
- ▶ Few instances of downtime
- ▶ 3 years warranty*, without contractual obligation warranty
- ▶ 5-year free factory inspection **
- ▶ relaxed feeling for sleeping well

* except wear parts
** Carriage and repair not included.

Every lifting clamp is manufactured at the PFEIFER headquarters in Memmingen



Lifting clamps and grabs

Instructions for the use of lifting clamps

Points to be considered:

- For generating enough force “K” with the given set of levers, the load must weigh a minimum of 10% of the nominal carrying capacity of the clamp. This means that the minimum load that should be lifted with a 1 tonne-lifting clamp is 100 kg.
- During the lifting process with clamps, presence of personnel under the load and/or within the danger zone is not allowed.
- Use lifting clamps in the temperature range from -20°C to $+100^{\circ}\text{C}$ (ambient or load temperature)
- Max. permitted surface hardness of load 300 HB

new!

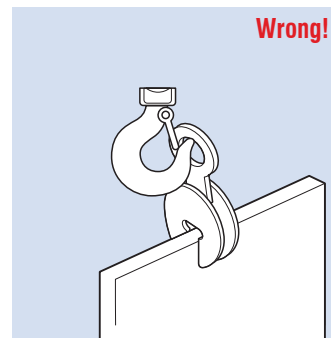
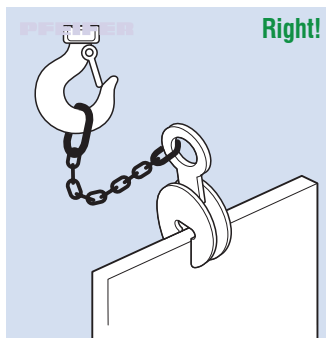
- Almost all lifting clamp bodies are powder-coated
- for better corrosion prevention
- and even more durable lifting clamps



Notes on the use of attachment devices

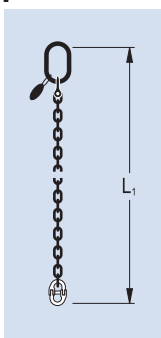
Important information for you:

Never engage clamps directly into the crane hook but connect them via a suitable lifting sling. Make sure that the master link is big enough for the crane hook.

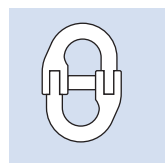
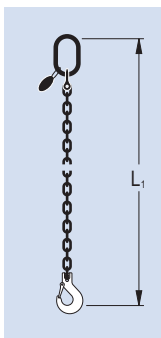


Attachment possibilities

Single-leg lifting chain with connecting link



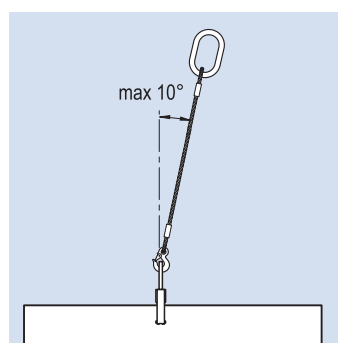
Single-leg lifting chain with load hook



The component dimensions are given on pages 182–183.

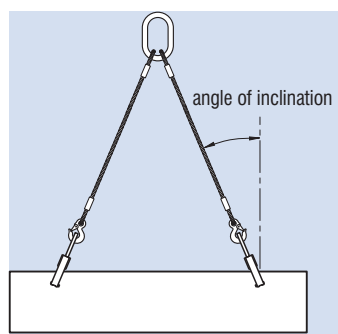
Which clamp model to connect with which chain?

Nominal chain size mm	MPS ES-1	MPC EC-1	G2	CS	NM	SCP SCPA	SP	ASTS ASTL WHS	M	H
6	–	–	–	–	–	–	0.3 t	0.5 t	–	0.25 t
8	1.0 t	–	–	–	–	0.5 t	–	1.5 t	–	0.5 t
10	–	1.0 t	–	0.5 t	1.0 / 2.0 t	1.5 t	–	–	0.5 / 1.0 t	0.75 / 1.5 t
13	2.0 t	2.0 t	–	–	4.0 t	3.0 t	–	3.0 t	2.0 t	3.0 t
16	3.0 / 5.0 t	3.0 t	6.3 t	–	–	6.0 t	–	–	4.0 t	4.0 t
19	–	5.0 t	10 t	–	–	–	–	–	–	–
22	–	–	12 t	–	–	10.0 / 15.0 t	–	–	–	–
26	–	–	–	–	–	–	–	–	–	–

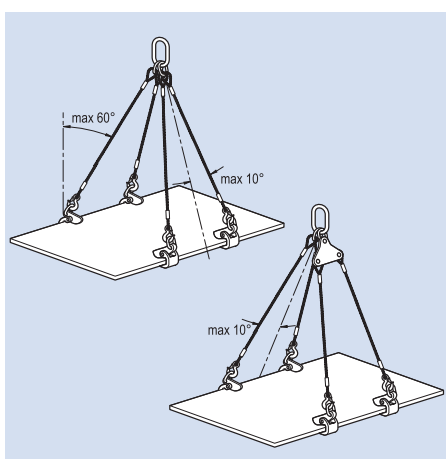


Note the angle of inclination!

For vertical lifting clamps with fixed suspension it is not allowed to pull at an inclination of more than 10° (please see picture on the left). The suspension is not designed for diagonal pull.



When operating with two clamps in a double-stranded sling the clamps must be attached in line with the inclination of the sling. Another possibility is to use clamps with a pivoting lifting shackle (MPC, CS, CA).



For horizontal lifting clamps (H, M, WHS) the indicated working load limit is valid for an inclination angle of 30°. Inclination angles with more than 30° increase the working load, which means a reduced working load limit of the lifting clamps. At 45° the working load limit of the lifting clamp is reduced to 70% of the rated capacity whereas at 60° it is only 50%. Please mind!

In general

Please ensure that the working load of the lifting clamp is in accordance with the rope or chain sling. The combined working load of a lifting clamp attached to a sling decreases depending on the angle of inclination.

PFEIFER-RENFROE

lifting clamps

Series MPS/MPC
The special modular design

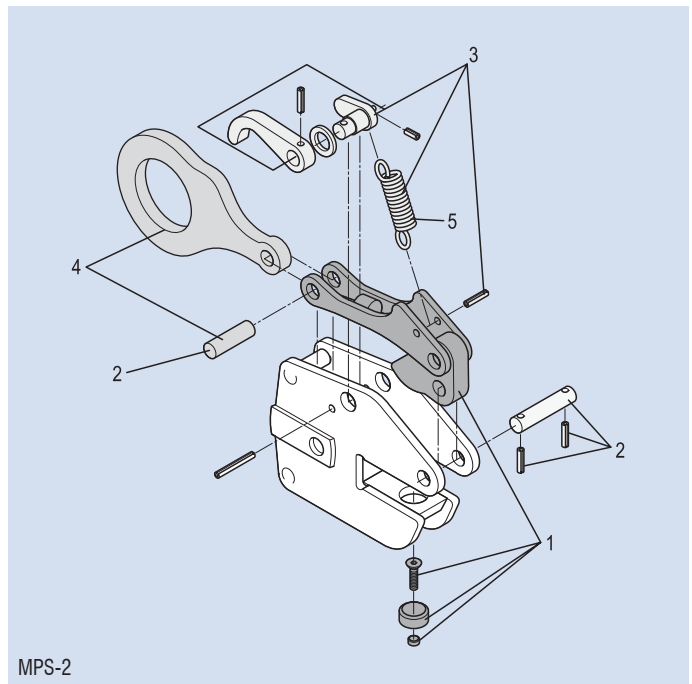
The modular design of the lifting clamps enables easy exchange of damaged/defective wear parts. The spare parts are offered in conveniently assorted sets. Moreover, gripping elements suitable for different hardnesses being interchangeable allows the same clamp to be used for lifting sheets with varying hardnesses.

For very hard loads, e.g. Hardox 400, we offer extra hard gripping elements. In order to avoid contact corrosion, you can also choose stainless steel gripping elements.

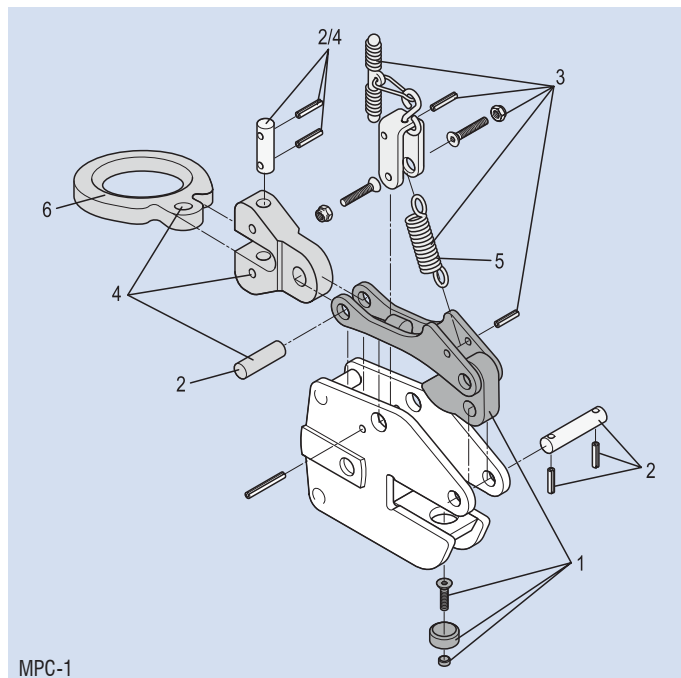
Gripping elements	1t	2t	3t	5t	Hardness up to
Standard	163348	163350	163351	170713	300 HB (32 HRC)
Extra hard	179415	196741	179416	196742	450 HB (45 HRC)
Stainless steel	211402	211590	211618	211650	300 HB (32 HRC)

Right: Explosion Diagramme MPS 2 with "Lock-open" and "Lock-closed" feature

Identification No.	Clamp type	Spare part kit	Colour code
1	MPS - 2	Gripping elements	1
2	MPS - 2	Pin set	2
3	MPS - 2	Lock assembly	3
4	MPS - 2	Lifting shackle	4
5	MPS - 2	Lock spring	5
6	MPS - 2	Gripping element extra hard	1
7	MPS - 2	Gripping element stainless steel	1



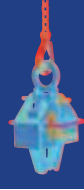
A further example is the MPC-1 with "Lock closed" feature



Identification No.	Clamp type	Spare part kit	Colour code
1	MPC - 1	Gripping elements	1
2	MPC - 1	Pin set	2
3	MPC - 1	Lock assembly	3
4	MPC - 1	Lifting shackle	4
5	MPC - 1	Lock spring	5
6	MPC - 1	Gripping element extra hard	1
7	MPC - 1	Gripping element stainless steel	1
8	MPC - 1	Gripping element stainless steel	1

For reference numbers please see the spare part list.

Spare part lists and explosion drawings of all clamp models are available on our website: www.pfeifer.de



Lifting clamps and grabs

PFEIFER-RENFROE clamp model MPS 1

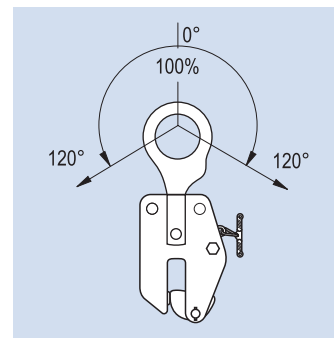
with rigid lifting shackle

For vertical lifting and 180° turning of sheets, steel plates, girders and structural steel elements.

The "lock closed" feature guarantees the clamp to firmly grip the load even under unintentional release.

The MPS model series replace the former models G1, G3 and BDS with extended operating features.

Also available for super-hard loads up to 450 HB and with stainless steel gripping elements (see Page 77).



SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E	F	G	H	J		
1000	0-25	65	290	60	125	65	45	12	4.4	166770
1000	25-50	65	290	60	150	65	45	12	4.2	166784
2000	0-30	80	370	70	165	72	55	15	7.5	167539
2000	30-60	80	370	70	195	72	55	15	8.0	167541
3000	5-35	105	490	90	195	86	65	20	12.0	161487
3000	35-70	105	490	90	230	86	65	20	13.8	161488
5000	5-50	115	515	90	240	95	85	20	18.6	162874
5000	50-100	115	515	90	290	95	85	20	19.0	168272

PFEIFER-RENFROE clamp model MPS 2

with rigid lifting shackle

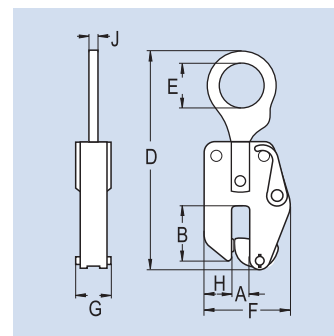
For vertical lifting and 180° turning of sheets, steel plates, girders and structural steel elements.

With "lock closed" and "lock open" feature enabling the clamp to firmly grip the load even under unintentional release. In "lock open" position the clamp can be advanced to the load, attached and locked.

Once the load has been set down and secured, the clamp – locked in the open position – can be lifted off by the crane.

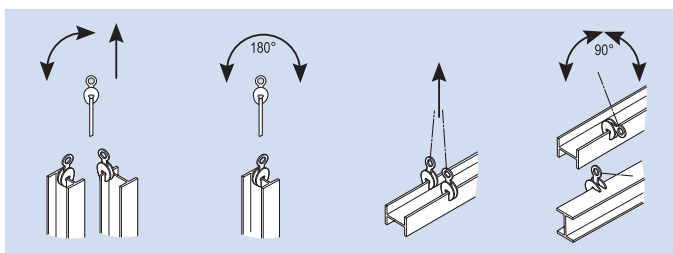
The MPS model series replace the former models G1, G3 and BDS with extended operating features.

Also available for super-hard loads up to 450 HB and with stainless steel gripping elements (see Page 77).



SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E	F	G	H	J		
1000	0-25	65	290	60	125	65	45	12	4.5	166796
1000	25-50	65	290	60	150	65	45	12	4.2	166798
2000	0-30	80	370	70	165	72	55	15	7.5	167564
2000	30-60	80	370	70	195	72	55	15	8.0	167567
3000	5-35	105	490	90	195	86	65	20	13.3	161505
3000	35-70	105	490	90	230	86	65	20	12.5	161504
5000	5-50	115	515	90	240	95	85	20	18.0	168284
5000	50-100	115	515	90	290	95	85	20	19.0	168287

For the main use of the MPS model series please see the attached drawing and the chart on page 87.



PFEIFER-RENFROE clamp model MPC 1

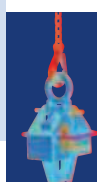
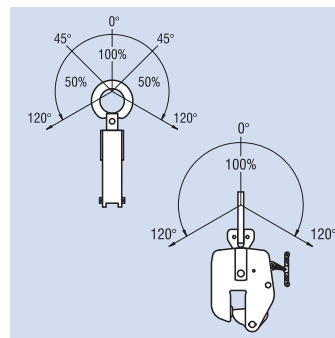
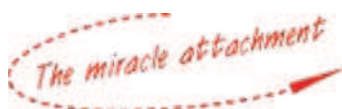
with pivoting lifting shackle

For vertical lifting and 180° turning of, and lateral attachment to sheets, steel plates, girders and structural steel elements.

The "lock closed" feature guarantees the clamp to firmly grip the load even under unintentional release.

The MPC series replaces the following clamp models: CS and CA 2 with extended operating features.

Also available for super-hard loads up to 450 HB and with stainless steel gripping elements (see Page 77).



SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E	F	G	H	J		
1000	0-25	65	290	60	125	65	45	12	4.9	166788
1000	25-50	65	290	60	150	65	45	12	4.2	166790
2000	0-30	80	370	70	165	72	55	15	7.5	167546
2000	30-60	80	370	70	195	72	55	15	8.0	167552
3000	5-35	105	490	90	195	86	65	20	12.0	161490
3000	35-70	105	490	90	230	86	65	20	12.5	161491
5000	5-50	115	515	90	240	95	85	20	18.0	163216
5000	50-100	115	515	90	290	95	85	20	19.0	168275

PFEIFER-RENFROE clamp model MPC 2

with pivoting lifting shackle

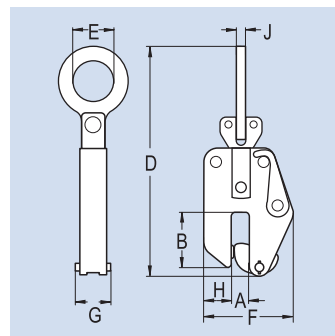
For vertical lifting and 180° turning of, and lateral attachment to sheets, steel plates, girders and structural steel elements.

With "lock closed" and "lock open" feature enabling the clamp to firmly grip the load even under unintentional release. In "lock open" position the clamp can be advanced to the load, attached and locked.

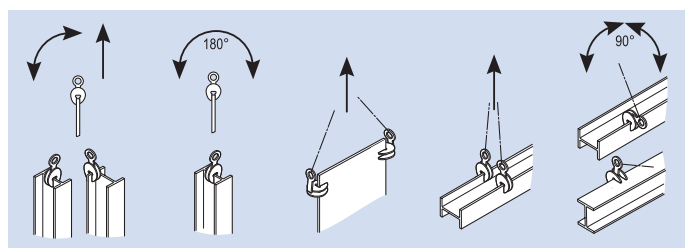
Once the load has been set down and secured, the clamp – locked in the open position – can be lifted off by the crane.

The MPC series replaces the following clamp models: CS and CA 2 with extended operating features.

Also available for super-hard loads up to 450 HB and with stainless steel gripping elements (see Page 77).



SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E	F	G	H	J		
1000	0-25	65	290	60	125	65	45	12	5.0	166800
1000	25-50	65	290	60	150	65	45	12	4.8	166802
2000	0-30	80	370	70	165	72	55	15	8.4	167572
2000	30-60	80	370	70	195	72	55	15	8.0	167575
3000	5-35	105	490	90	195	86	65	20	12.0	161512
3000	35-70	105	490	90	230	86	65	20	13.9	161510
5000	5-50	115	515	90	240	95	85	20	22.6	168288
5000	50-100	115	515	90	290	95	85	20	19.0	168289



For main use of the MPC model series please see the attached drawing and the chart on page 87.

PFEIFER-RENFROE clamp model G2

for heavy-duty lifting

Extremely sturdy and capable for lifts up to 100 tonnes.

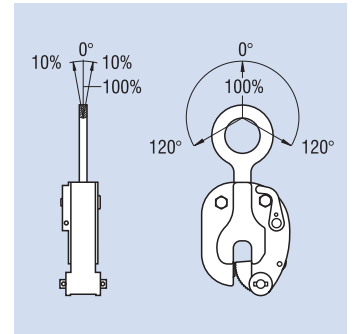
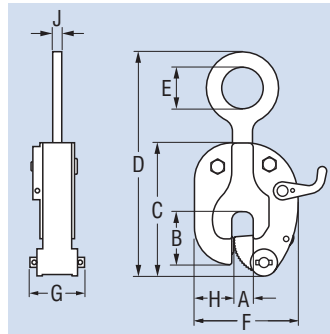
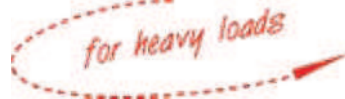
Suitable for the vertical lifting and 90° turning of sheets, steel plates, girders and structural steel elements.

The lifting clamp incorporates the "look open" and "lock closed" feature. After relieving and securing the load, the clamp can be lifted off with a crane.

Can be released remote-controlled through a "tag-line".

The model is equipped with rollers from 10 tonnes lifting capacity and above. This is to assist in moving the clamp on the ground.

For wider loads we recommend the use of clamps in pairs attached to a double-leg sling or to a spreader beam.



SWL kg	Gripping range A mm	Dimensions in mm								Weight approx. kg	Reference no.
		B	C	D	E	F	G	H	J		
4000	0-25	90	254	432	92	215	97	70	19	14.0	121381
4000	19-38	90	254	432	92	230	97	70	19	14.3	121391
4000	32-51	90	254	432	92	241	97	70	19	15.0	121392
4000	44-64	90	254	432	92	254	97	70	19	16.0	121393
6300	0-32	117	292	495	92	243	121	87	19	18.3	121394
6300	25-51	117	292	495	92	262	121	87	19	19.0	121406
6300	44-70	117	292	495	92	281	121	87	19	21.0	121407
6300	64-89	117	292	495	92	300	121	87	19	24.0	121409
6300	83-108	117	292	495	92	320	121	87	19	27.0	121410
10000	0-38	114	354	572	95	260	137	84	25	32.0	121411
10000	25-51	114	354	572	95	273	137	84	25	33.0	121423
10000	51-76	114	354	572	95	298	137	84	25	35.0	121424
10000	70-102	114	354	572	95	324	137	84	25	37.0	121425
10000	95-127	114	354	572	95	350	137	84	25	35.3	121426
12000	0-64	166	457	711	98	345	168	98	45	63.0	121427
12000	51-102	166	457	711	98	383	168	98	45	65.0	121439
12000	102-152	166	457	711	98	433	168	98	45	68.0	121440
12000	140-191	166	457	711	98	472	168	98	45	73.0	121441
20000	13-76	188	578	900	125	432	216	127	64	120.0	121442
20000	76-127	188	578	900	125	483	216	127	64	133.0	121454
20000	127-178	188	578	900	125	534	216	127	64	147.0	121455
20000	178-229	188	578	900	125	585	216	127	64	159.0	121456
50000	13-76	216	648	991	125	559	229	168	64	214.0	218058
100000	13-76	343	864	1118	125	660	318	267	102	613.0	218059

PFEIFER-RENFROE clamp model CA

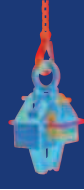
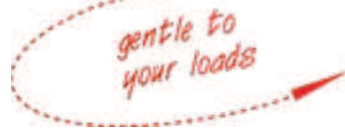
with pivoting lifting shackle and clever pressure distribution

The large cam jaw enables wide pressure distribution and thus guarantees careful handling of your sensitive goods.

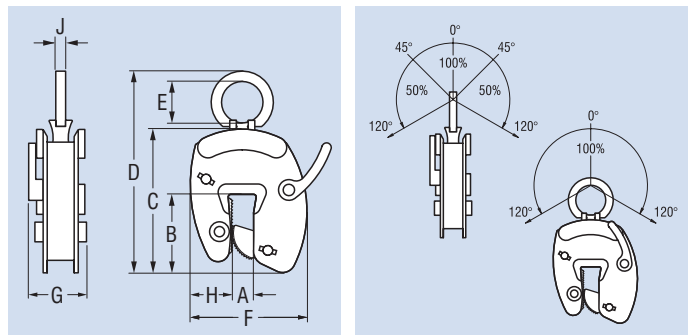
For vertical lifting and 180° turning of sheets, steel plates, girders and structural steel elements. The pivoting shackle enables easy handling due to unmatched attachment angles. Even lateral attachment to the load is allowed.

The lifting clamp incorporates the “look open” and “lock closed” feature. After relieving and securing the load, the clamp can be lifted off with a crane. Can be released remote-controlled through a “tag-line”.

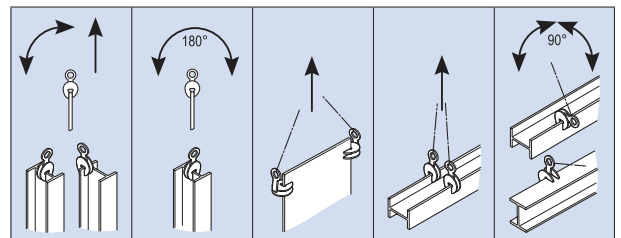
For wider loads we recommend the use of clamps in pairs attached to a double-leg sling or to a spreader beam.



Lifting clamps and grabs



SWL kg	Gripping range A mm	Dimensions in mm								Weight approx. kg	Reference no.
		B	C	D	E	F	G	H	J		
3200	3-35	130	280	415	80	215	110	80	19	13	120813
3200	35-70	130	280	415	80	245	110	68	19	14	120863
5000	5-45	145	350	510	90	300	120	100	19	25	120868
5000	45-85	145	350	510	90	335	120	80	19	27	120907
8000	10-65	205	430	610	90	350	140	120	32	41	120915
8000	65-120	205	430	610	90	400	140	105	32	43	120955
12000	10-80	185	495	710	100	450	180	150	32	70	120959
12000	80-150	185	495	710	100	480	180	120	32	73	120999



NM, SP	●				
SG	●	●			
G2	●			●	●
CA	●	●	●	●	●

For the main use of the clamp models on pages 80 to 82 please see the attached drawing.

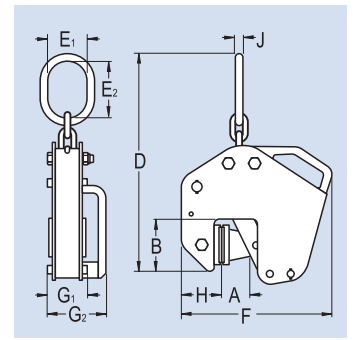
PFEIFER lifting clamp model SG



Lifting clamp with large, coated gripping pads for materials with sensitive surfaces.

Suitable for the vertical lifting and 180° turning of sheets, steel plates, girders and structural steel elements. Also suitable for materials with sensitive surfaces (stainless steel, plastic and particle board etc. – not for polished surfaces!). The lifting clamp is operated by slewing the handle, no adjustment is necessary. The load surfaces must be clean, dry and free of lubricating grease.

For wider loads we recommend the use of clamps in pairs attached to a double-leg sling or to a spreader beam.



SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E1/E2	F	G1/G2	H	J		
1000	0-50	100	625	75/110	270	80/115	75	13	11.5	175860

PFEIFER-RENFROE clamp model NM

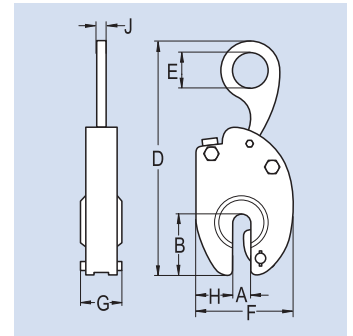
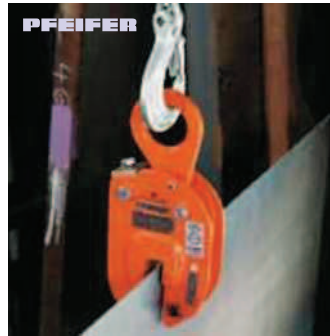


Lifting clamp with large, smooth gripping pads for metals which have sensitive surfaces or which are hard.

Suitable for the vertical lifting and 90° turning of sheets, steel plates, girders and structural steel elements.

The jaw can be pre-adjusted to any gripping range using an adjusting screw. After attachment, the adjusting screw must be tightened. The load surfaces must be clean, dry and free of lubrication grease.

For wider loads we recommend the use of clamps in pairs attached to a double-leg sling or to a spreader beam.



SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E	F	G	H	J		
1000	0-19	116	346	60	150	81	60	16	8.0	121550
1000	19-32	116	346	60	162	81	60	16	9.0	121563
2000	0-25	131	406	79	171	95	73	16	10.3	121567
2000	19-38	131	406	79	184	95	73	16	11.0	121579
4000	6-40	137	470	75	197	114	75	25	20.5	121584
4000	40-72	137	470	75	235	114	75	25	23.0	121596
4000	76-108	137	470	75	266	114	75	25	25.0	121598

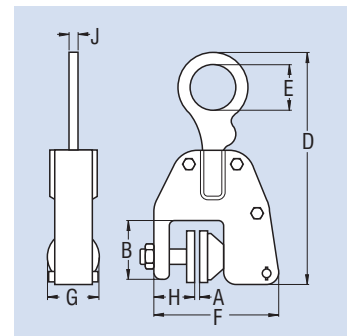
PFEIFER lifting clamp model SP



Vertical turning lifting clamp with safety device, lock-closed feature.

Suitable for the lifting and 90° turning of materials with sensitive surfaces (stainless steel, plastic and particle boards etc. – not for polished surfaces!). The specially coated gripping pads can be continuously adjusted with an adjusting screw.

For wider loads we recommend the use of clamps in pairs attached to a double-leg sling or to a spreader beam.



SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E	F	G	H	J		
300	0-30	75	290	60	200	66	70	13	4.7	121366
300	6-45	75	290	60	200	66	70	13	4.5	121367

PFEIFER-RENFROE clamp model CS

with pivoting lifting shackle

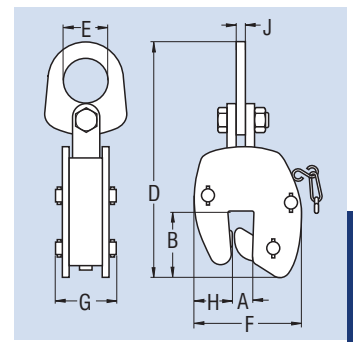
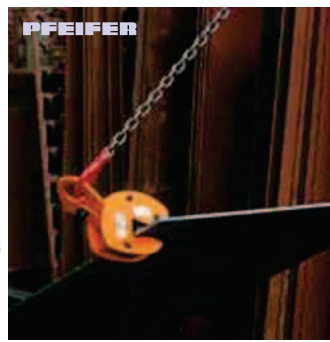
Lifting clamp with universal joint, safety device, lock-closed feature. The lock-closed feature also holds the clamp tight when the load is unintentionally released.

Suitable for the vertical lifting and 180° turning of sheets and girders.

The pivoting shackle enables easy handling due to unmatched attachment angles. Even lateral attachment to the load is allowed.



the allround clamp



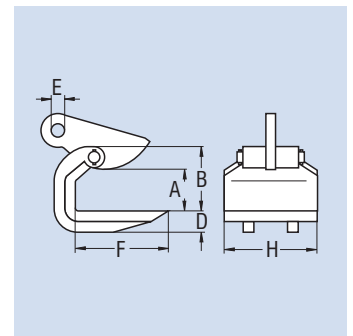
SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E	F	G	H	J		
500	0-15	50	220	43	100	56	32	9.5	2.2	121047
500	15-30	50	220	43	115	56	32	9.5	1.5	121053

PFEIFER-RENFROE clamp model H

Horizontal lifting clamp for handling inherently stacked bundles of sheets and steel plates.

The lifting clamps are fastened to suitable slings and attached at three or more points on the load being handled.

With long loads, we recommend using a spreader beam.



SWL kg	Gripping range A mm	Dimensions in mm					Weight approx. kg	Reference no.
		B	D	E	F	H		
250	0-25	70	13	25	90	76	2.0	121666
500	0-51	108	13	36	143	178	6.5	121669
750	0-51	111	16	36	143	178	8.7	121672
1500	0-51	111	19	36	143	178	10.0	121675
3000	0-51	111	41	36	143	178	11.0	121678
4000	0-65	145	55	36	190	178	19.0	121681

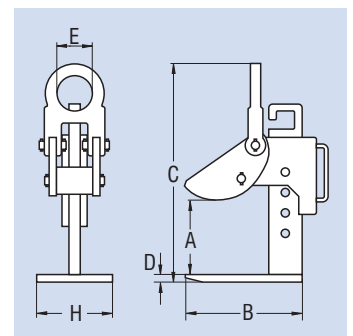
PFEIFER-RENFROE clamp model WHS

High-performance horizontal lifting clamp for transporting dimensionally stable sheets and sheet stacks.

Its particular advantage: using a locking pin, the gripping range can be quickly changed from 0 to a maximum of 406 mm.

Integrated springs hold the gripping cams open and facilitate attachment.

The lifting clamps are fastened to suitable slings and attached at three or more points on the load being handled.



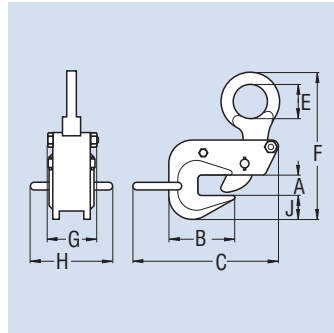
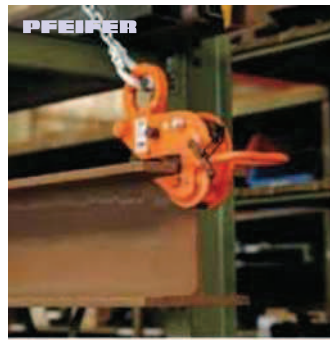
With long loads, we recommend using a spreader beam.

SWL kg	Gripping range A mm	Dimensions in mm					Weight approx. kg	Reference no.
		B	C	D	E	H		
500	0-152	275	360	16	89	213	20	121853
500	0-305	330	587	16	89	213	28	121865
500	0-406	330	691	16	89	213	29	121866
1500	0-152	275	364	19	89	213	29	121867
1500	0-305	330	591	19	89	213	40	121879
1500	0-406	330	694	19	89	213	46	121880

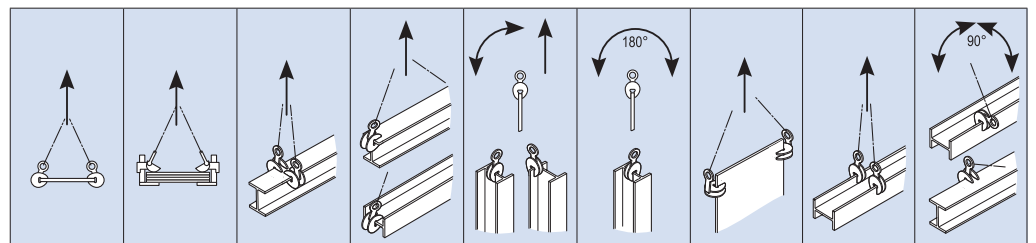
PFEIFER-RENFROE clamp model M

Horizontal lifting clamp for dimensionally stable sheets, sheet stacks and profiles. The wide, split lower jaw is particularly suitable for gripping steel girders, regardless of whether from the side or the end. With safety-latch system; can be locked closed.

Used for handling girders in pairs, for handling sheets and bundles of sheets, slings with three clamps or more.



SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	C	E	F	G	H	J		
500	0-25	59	180	57	225	70	70	37	3.38	121457
500	19-38	59	180	57	238	70	70	37	4.00	121468
1000	0-25	63	292	57	241	70	117	48	5.00	121469
1000	19-38	63	292	57	254	70	117	48	5.00	121481
1000	32-51	63	292	57	267	70	117	48	6.00	121482
2000	0-32	81	333	78	310	98	138	51	9.70	121483
2000	25-51	81	333	78	329	98	138	51	10.00	121495
2000	44-70	81	333	78	348	98	138	51	11.00	121496
4000	0-38	97	378	92	380	111	145	70	16.00	121497
4000	32-64	97	378	92	406	111	145	70	17.00	121509
8000	0-51	125	520	102	510	133	150	102	44.00	121511
8000	44-89	125	520	102	548	133	150	102	45.00	121522
8000	83-127	125	520	102	586	133	150	102	50.00	121523



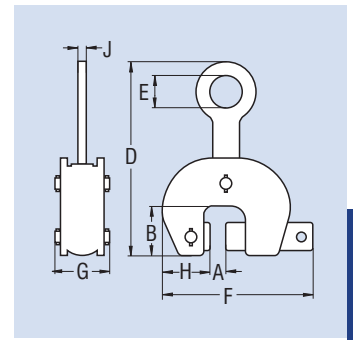
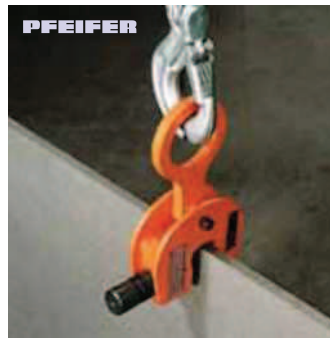
The main areas of application of the RENFROE products illustrated on pages 83 and 84 can be seen in the adjacent pictogram table and in the table on page 87.

M	●	●	●	●					
H	●	●							
WHS	●	●							
CS					●	●	●	●	●

PFEIFER-RENFROE clamp model SCP

Screw clamp for vertical lifting and 180° turning of metal items of all kinds.
Max. surface hardness of the load 300 HB.
Equipped with a pivoting cam jaw.
Particularly suited for use with rolling and edging machines.

For wider loads we recommend the use of clamps in pairs attached to a double-leg sling or to a spreader beam.

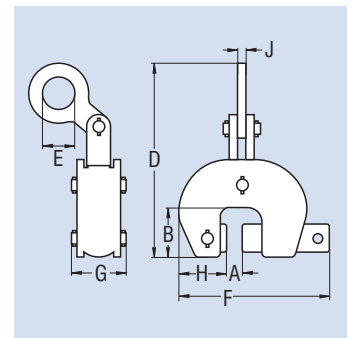


SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E	F	G	H	J		
500	0-19	60	229	60	168	60	48	13	3.5	121147
1500	0-32	73	268	67	214	86	60	16	6.5	121156
3000	0-51	79	305	60	275	104	71	19	8.5	121165
6000	0-64	110	394	76	341	137	87	25	20.0	121174
10000	0-76	140	489	83	416	171	112	25	42.0	121183
15000	0-102	184	581	95	552	210	141	32	95.0	135082

PFEIFER-RENFROE clamp model SCPA

Screw clamp with pivoting suspension eye, for vertical lifting and 180° turning of metal items of all kinds.
Max. surface hardness of the load 300 HB.
Equipped with a pivoting cam jaw.
Particularly suited for use with rolling and edging machines, and for lateral attachment to the load.

For wider loads we recommend the use of clamps in pairs attached to a double-leg sling or to a spreader beam.

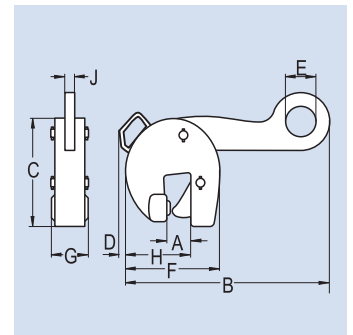


SWL kg	Gripping range A mm	Dimensions in mm							Weight approx. kg	Reference no.
		B	D	E	F	G	H	J		
500	0-19	60	284	60	168	60	48	13	3.5	121185
1500	0-32	73	346	67	214	86	60	16	6.5	121194
3000	0-51	79	354	60	275	104	71	19	8.5	121203
6000	0-64	110	484	76	341	137	87	25	25.3	121212
10000	0-76	140	680	83	416	171	112	25	42.0	121221
15000	0-102	184	581	95	552	210	141	32	95.0	135083

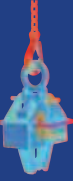
PFEIFER-RENFROE clamp model AST-S

Lifting/turning clamp with serrated gripping cams and safety device, lock-closed feature. Holds the girder almost horizontally in both directions. It facilitates the turning process when the lifting shackle is arranged outside the girder.

For wider loads we recommend the use of clamps in pairs attached to a double-leg sling or to a spreader beam.



SWL kg	Gripping range A mm	Dimensions in mm								Weight approx. kg	Reference no.
		B	C	D	E	F	G	H	J		
500	0-19	281	170	26	44	152	45	90	13	4	190904
1500	0-19	337	216	35	64	178	57	100	16	9	190920
3000	0-38	527	318	43	95	279	85	170	19	24	190923



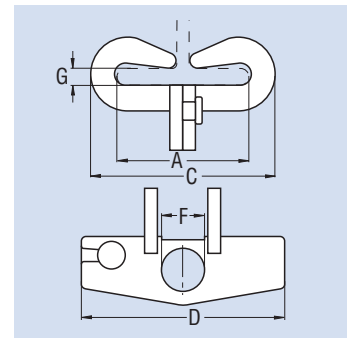
Lifting clamps and grabs

PFEIFER-RENFROE clamp model B1

Two-part clamp with locking wedge for I-beams which can be attached anywhere on the beam.

The two halves of the clamp are locked with a simple pin lock and then secured with a locking screw. The clamp is locked in place with a locking wedge.

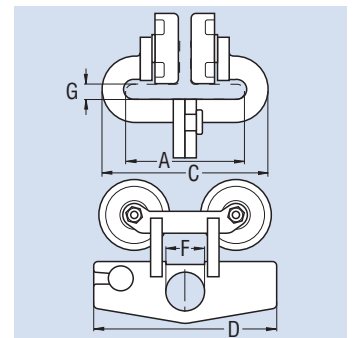
To be used as an assembly clamp only for suspension for all types of hoists. Approved only for mounting on a ceiling girder.



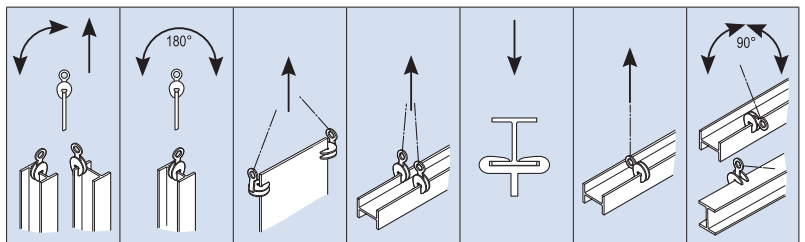
SWL kg	Gripping range A mm	Dimensions in mm				Weight approx. kg	Reference no.
		C	D	F	G		
1000	38-102	172	222	38	17	4.0	121821
1000	51-152	242	222	38	28	5.0	121822
1000	102-305	480	222	38	40	9.0	121823
3000	76-152	258	286	58	28	9.5	121824
3000	102-305	474	286	58	40	17.0	121825

PFEIFER-RENFROE clamp model B2

The beam-trolley clamp – can be moved along the bottom flange like a travelling hoist. Design, operation and use as for Model B1.



SWL kg	Gripping range A mm	Dimensions in mm				Weight approx. kg	Reference no.
		C	D	F	G		
1000	38-102	184	222	38	19	6.7	121837
1000	76-152	267	222	38	27	12.0	121839
1000	102-305	457	222	38	44	15.0	121841
3000	76-152	311	286	57	29	29.0	121842
3000	102-305	483	286	57	46	35.0	121844



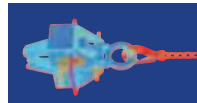
B1, B2					•		
AST-S						•	•
SCP	•	•		•			•
SCPA	•	•	•	•			•

The main areas of application of the clamp models illustrated on pages 85 and 86 can be seen in the adjacent pictogram table.

Application guide to lifting clamp models

	vertical lifting 90° turning	vertical lifting 180° turning	lateral attachment, vertical lifting	horizontal transport, dimensionally stable sheet metal	horizontal transport, dimensionally stable sheet metal, sheet stacks	horizontal transport of standing girders	horizontal transport of lateral attached girders	horizontal transport of lying girders vertical attachment	horizontal transport of lying girders	girders 90° turning	fixed suspension eye overhead girders
G1/G2/G3/BDS	•							•		•	
CA/CS/CA2, MPC1, MPC2	•	•	•					•		•	
MPS1, MPS2, ES-1, EC-1	•	•						•		•	
SCP	•	•						•		•	
SCPA	•	•	•					•		•	
H				•	•						
WHS				•	•						
M				•	•	•	•				
ASTL, ASTS									•	•	
NM, SP	•										
SG	•	•									
B1, B2											•

Please note that the clamp models G1, G3, BDS, CA2, have been replaced by model series MPS/MPC.



PFEIFER-RENFROE Accessories and service

PFEIFER-RENFROE Spare-part Kit

We facilitate the replacement of wear parts. We offer a spare-part kit for every clamp model in each capacity. It contains the correct gripping segments and associated fixing and fitting components.

Buying this kit will earn you 25% savings as opposed to buying single spare parts.

The complete kit is available for the models G1, G3, BDS, CS, CA2 and G2, CA, SCP, SCPA, H, WHS, M, AST, ASTL, NM, SP, B1 and B2.



Our PFEIFER-RENFROE poster gives information to workers about operating and correct use of our complete range of lifting clamps.

Inspection Service and Training Centre

You are responsible for the required inspection of your PFEIFER-RENFROE clamps by law. Our inspection service is able to support you in this matter. We check, repair and certificate locally (within Germany only). Your employees can add to their technical knowledge leading to increased awareness of safety in your company.



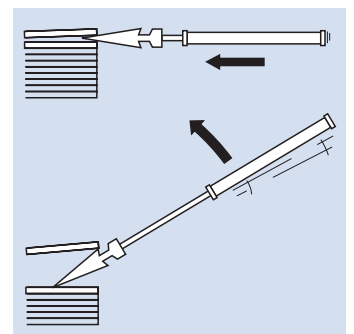
PFEIFER-RENFROE pry bar

With this amazingly simple tool you can prepare plates in stacks easily, quickly and carefully for clamp attachment.



PFEIFER

Lenght extracted	mm	1320
Weight	approx. kg	6.2
Reference no.		121977



Rail grabs

Automatic rail grab with BAU/TB approval

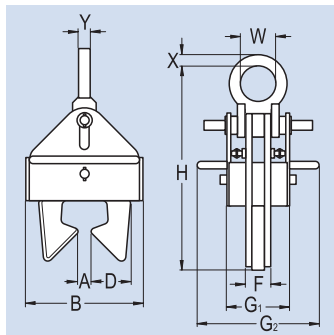
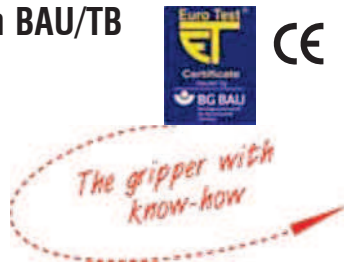
For lifting and pulling rails lengthways and crossways for rail sizes S49, S54, S60s, UIC60.

Very solid, practical design with low dead weight.

After placing the grab on the load, it locks automatically (in compliance with TBG requirements).

We warrant the rail grab for three years (except for spare parts).

Always attach the grab above the centre of gravity of the load.
With long loads, we recommend using two or more grabs.



SWL kg	Dimensions in mm												Weight approx. kg	Reference no.
	A min.	A max.	B	D	F	G ₁	G ₂	H min.	H max.	W	X	Y		
2000	10	80	200	85	42	106	210	270	350	60	20	20	12	178196
4000	10	80	200	90	60	127	230	285	365	65	23	25	17	185063

Rail grab

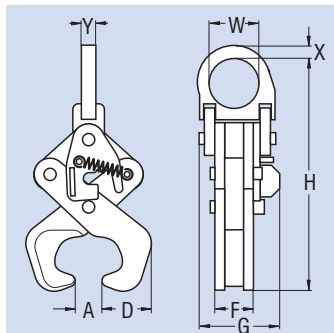
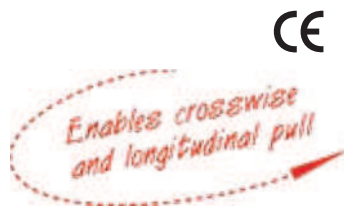
For lifting and pulling rails lengthways and crossways for rail sizes S49, S54, S60s, UIC60.

Very solid, practical design with low dead weight.

Safety device with double function: For holding open and locking under load in order to hold rails securely, even when they are overturning, i.e. the grab cannot open accidentally.

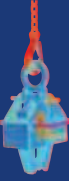
We warrant the rail grab for three years (except for spare parts).

Always attach the grab above the centre of gravity of the load.
With long loads, we recommend using two or more grabs.



SWL kg	Dimensions in mm										Weight approx. kg	Reference no.
	A min.	A max.	D	F	G	H min.	H max.	W	X	Y		
2000	15	85	50	51	105	242	302	60	18	19	7.8	114052
4000	10	95	80	76	150	320	410	76	31	25	22.0	114062

Special gripping arms for handling other rail forms are available.



Lifting clamps and grabs

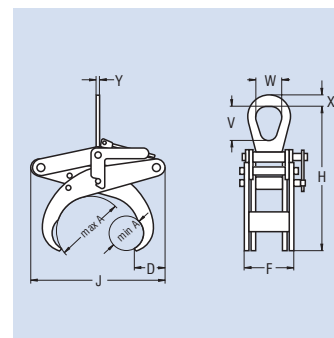
Section grabs

Rod and bar grab



For horizontal transport of round materials of all kinds.
 Heavy-duty double-scissor design with safety latch.
 Very small external footprint thanks to a new internal contour whose 4-point clamping prevents the load from seesawing.
 Self-acting latched hold-open lever, locking spring stirrup with handle for securing the grab against opening accidentally when the load on the grab is released.
 For design-related reasons, grabs with part no. 114040 and 114049 are supplied without safety device.

Always attach the grab above the centre of gravity of the load.
With long loads, we recommend using two or more grabs.



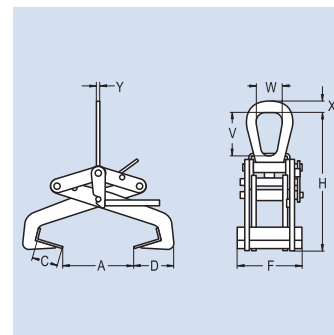
SWL kg	Dimensions in mm											Weight approx. kg	Reference no.
	A min.	A max.	D	F	H min.	H max.	J	V	W	X	Y		
500	50	100	42	140	300	410	220	100	77	31	10	8.0	114040
500	100	200	65	140	430	630	400	100	77	31	10	17.5	114041
500	200	400	95	150	730	1100	740	122	80	40	10	39.0	114043
1000	100	200	65	150	430	630	400	100	77	31	10	22.0	114045
1000	200	400	95	160	730	1110	740	122	80	40	10	48.0	114046
2000	150	300	110	160	610	895	620	122	80	40	15	56.0	114048
2000	300	600	170	160	1030	1590	1130	122	80	40	15	115.0	114049

Section grab



For handling all kinds of double-flange sections and flat materials.
 Mechanically acting for positive interlocked load handling.
 Robust, double-scissor design with safety device and wide load-holding surfaces.
 Self-acting, latched hold-open lever.
 Locking spring stirrup with handle for securing the grab against opening accidentally when loaded.

Always attach the grab above the centre of gravity of the load.
With long loads, we recommend using two or more grabs.



SWL kg	Dimensions in mm											Weight approx. kg	Reference no.
	A min.	A max.	C	D	F	H min.	H max.	V	W	X	Y		
500	0	180	74	110	180	370	580	120	80	32	10	13	114010
1000	0	260	107	155	200	420	770	120	80	32	10	25	114011
2000	0	300	120	190	250	470	880	120	80	40	12	55	114012