



DAWSON
CONSTRUCTION PLANT LTD

PRODUCT SUMMARY

INNOVATIVE PILING EQUIPMENT



Est. 1974-2014



EURO GROUND RELEASE SHACKLES

This robust pile lifting shackle was contractor designed and developed over many years of site use and abuse. The use of these shackles compliments the "Feet on the Ground" approach to piling. When used in conjunction with the Sheet Pile Threader, there is no need for site operatives to go above the safety of top frame level for interlocking sheet piles or releasing the lifting shackles. The shackles are suitable for lifting all steel piles up to 28 mm thick and within the safe working load of the shackle. The shackle is stiffened to resist spreading of the forks when lifting at 90° to the axis of the pile. (See "Safety Check List"). When lifting sheet piles in pairs or individual piles weighing more than the Safe Working Load of the shackle, it is necessary to use multiple shackles in order to keep within the safe working load. Pairs of shackles can be supplied mounted on a two legged steel wire rope sling. The advantage being that the standard pair of shackles with lifting sling can be fitted to any pair of Larssen 'U' piles, Frodingham 'Z' piles, pipe or box piles. No additional parts or change of components is necessary. The ring at the top of the sling can be hooked directly onto a standard crane hook block, 'D' shackle or fork anchor. Shackles can also be fitted onto a solid steel cross head according to customers requirements.

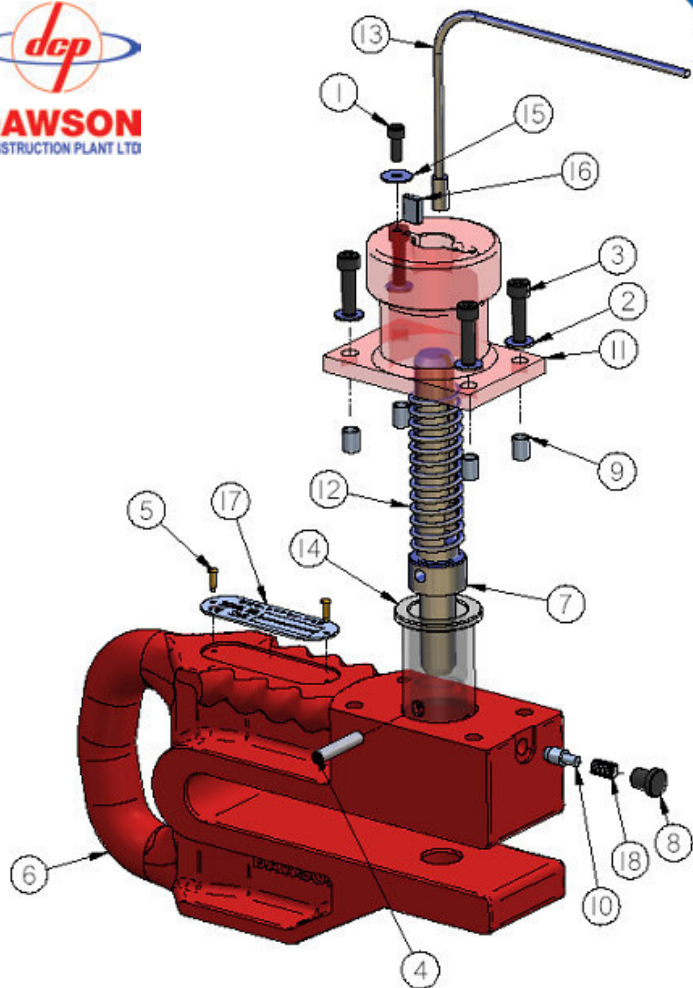
FEATURES

- Robust High Strength cast steel body. High alloy steel plunger
- Plunger mechanism concealed for maximum protection
- Plunger mechanism easily detachable for maintenance
- Heavy web stiffening to withstand side left (i.e. 90° to the axis) imposed when lifting piles from a stack
(See "Safety Check List" for correct working practice)

Model No.	Description
5983	4T EGRS 150 Throat General Assembly
5984	7.5T EGRS 150 Throat General Assembly
5985	10T EGRS 150 Throat General Assembly
5986	7.5T EGRS 250 Throat General Assembly
5987	10T EGRS 250 Throat General Assembly
GRS-017 ISSA	Optional Remote Release Detent Kit









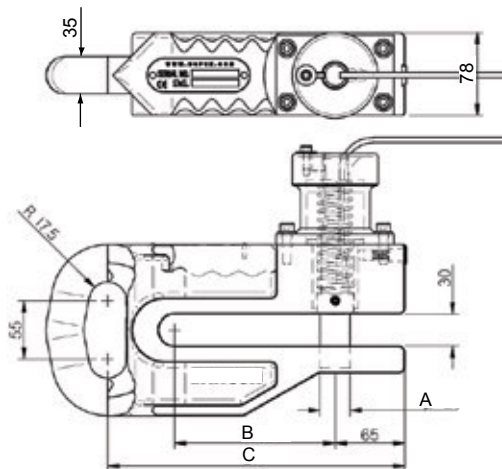
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PARTS LIST

Euro Ground Release Shackle						
Item No.	Quantity	Part Name	5983	5984	5985	5986 5987
1	1	Socket Head Cap Screw	0M06.016.02			
2	4	Socket Head Cap Screw	0M08-030-02			
3	4	Washer	0M08.000.20			
4	1	Coiled Spring Pin	0M08.040.36			
5	2	No6 x 1/2" Rivet	1-204-00-01			
6	1	EGRS Throat	5903	5904	5905	5906 5907
7	1	Plunger	5908	5909	5913	5909 5913
8	1	M12 X 1.5 Plug	5915			
9	4	Dowel Bushing	5916			
10	1	Detent Pin	5919			
11	1	Tube Assembly	5922A-B			
12	1	Compression Spring	5926			
13	1	Safety Pull Wire Assy	5930A			
14	1	Sleeve	5931			
15	1	M6 x Ø19 Washer	5936			
16	1	Guide Key	5937			
17	1	Shackle ID Plate	5938			
18	1	Compression Spring	6935			



GROUND RELEASE SHACKLE DIMENSIONS

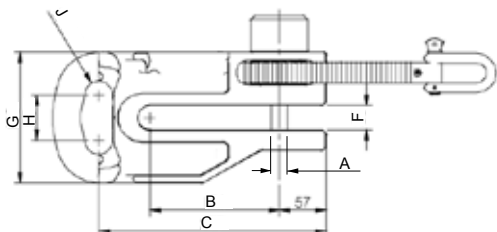
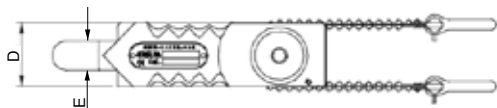


	Model No.				
	5983	5984	5985	5986	5987
WEIGHT kg	17.5	17.5	17.5	21.5	21.5
A	Ø22	Ø28	Ø35	Ø28	Ø35
B	150	150	150	250	250
C	277	277	277	377	377

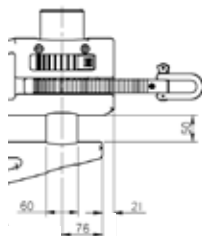


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RATCHET RELEASE SHACKLE DIMENSIONS



3.5T- 10T ERRS 150/250/300 THROAT



40T ERRS 250 THROAT

	Model No.										
	681	682	683	684	686	687	688	689	692A	693A	6962A
WEIGHT	15 kg	19 kg	15 kg	19 kg	19 kg	15 kg	19 kg	15 kg	22 kg	22 kg	67 kg
A	Ø20	Ø20	Ø24	Ø24	Ø27	Ø35	Ø35	Ø27	Ø27	Ø35	Ø60
B	158	258	158	258	258	158	258	158	303	303	239
C	277	377	277	377	377	277	377	277	360	360	457
D	78	78	78	78	78	78	78	78	80	80	125
E	35	35	35	35	35	35	35	35	40	40	60
F	30	30	30	30	30	30	30	30	32	32	50
G	160	160	160	160	160	160	160	160	202	202	280
H	55	55	55	55	55	55	55	55	60	60	80
J	R17.5	R17.5	R17.5	R17.5	R17.5	R17.5	R17.5	R17.5	R20	R20	R40





EURO RATCHET RELEASE SHACKLES

This robust lifting shackle was contractor designed and developed over many years of site use and abuse. The use of these shackles compliments the "Feet on the Ground" approach to steel erection and pile installation. There is no need for site operatives to go into a dangerous position to release the lifting attachment.

The shackle is stiffened to resist spreading of the forks when lifting at 90° to the axis of the lift (see "Safety Check List"). The Ratchet Shackle is designed for lifting steel through standard bolt holes or other units of lift having a suitable hole through which the pin can be conveniently and safely engaged.

FEATURES

- Robust High Strength cast steel body
 - Pin mechanism concealed for maximum protection
 - Pin mechanism easily detachable for maintenance
 - Can be used for lifting columns, pipe piles, sheet piles & steel fabrications
 - Heavy web stiffening to withstand side lift (i.e. 90° to the axis) imposed when lifting from the horizontal.
- (See "Safety Check List for correct working practice)

Model No.	Description
681	3.5T ERRS 150 Throat General Assembly
682	3.5T ERRS 250 Throat General Assembly
683	5T ERRS 150 Throat General Assembly
684	5T ERRS 250 Throat General Assembly
686	7.5T ERRS 250 Throat General Assembly
687	10T ERRS 150 Throat General Assembly
688	10T ERRS 250 Throat General Assembly
689	7.5T ERRS 150 Throat General Assembly
692A	7.5T ERRS 300 Throat General Assembly
693A	10T ERRS 300 Throat General Assembly
6962A	40T ERRS 250 Throat General Assembly





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PARTS LIST

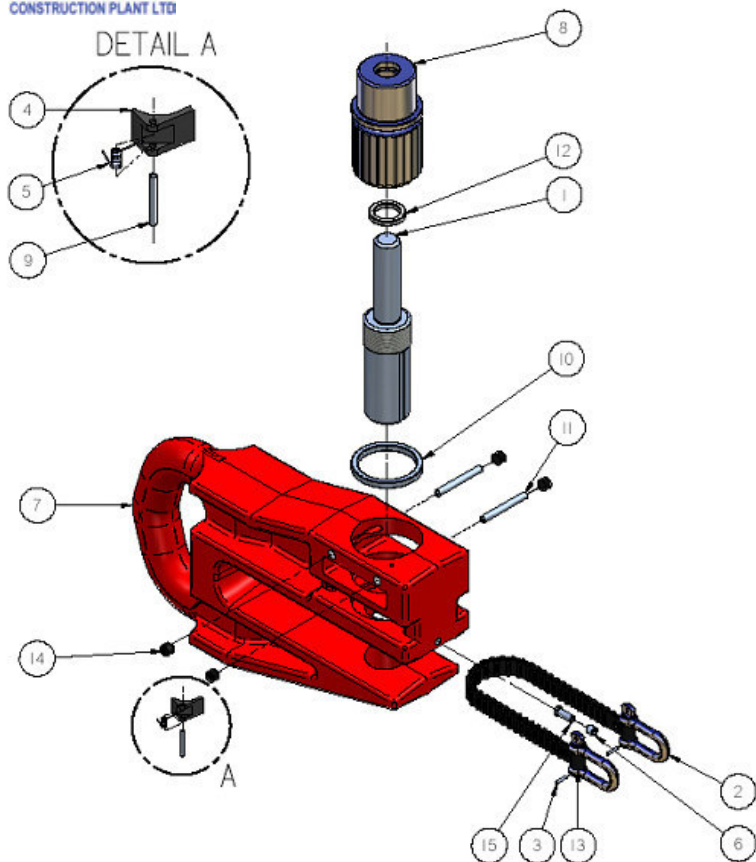
Euro Ratchet Release Shackle												
Item No.	Qty	Part Name	681	682	683	684	686	687	688	689	692A	693A
1	1	Socket Set Screw M6 x 6	0M06.006.05									
2	1	Socket Set Screw M12 x 12	0M12-012-05									
3	2	No.6 x 1/2 " Rivet	1-204-00-01									
4	1	Shackle ID Plate	5938									
5	1	Ratchet Collar Machined	604					642	642	604	604	642
6	1	Release Nut	605					643	643	606	606	643
7	1	Nylon Ring	606	606	606	606	606	644	644	606	606	644
8	1	Nylon Buffer / Rubber Stop	607 / 607R									
9	1	Ratchet Belt Assy	608A									
10	2	Small D Shackle	609									
11	1	O-Ring	610									
12	2	Spring Pin	0M04.020.22									
13	4	Dog P't Grub Screw	0M06.008.16									
14	1	Threaded Pin	621	621	671	671	601	641	641	601	601	641
15	1	Pivot Pin	626									
16	1	Pawl	627									
17	1	Pawl Spring	628									
18	1	ERRS Main Body	661/A	666/A	662/A	667/A	668/A	664/A	669/A	663/A	678	679
19	1	Guide Peg	672									





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DETAIL A





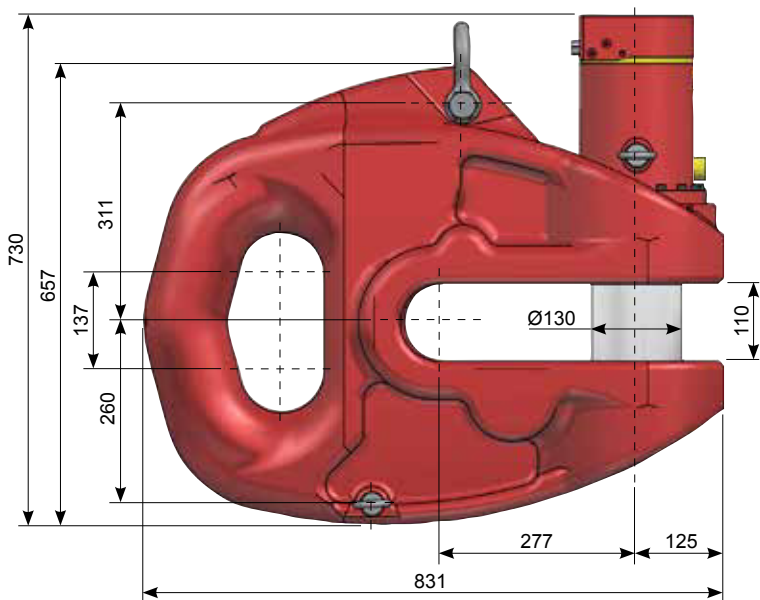
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PARTS LIST

40T Ratchet Release Shackle			
Item No.	Quantity	Part Name	
1	1	Threaded Pin	6962A
2	2	Small D Shackle	6912
3	2	Spring Pin	609
4	1	Pawl	0M04.020.22
5	1	Pawl Spring	627
6	1	M12x12 Flat Nose Grub Screw	628
7	1	Main Body	0M12.012.05
8	1	Release Nut	6902/A
9	1	Pivot Pin	6920
10	1	Bearing Washer	6923
11	2	Location Bar	6930
12	1	Nylon / Rubber Buffer Stop	6931
13	1	Ratchet Belt Assembly	6932 / 6932R
14	4	Plain Cup Point Set Screw	6936A
15	1	Guide Pin	0M16.016.05
			6942



Weight:
Shackle = 410kg
Shackle and Stand = 645kg





100T HYDRAULIC REMOTE RELEASE SHACKLE

The Dawson 100 ton release shackle has been specifically designed for use on large tubes, and when used as a pair, tubes weighing up to 200 tons can be lifted.

The pin size is 130mm Diameter and is retracted and engaged hydraulically with a hand pump mounted on the ground complete with spooler to keep the hose under control.

The hose length is 60mts allowing long piles to be positioned; because the pin is released hydraulically the operator does not need to be directly underneath the shackle.

The shackle and spooler are mounted into a fabricated frame so that loading and unloading or moving around the job site is just a single crane lift.

FEATURES

High strength cast steel body.

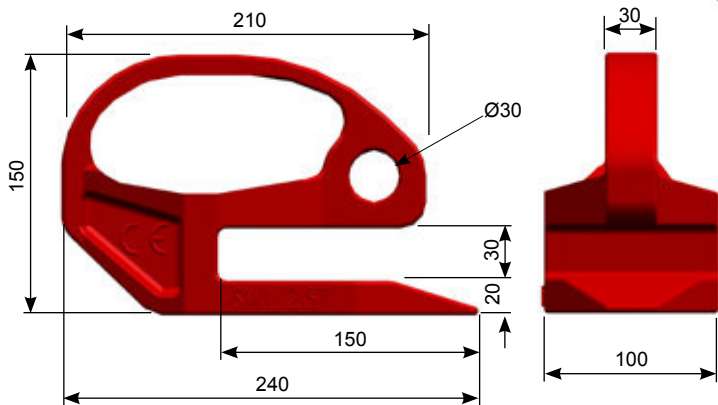
Pin and hydraulic ram are easily removed for easy maintenance.

Main body tested to 5 times SWL

Each shackle is proof tested to 2 times SWL

Hydraulic pin release.



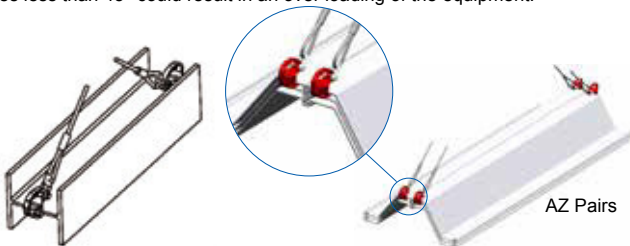


Dimensions (mm) Weight: 6,0 kg

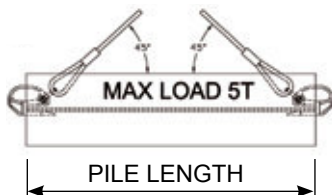
Critical Min. Lift Angle 45°

Lifting straps must be of equal length.

Angles less than 45° could result in an over loading of the equipment.



PILE LENGTH	MIN. SLING LEG LENGTH
5 m	3.5 m
10 m	7 m
20 m	14 m
30 m	21 m



$$1/2 \text{ PILE LENGTH} \times 1.414 = \text{MIN SLING LEG LENGTH}$$

STEEL HANDLING SHOE



SWL 2.5 tonnes

For safe handling of steel sections and splitting from stacks.

The DCP Lifting Shoe is purpose designed for handling structural sections of steel in workshops, stockyards and on construction sites.

Shoes should be used in pairs on steel wire rope or chain slings or on a spreader beam.

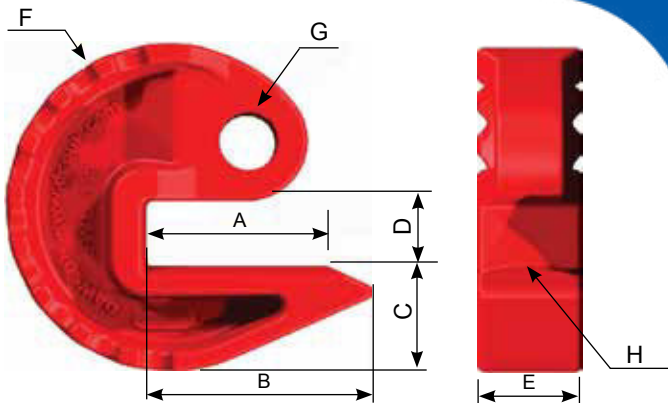
QUALITY ASSURANCE

Body - high quality alloy steel casting.

Inspection procedures:

- 20% batch x-ray
- 100% ultrasonic inspection
- 100% MPI



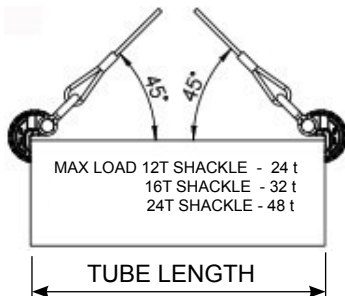


Model	Dimensions							
	A	B	C	D	E	F	G	H
12 tonne	140	175	80	50	80	R125	Ø45	R124
16 tonne	164	190	88	60	100	R143	Ø54	R305
24 tonne	235	260	122	80	120	187	Ø62	R305

Critical Min. Lift Angle 45°

Lifting straps must be of equal length.

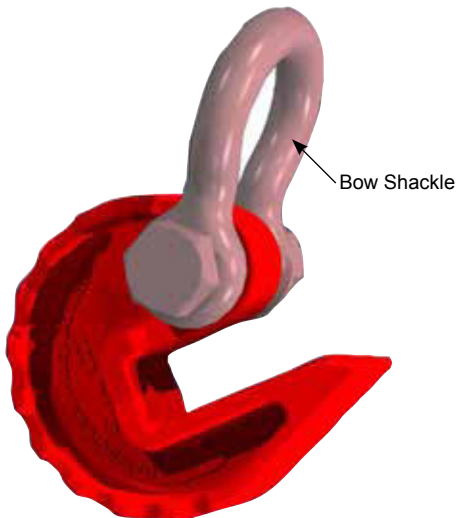
Angles less than 45° could result in an over loading of the equipment.



TUBE LENGTH	MIN. SLING LEG LENGTH
5 m	3.5 m
10 m	7 m
20 m	14 m
30 m	21 m

$1/2 \text{ TUBE LENGTH} \times 1.414 = \text{MIN SLING LEG LENGTH}$

PIPE LIFTING SHOE



12 / 16 / 24 tonne

The 12 / 16 / 24 tonne pipe lifting shoes are made from a high grade cast steel allowing weight reduction to be made in the design. New features include a radial profile engagement face and all round grip handling ridges.

	12 tonne	16 tonne	24 tonne
Part Number	908	909	910
Total Weight of shoe & shackle	25 kg	38.5 kg	67.5 kg
Weight of Shoe	17.25 kg	25 kg	47.5 kg
SWL per pair	24 tonne	32 tonne	48 tonne
SWL Bow Shackle	17 tonne	25 tonne	35 tonne





PRODUCT SUMMARY

WORLDWIDE
DEALER
NETWORK

GLOBAL
SUPPLY,
LOCAL
SUPPORT.

Dawson Construction Plant Ltd
Chesney Wold.
Bleak Hall,
Milton Keynes,
MK6 1NE, England
Tel: +44 (0) 1908 240300
Fax: +44 (0) 1908 240222

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