



# EURO RATCHET RELEASE SHACKLE

**FOR FASTER & SAFER STEEL ERECTION**







The Ratchet Release Shackle is designed to enable steel, timber or concrete elements to be lifted into position, any height above ground level and for the shackle to be disconnected safely and efficiently from a remote position. The purpose is to save the time taken and avoid the material costs of providing access for a man to disconnect the shackle. Achieving this result makes the work faster, more economical and inherently safe.

## ADVANTAGES

### 1. FAST HOOK UP

Shackles straight on to bolt holes or lugs provided. No need to get underneath to wrap chains.

### 2. FAST RELEASE

Release time takes approximately 15 seconds. Many times faster than a chain-wrapped column.

### 3. POSITIVE RELEASE

The threaded pin withdrawal is positive and powerful.

### 4. SUPER SAFE

Ratchet mechanism ensures a fail-safe mode. Release action cannot be simulated by accident.

### 4. SAFETY CHECK

Shackle threaded pin is extended through the back of the shackle as

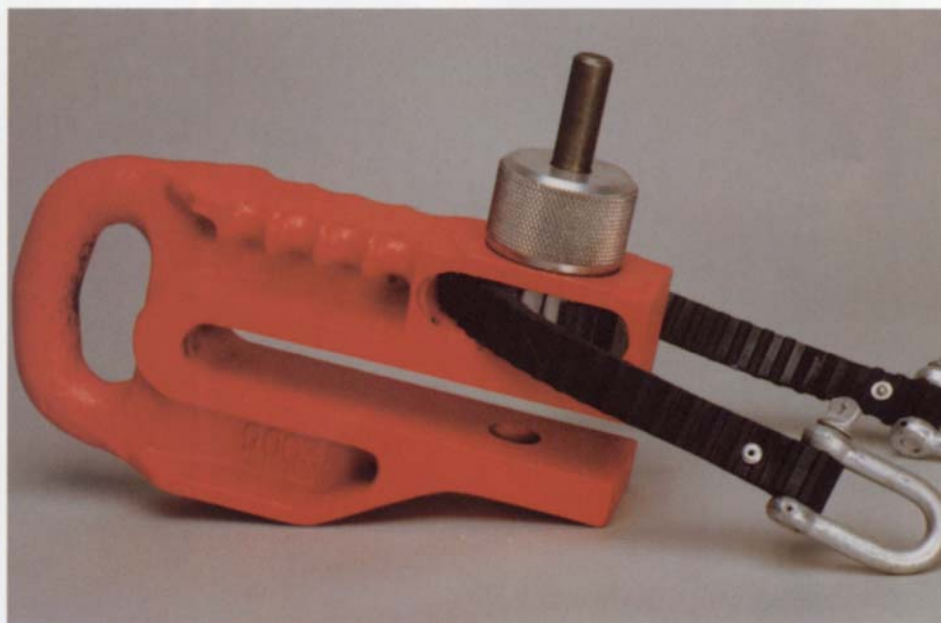
an 'indicator bar'. This gives a tell-tale indication of the pin position.

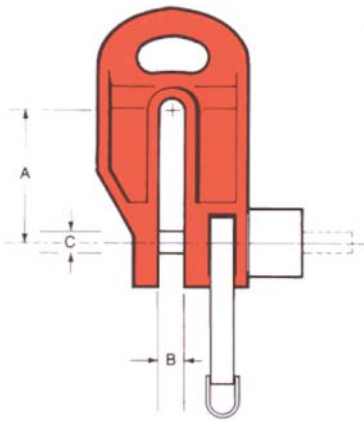
- Stiff web section gives high strength/weight ratio on main steel casting.
- Top ring provides two dimensional flexible joint.
- Ratchet mechanism ensures failsafe mode.
- Minimum components for reliability and ease of maintenance.

## MATERIAL QUALITY

- High quality steel casting: BS 3100: 1976: GRADE BT2. Tensile strength: 850-1000 N/mm<sup>2</sup> (55-65 T/in<sup>2</sup>)
- High quality pin: BS970: 1955: EN36. Minimum tensile strength: 1000N/mm<sup>2</sup> (65 T/in<sup>2</sup>)

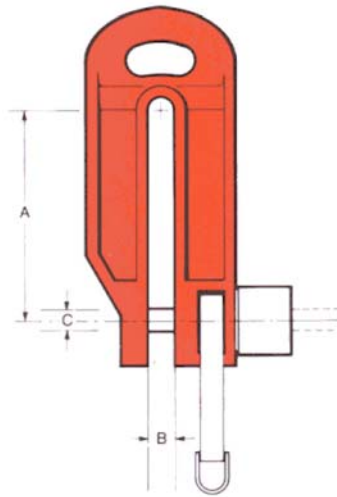
**EVERY SHACKLE IS TESTED  
TO DOUBLE ITS SAFE WORKING LOAD**





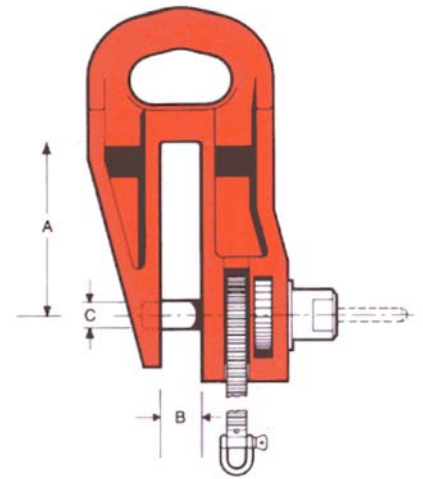
Type 150 / 3.5, 5.0, 7.5, 10 Tonnes

| Type     | Dimensions |    |    | S.W.L. tonnes | Weight k.g. |
|----------|------------|----|----|---------------|-------------|
|          | A          | B  | C  |               |             |
| 150/3.5T | 150        | 30 | 20 | 3.5           | 14.5        |
| 150/5.0T | 150        | 30 | 24 | 5.0           | 14.5        |
| 150/7.5T | 150        | 30 | 27 | 7.5           | 14.5        |
| 150/10T  | 150        | 30 | 35 | 10.0          | 14.5        |



Type 250 / 3.5, 5.0, 7.5, 10 Tonnes

| Type     | Dimensions |    |    | S.W.L. tonnes | Weight k.g. |
|----------|------------|----|----|---------------|-------------|
|          | A          | B  | C  |               |             |
| 150/3.5T | 250        | 30 | 20 | 3.5           | 19          |
| 150/5.0T | 250        | 30 | 24 | 5.0           | 19          |
| 150/7.5T | 250        | 30 | 27 | 7.5           | 19          |
| 150/10T  | 250        | 30 | 35 | 10.0          | 19          |



Type 250 / 40 Tonnes

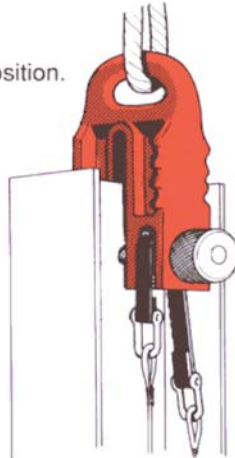
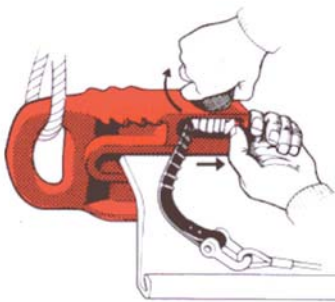
| Type    | Dimensions |    |    | S.W.L. tonnes | Weight k.g. |
|---------|------------|----|----|---------------|-------------|
|         | A          | B  | C  |               |             |
| 250/40T | 250        | 50 | 60 | 40            | 60          |

### METHOD OF OPERATION

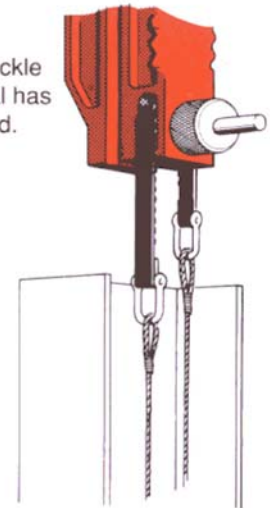
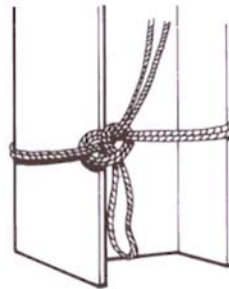
1. Insert pin.

2. Hoist to position.

3. Release shackle after material has been secured.



2a. Tie release ropes

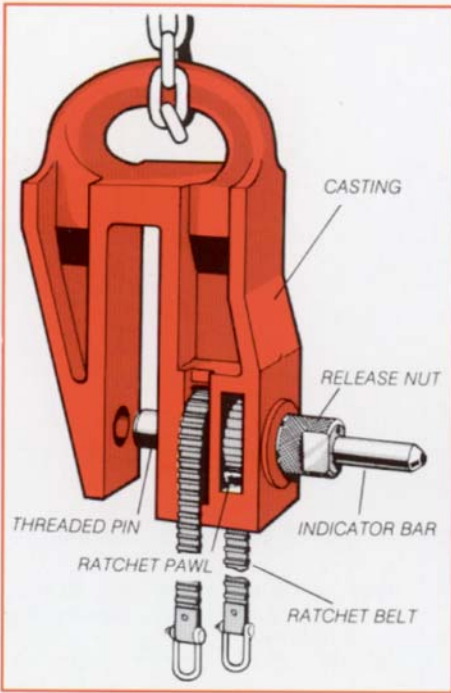


1. With the pin retracted, slide the shackle over the material to be lifted until the pin is approximately over the lifting hole. Press the ratchet pawl down with thumb of one hand and turn the release nut of the shackle with the other hand. Continue turning in a clockwise direction until the pin has gone through the hole in the member to be lifted and into the opposite side of the shackle. The indicator bar should not protrude from the face of the release nut.

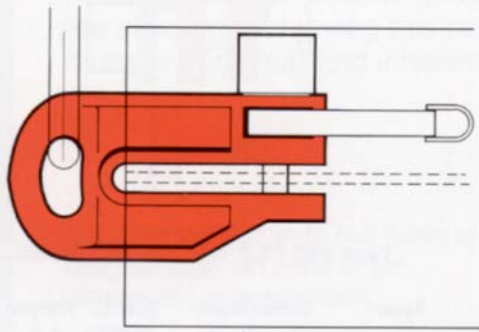
2. Two soft ropes should be attached to the 'D' shackles at each end of the toothed belt. The material may then be lifted. It is prudent to tie the ends of the shackle release ropes to the bottom of the member (2a) to prevent the ropes from becoming snagged or being caught in the wind and becoming inaccessible.

3. After lifting the material, the shackle is released by pulling the release ropes first one way and then the other, five or six times. The ratchet action withdraws the pin. The stroke of the pull is limited by the 'D' shackles at each end of the toothed belt (450mm maximum length).

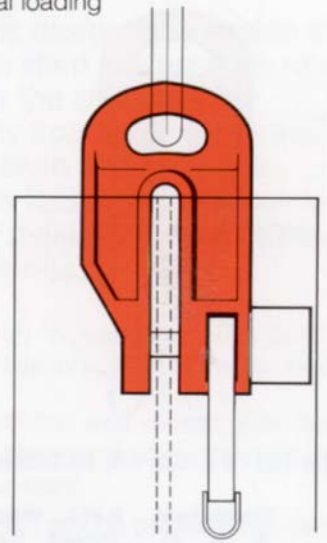




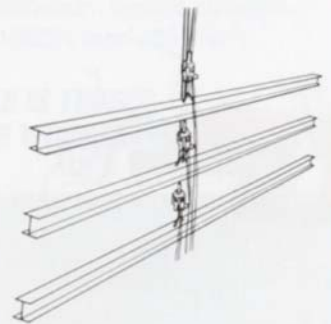
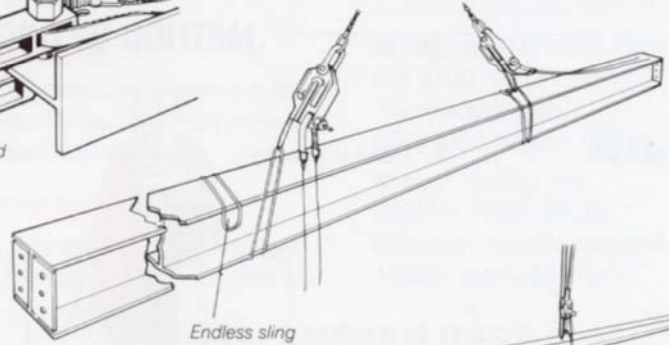
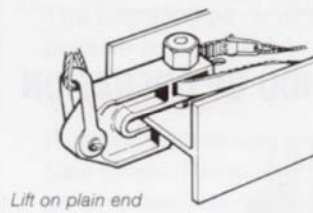
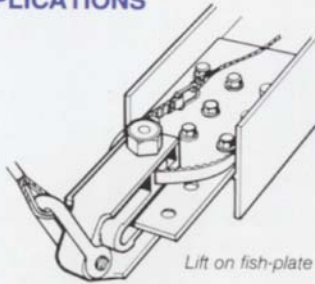
**SAFE**  
Lifting off stack at 90° to the axis of the pile.



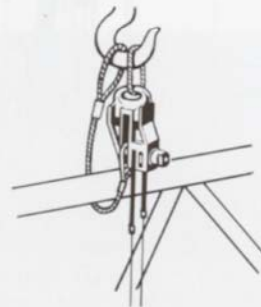
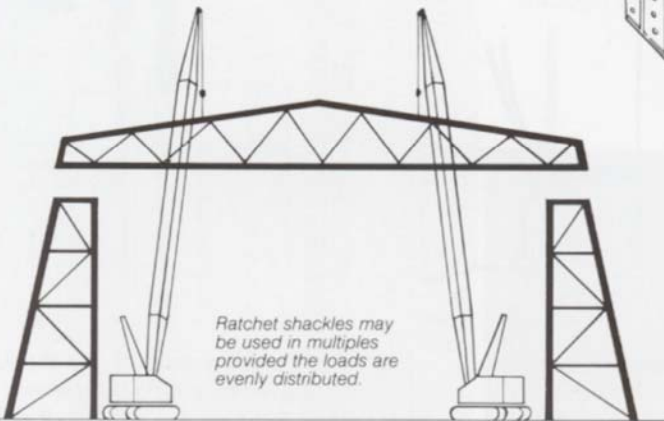
**SAFE**  
Axial loading



**APPLICATIONS**



Multiple lift with shackles attached to slings or lifting lugs. Each beam has separate rope. Colour code or isolate release ropes to ensure correct beam release.



**CE** This product complies with 89/392 EEC Machinery Directive



DAWSON CONSTRUCTION PLANT LTD  
Chesney Wold, Bleak Hall, Milton Keynes MK6 1NE, England.  
Tel: (01908) 240300 Fax: (01908) 240222 Int Tel: +44 1908 240300 Int Fax: +44 1908 240222

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