

T 0115 944 1448

F 0115 944 1466

E info@stanton-bonna.co.uk

W www.stanton-bonna.co.uk

Lifting and Jointing System

The lifting and jointing system, when used in conjunction with pipes DN 1400 and above, offers these major advantages:

Safe Handling

The lifting eyes engage securely and provide a horizontal lift every time. Once engaged, the lifting eyes cannot disengage under load.

Speed

Off-loading, site handling and pipe jointing is much faster than with traditional tackle and no weight balancing is required.

Cost Effective

Compared to traditional methods, the speed, safety and pipe laying efficiency of the system generates savings in time, plant and labour.

1. The Chain Set

The system comprises lifting anchors cast into the pipe wall and a special three legged chain set (Fig. 1) with lifting eyes which connect to the anchors for lifting and jointing operations.

2. Engaging the eye

To engage a lifting eye with a lifting anchor simply place the eye opening over the anchor head and rotate the eye tail until it touches the pipe surface.

Correct engagement of the lifting eyes is essential prior to any lifting or jointing operation and the spare lifting eye should be secured to a shortening clutch to avoid accidental damage or injury.

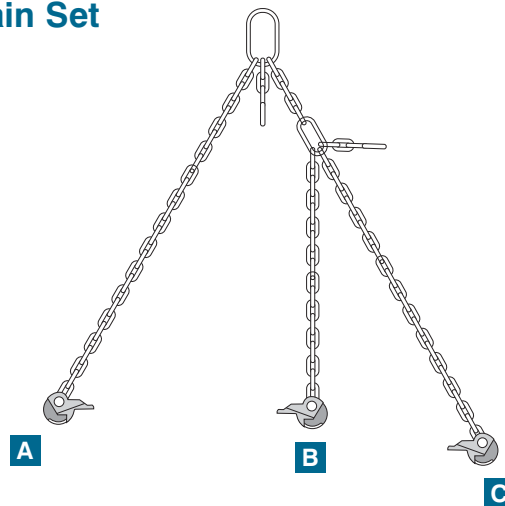
3. Correct Lifting

Engage the eye and lift as shown in Fig. 3 and not as in Fig. 4.

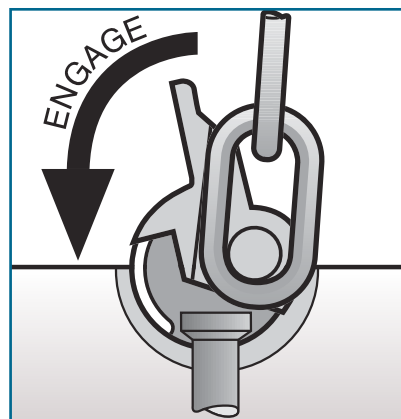
5. Disengaging the eye

To disengage a lifting eye, slacken the chain set and rotate the eye tail away from the pipe surface until the eye can be lifted off the anchor head.

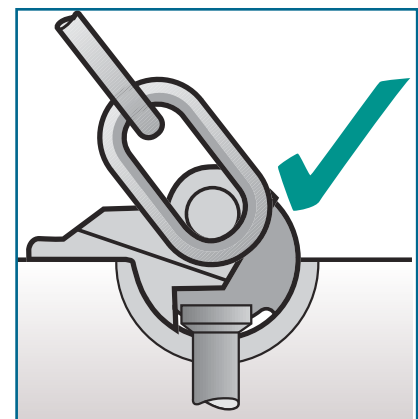
1. The Chain Set



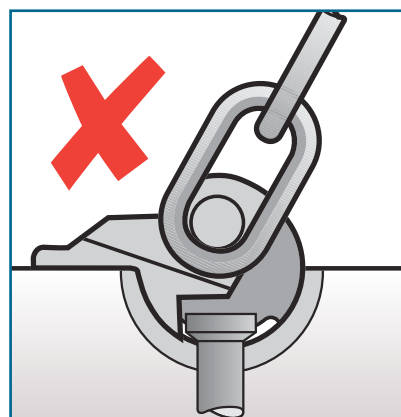
2. Engaging the Eye



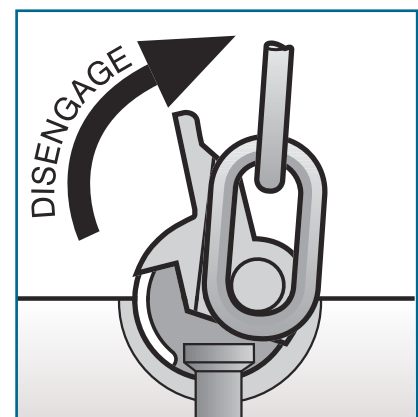
3. Correct Lifting



4. Incorrect Lifting



5. Disengaging the Eye



T 0115 944 1448

F 0115 944 1466

E info@stanton-bonna.co.uk

W www.stanton-bonna.co.uk

Lifting and Jointing System

6. Lifting and Handling

Position the crane's top guide pulley centrally between the lifting anchors and engage chain A with the socket end anchor, B with the spigot end anchor and secure C to its shortening clutch (Fig.6). During lifting the included angle between chains must not exceed 60°.

7. Jointing

Lift the pipe, lower it into the trench and enter the pipe spigot into the socket of the previously laid pipe. Disengage chain A and secure to its shortening clutch. Position the crane's top guide pulley over the socket of the previously laid pipe and engage chain C with the spigot end anchor (Fig.7).

Take up any chain slack and continue lifting slowly to joint the pipes. Adjust the pipe to line and level and check for the recommended joint gap. Disengage the lifting eyes and repeat the lifting and jointing operations as necessary to complete the pipeline.

Anchor Recesses

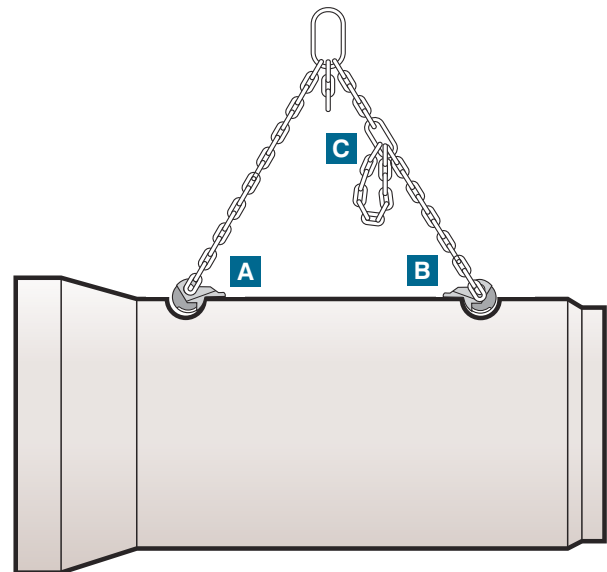
Before backfilling, clean and make good anchor recesses flush to the pipe barrel surface with epoxy or polyester resin or a 1:3 cement sand mortar proportioned by mass.

General Advice

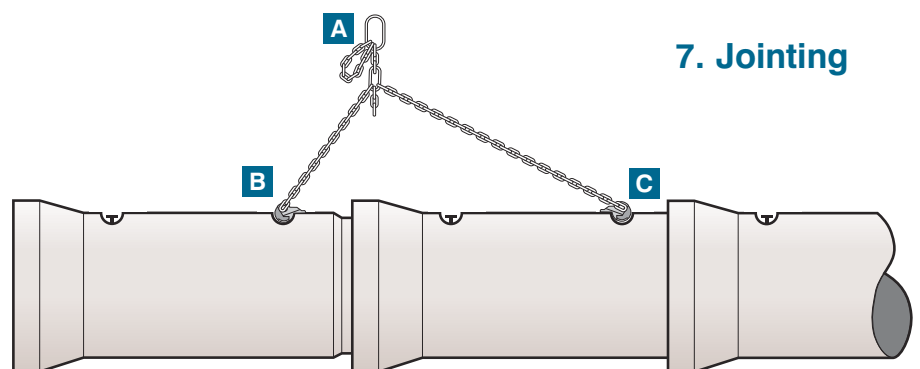
Pipes must be handled, stored and installed by persons trained in safe practices for these tasks. Chain sets are supplied having been tested in accordance with the Lifting Operations and Lifting Equipment Regulations 1998. Users should have a current test certificate and certificate of examination as appropriate and should check equipment daily for obvious damage before use. If equipment is subjected to excessive shock load or abuse it should be taken out of use, re-examined and tested.

Junctions, bends, rocker and butt pipes require jointing by traditional methods. Rocker and butt pipes may be lifted using the single cast in anchor.

6. Lifting and Handling



7. Jointing



Jointing may not be possible with certain diameters, refer to Stanton Bonna for advice.