

Flanged Crossheads

For Reciprocating Compressors

Dresser-Rand provides responsive, reliable technical support, parts, field service, repairs, overhauls and upgrades for reciprocating compressors and engines, steam and gas turbines, and turbomachinery. Through our worldwide network of service centers, we are available anywhere in the world 24 hours a day to keep your equipment up and running.

Flanged Design for Reciprocating Compressor Crossheads

The Dresser-Rand flanged design for the crosshead-to-piston rod joint is an important component in modernizing heavy process reciprocating compressors and is used on 3.5-inch (88.9 mm) piston rods and larger. The flanged design eliminates the conventional threaded connection between the piston rod and crosshead.

Features

Hydraulic tensioning for accurate pre-stressing of joints

Piston rod kept in tension (eliminates stress reversal in threads)

Flanged crosshead design allows easy vertical/horizontal adjustment of the piston rod (eliminates the need to re-shim the crosshead)

Precision shim adjusts piston-to-cylinder end clearance

Tensioning tools with air motor-driven hydraulic pump

Benefits

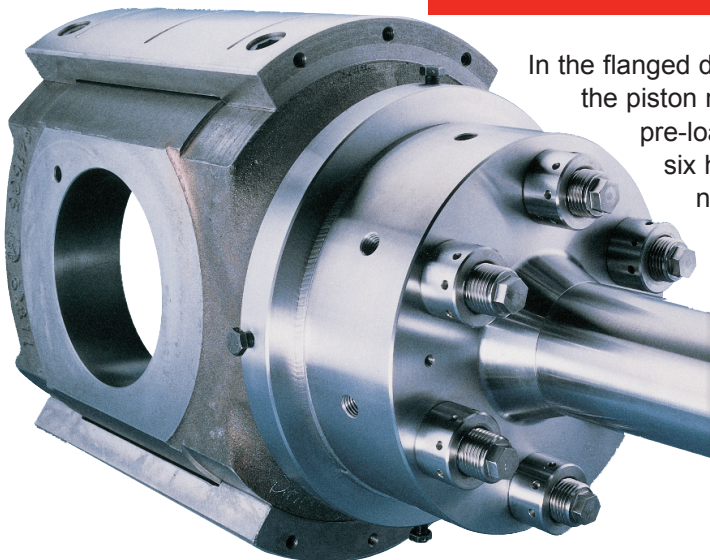
Increases unit reliability and reduces maintenance

Increases safety and reliability; reduces maintenance and replacement part costs

Significantly reduces maintenance costs and downtime

Allows easy re-establishment of precise end clearance after cylinder maintenance

Provide accurate pre-stress of studs and piston rods for reliable operation



In the flanged design, the piston rod is necked down through the flange and the piston rod nut is hydraulically tensioned on the crosshead side to pre-load the joint. The flange is attached to the crosshead using six hydraulically tensioned studs. An adjustment ring on the nose of the crosshead allows vertical and horizontal piston rod run-out adjustment. A spacer is provided to adjust piston-to-cylinder end clearance.

The crosshead pin on all frame sizes is full floating for easy maintenance. To provide optimum lubrication for the bushing and tolerance of minimal rod load reversal, the connecting rod pin bushing has helical grooves and the

For a complete listing of products and services, visit www.dresser-rand.com or contact one of the following Dresser-Rand locations.

Dresser-Rand Corporate Headquarters

West8 Tower Suite 1000
10205 Westheimer Road
Houston, TX 77042 USA
Tel: (Int'l +1) 713-354-6100
Fax: (Int'l +1) 713-354-6110

112, Avenue Kleber
75784 – Paris Cedex 16
Tel: (Int'l +33) 156 26 71 71
Fax: (Int'l +33) 156 26 71 72

email: info@dresser-rand.com

Regional Headquarters

The Americas

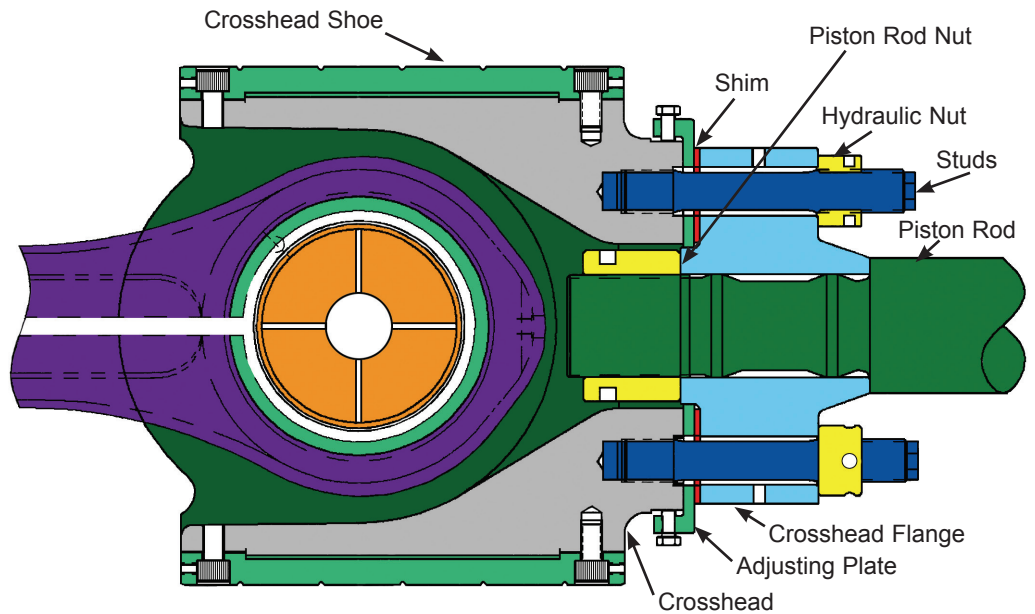
Dresser-Rand
West8 Tower Suite 1000
10205 Westheimer Road
Houston, TX 77042 USA
Tel: (Int'l +1) 713-354-6100
Fax: (Int'l +1) 713-354-6110

EMEA

(Europe, Middle East & Africa)
Dresser-Rand S.A.
31 Boulevard Winston Churchill
Cedex 7013
Le Havre 76080 France
Tel: (Int'l +33) 2-35-25-5225
Fax: (Int'l +33) 2-35-25-5366 / 5367

Asia-Pacific

Dresser-Rand Asia Pacific Sdn Bhd
Unit 9-4, 9th Floor
Bangunan Malaysian Re
17 Lorong Dungun, Damansara Heights
50490 Kuala Lumpur, Malaysia
Tel: (Int'l +60) 3-2093-6633
Fax: (Int'l +60) 3-2093-2622



crosshead pin is non-rotating. Hydraulic tensioning is standard on all frame and cylinder bolting 1.625 inches (40.6mm) and larger.

ASTM A536 Grade 60/40 nodular iron is the standard crosshead material because of its ductility and excellent fatigue properties. It has proven to be the best material for reliable performance.

Materials

- Crosshead body ASTM A536 60/40/18 nodular iron
- Flange..... ASTM A193 grade B7 alloy steel
- Studs ASTM A193 grade B7 alloy steel
- Crosshead pin Alloy steel, surface hardened
- Connecting rod bushing Bronze
- Crosshead shoe Cast iron with babbitt face

©2005 Dresser-Rand.

This document comprises a general overview of the products described herein. It is solely for informational purposes, does not represent a warranty or guarantee of the information contained herein, and is not to be construed as an offer to sell or a solicitation to buy. Contact Dresser-Rand for detailed design and engineering information suitable to your specific applications. Dresser-Rand reserves the right to modify its products and related product information at any time without prior notice.