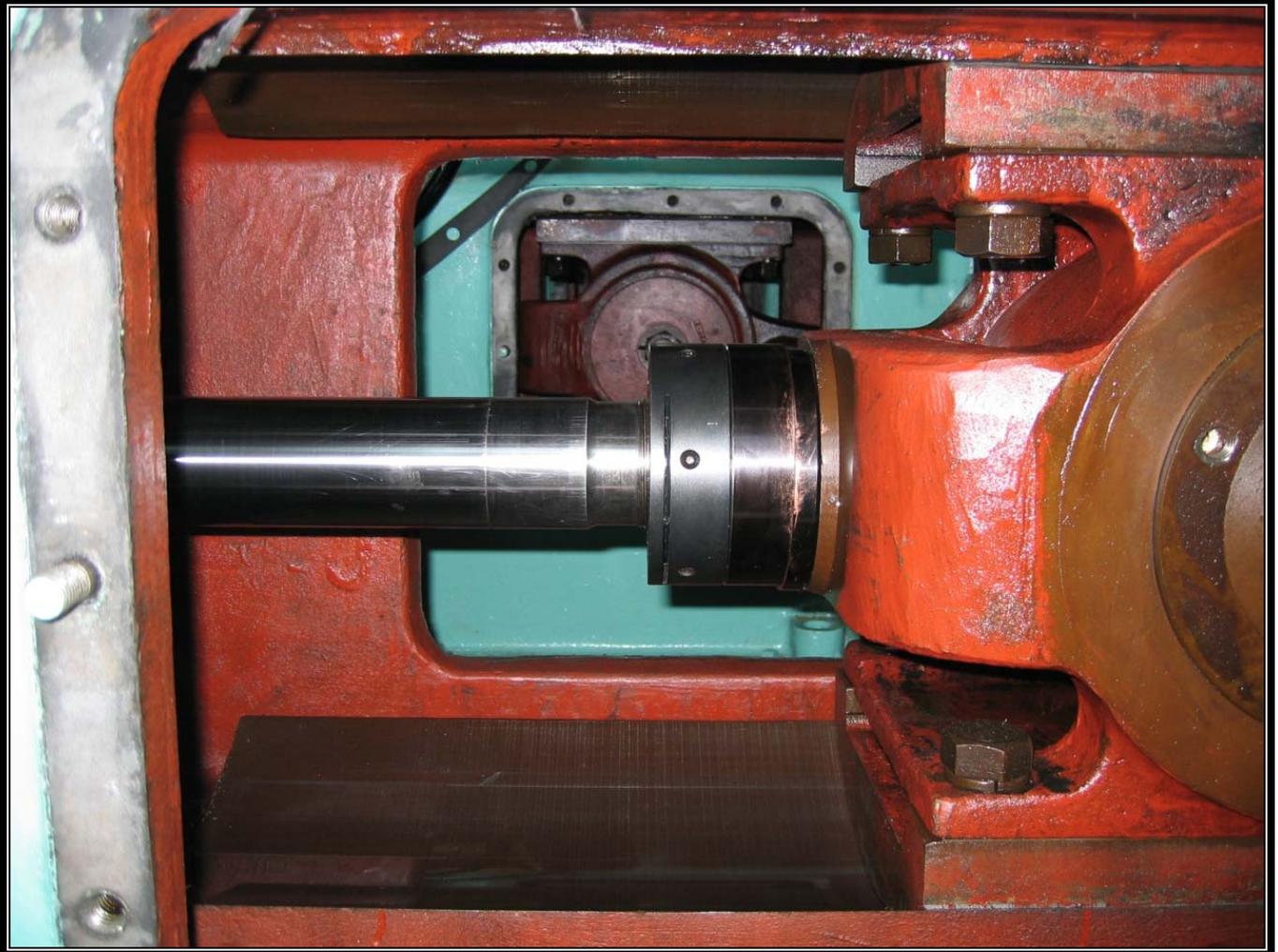


# Riverhawk Crosshead Nut



The Riverhawk hydraulic crosshead nut provides results that OEMs and end-users require in reciprocating compressor applications. Riverhawk engineering has incorporated distinctive design features within the traditional hydraulic nut to prevent piston rod bending and fatigue failures. Plus the hydraulic crosshead nut offers the inherent reliability of accurate preloading and repeatability.

No longer of concern are issues resulting from torquing and jack-type nuts. The Riverhawk hydraulic crosshead nut supplies uniform loading on the crosshead bearing face to provide long life to the piston rod and crosshead slide.

In addition, special surface coatings offer unlimited metal seal life and protection from fretting.

Riverhawk has provided solutions in other troublesome reciprocating applications such as connecting rods, drive rods, and piston heads. Contact Riverhawk and discuss your reciprocating compressor application or use the application data sheet on the reverse page and submit to Riverhawk engineering.

#### *Advantages of the Riverhawk Crosshead Nut*

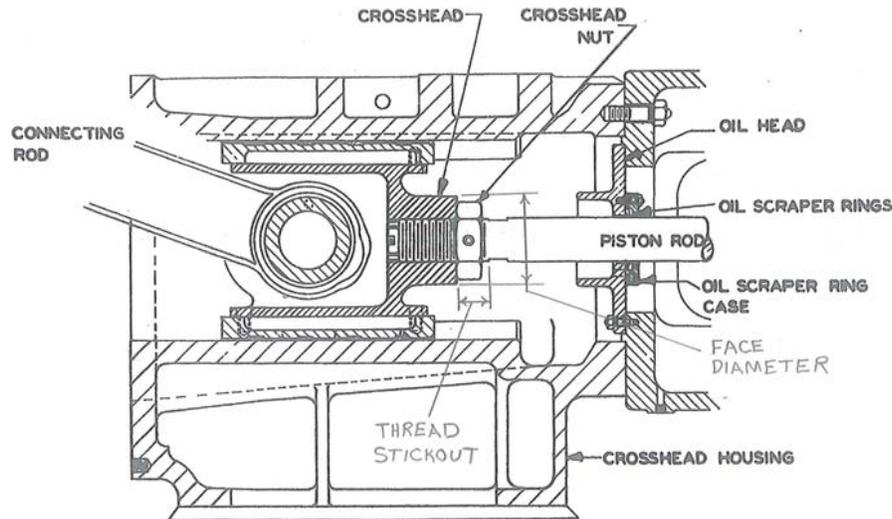
- Accurate and repeatable preloading
- Maintains straightness of piston rod
- Designed to prevent fatigue failure
- Meets API 618 specifications



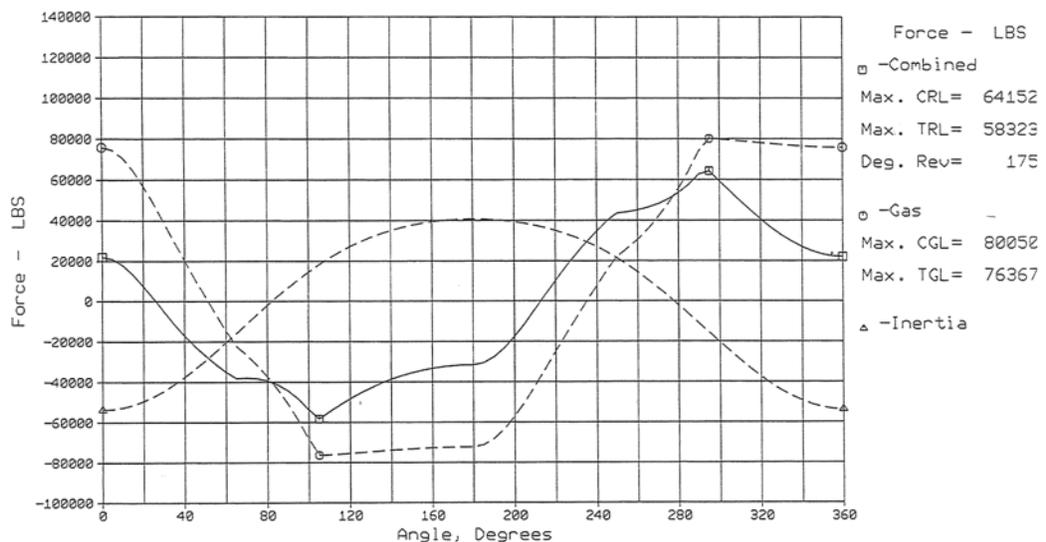
# Application Data Sheet

1. Thread Details: \_\_\_\_\_  
Include piston rod thread diameter, thread pitch, and thread class.
2. Required Preload: \_\_\_\_\_  
This may be expressed in as force, torque, stress, or rod stretch.
3. Crosshead Face Diameter: \_\_\_\_\_  
If the available face diameter is unknown, please specify the current nut diameter or hex size.
4. Rod Thread Stickout: \_\_\_\_\_  
If the available piston rod thread height is unknown, please specify the current nut height.
5. Combined Gas and Inertial Reverse Loading  
For each throw, the piston rod will have a maximum combined gas and inertial load in both compression and tension.  
Max CRL: \_\_\_\_\_ (Maximum Combined Tensile Rod Load)  
Max TRL: \_\_\_\_\_ (Maximum Combined Compressive Rod Load)  
If the Max TRL and Max CRL are unknown, Riverhawk will assume 50% preload for each.

Typical  
Crosshead  
Connection



Typical  
Reverse  
Loading  
Diagram



Riverhawk Company, an engineering driven manufacturer, specializes in hydraulic mechanical technologies. We meet the daily challenges of the rotating equipment industries by offering auxiliary equipment such as air driven and manual hydraulic pressure kit as pusher piston cylinders for the installation of coupling hubs, thrust discs, and compressor wheels. Riverhawk also designs and manufactures hydraulically tensioned studs and nuts, tensioning tools, hydraulic nuts, and plug and ring gages. We also provide source inspections and training seminars. Our equipment is proudly supplied to the top OEMs and end users of the turbomachinery industry. Riverhawk is a member of the American Petroleum Institute (API) and sits on the coupling committee of the American Gear Manufacturers Association (AGMA).

For more information about Riverhawk's Hydraulic Crosshead Nut or any of our other products and services call:



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