

# FLOATING CUSHION SUB MODEL 306430

## Function

To provide a means of mating together threaded connections on drill pipe without heavily loading the flanks of the threads. By incorporating a certain amount of axial movement below the rotary drive spindle, the sliding spindle of the cushion sub will allow the threads of the mating drill string components to float either together or apart during rotation without any movement of the rotary head. This amounts to only the friction and weight of the sliding spindle in the cushion sub on the threads of the drill components rather than the weight of the complete rotary drive.

## Application

The Model 306430 Floating Cushion Sub has been designed specifically to fit all mid range and large blast hole rotary drills which are utilized in soft to medium hard rock formations. The sub will accommodate various drill string combinations up to and including nine and one quarter inch drill pipe diameters. Although the main purpose of the sub is to reduce damage to the threads on the drill string, the unique configuration of the drive system and the cushions incorporated into

the design will also provide both axial and torsional dampening of shock and vibration generated by the bit in either DTH or rotary drilling applications.

## Performance

Reduction in both axial and torsional shock during the drilling operation will decrease maintenance to the drill and extend the life of valuable components. Thread damage to drill pipe and bits during the thread make-up and break-out process will be virtually eliminated by utilizing the floating spindle within the cushion sub. The end result will be increased drill performance, higher drill utilization and lower operating costs.

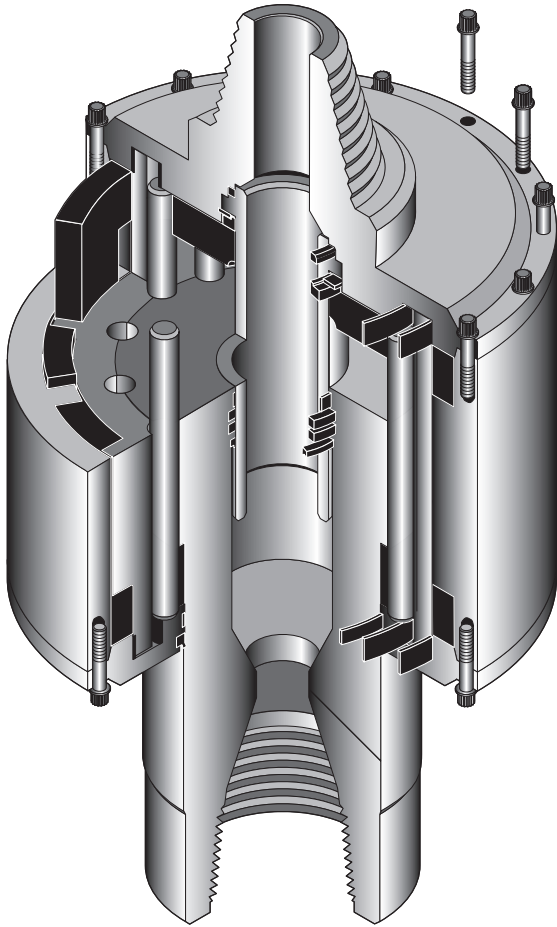
# **FOREMOST**

1.800.661.9190 or visit [www.foremost.ca](http://www.foremost.ca)



**INCREASED PRODUCTION, REDUCED MAINTENANCE AND IMPROVED  
DRILL UTILIZATION MEAN LOWER OPERATING COSTS**

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- Repairs and rebuilds can be accomplished at the mine property
- No modifications to the carousel or drill are required
- No restriction of air flow to the bit
- Maintenance costs on the drill and drilling tools are greatly reduced
- Shock reduction in torsional and axial directions

## SPECIFICATIONS

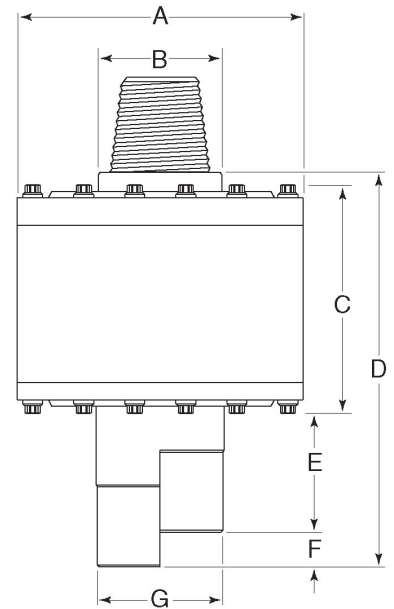
Hoist	200,000 lbs
Pulldown	200,000 lbs.
Torque	30,000 ft. lbs.
Stroke	2.5 inch
Weight	1,050 lbs.

## DIMENSIONS

A	18.00
B (max.)	9.00
C	16.37
D*	29.50
E	8.00
F (ext.)	2.50
G (max.)	9.00

dimensions shown in inches

\* Shoulder to shoulder length extended is established with 6% API Regular threads



## FEATURES

- Sliding spindle with 2 1/2 inches of extension
- Standard seals, wipers and wear rings are utilized to isolate drilling fluids and air
- Unique drive system to transfer rotary torque to the drill string
- Precision machined components manufactured from high strength alloy steel
- Manufactured to suit O.E.M. drill specifications
- Large through bore in a stationary wash pipe assembly
- Heavy duty urethane upper and lower cushions

## BENEFITS

- Sliding spindle reduces thread damage to drill pipe and allows drill operators to quickly and easily make-up and breakout connections
- Reduced maintenance to rotary drive bearings and gears

## ORDERING INFORMATION

- Drill make and model
- Pin and box thread type and size
- Spindle and drill pipe diameters
- Breakout flat dimensions

## Foremost Industries LP

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