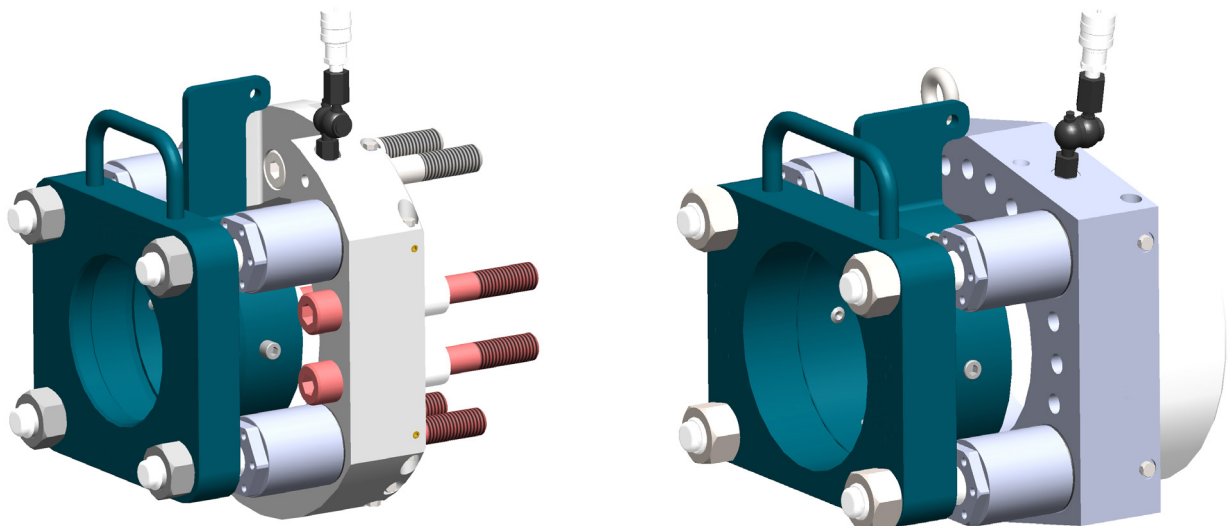


## High-Performance Liner Retention System



The Forum Energy Technologies high-performance (HP) liner retention system is a key component of the P-Quip® fluid end mud pump solution and to the overall drilling operation. The system can reduce liner change out times by 75%, provide lower lifecycle costs, and minimize safety risks by reducing maintenance operations and drilling downtime.

The HP system has been designed to hold liners firmly to the fluid end while drilling, by powerful spring mechanisms. Liner movement during high-pressure operations is almost imperceptible, resulting in improved liner and piston life. Furthermore, since the spring force is of known value, under and over tightening is almost impossible.

The patent-pending system is simple and easy to operate – a complete liner change out process takes only 15 minutes. With more than 1,000 drilling rigs worldwide using the system, the Forum HP retention system is the known market leader.

Smart Solutions. Powerful Products.



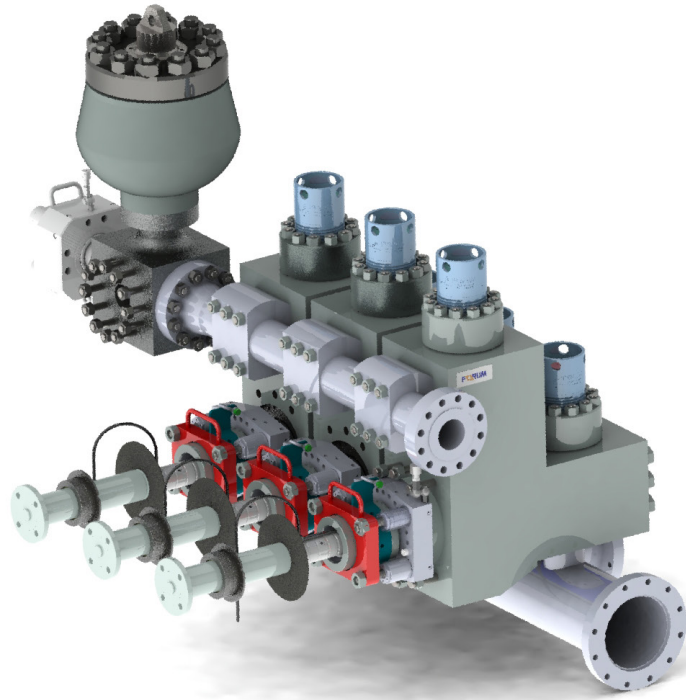
# High-Performance Liner Retention System

## **BENEFITS:**

- Decreased downtime, 75% faster liner change out times
- Inherently safe, no hammers or cheater bars required to install
- Lower lifecycle cost
- Improved efficiency since positive liner retention design helps eliminate liner movement

## **FEATURES:**

- Automatic clamping means no more under- or over-tightening
- Easy operation with a conventional air- or hand-operated hydraulic pump
- Direct replacement for OEM equipment
- Versions available for most pumps from 1,000 to 2,200 HP
- Built in liner removal assembly
- Standard versions also available



## **FORUM DRILLING TECHNOLOGIES**

10344 Sam Houston Park Drive, Suite 300 / 1.844.525.3500 [t]  
f-e-t.com/pquip / ForumDP.Sales@f-e-t.com

DRL1034.3.16