



石家庄冬利石油机械有限公司

Shijiazhuang Dongli Petroleum Machinery Co., Ltd.

PQUIP & BLAKJAK

Premium Mud Pump Fluid End Parts Solutions



Key Advantages

- 100% Interchangeable
- Superior Wear Resistance
- Global Rapid Delivery

电话 (Tel / WhatsApp / WeChat):

+86 155 3128 3675

+86 139 3044 2199

邮箱 (Email): wales@oildrillingpump.com

jackzhang@oildrillingpump.com

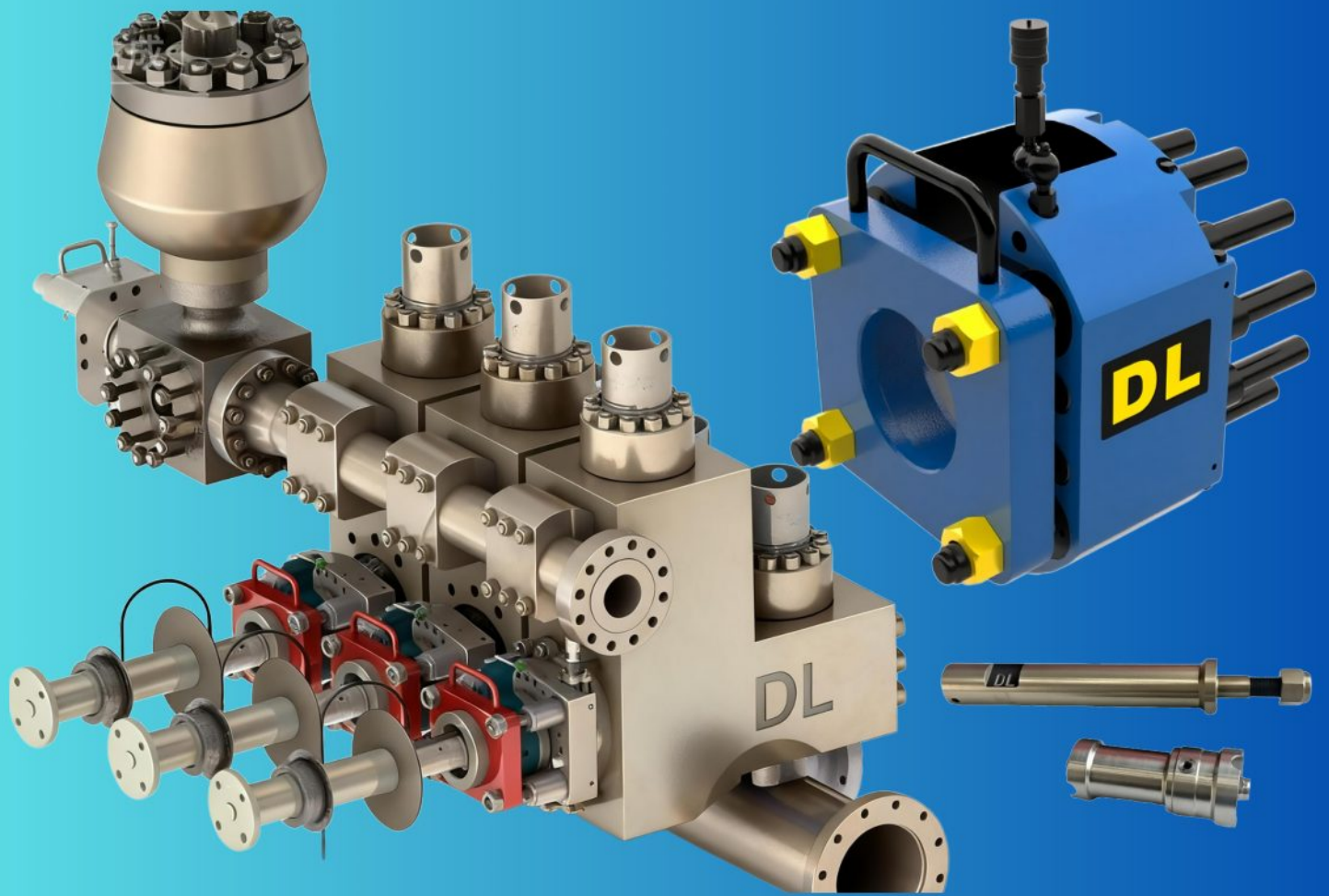
官网 (Website): www.donglipetroleum.com

地址 (Address): Zhizhao Industrial Park No.1
Road, Jiumen Hui Ethnic Township, Gaocheng
District, Shijiazhuang City, Hebei Province,
People's Republic of China



WEB BAR





DL Safe-Set™ Self-Align Piston Rod



How It Works (工作原理)

● **Adaptive "Floating" Connection:** The system introduces a precision joint allowing for micro-angular and radial displacement.

自适应“浮动”连接：系统引入了一个允许微小角度和径向位移的精密接头。

● **Dynamic Correction:** As the crosshead moves, if any misalignment exists, the HydrA-LIGN joint allows the piston to be guided by the liner wall rather than being forced sideways.

动态纠偏：当十字头运动时，如果存在不对中，HydrA-LIGN 接头允许活塞顺应缸套内壁的引导，而不是被强制推向一侧。

● **Zero Side Loading:** This continuous adjustment ensures the piston remains perfectly concentric, minimizing friction and wear.

零侧向载荷：这种持续的调整确保活塞保持完美的同心度，将摩擦和磨损降至最低。

Key Benefits (核心优势)

● **Extend Expendable Life (延长易损件寿命):** Drastically reduces uneven wear on pistons and liners.

大幅减少活塞和缸套的偏磨。

● **Reduce Non-Productive Time (减少非生产时间 NPT):** Fewer liner and piston changes mean higher drilling efficiency.

更少的更换频率意味着更高的钻井效率。

● **Enhance Safety (提升作业安全):** Reduces high-risk maintenance frequency and heavy lifting exposure.

显著降低高风险维护作业的频率，减少人员暴露。

● **Hydraulic Installation (液压辅助安装):** Features hydraulic-assist assembly for safer, faster, and consistent makeup torque without hammer unions.

液压辅助安装：具备液压辅助组装功能，无需大锤敲击即可实现更安全、快速且扭矩一致的连接。

Ideal Applications (核心应用场景)

1. MPD & Deepwater Drilling (控压钻井与深水作业): Critical for operations with narrow pressure windows where pump reliability is paramount.

控压钻井与深水作业：对于压力窗口狭窄、对泵可靠性要求极高的作业至关重要。

2. High-Performance Liners (高性能缸套应用): The only way to fully realize the ROI of expensive Zirconia or Ceramic liners by preventing eccentric wear.

高性能缸套应用：防止偏磨，从而充分发挥昂贵的氧化锆或陶瓷缸套的投资回报率 (ROI)。

3. Extended Reach Wells (大位移井): Ensures equipment longevity over long drilling cycles without frequent maintenance stops.

大位移井：确保设备在长周期钻井过程中保持长寿命，无需频繁停机维护。



☎ 联系获取图纸与报价 (Contact for Drawings & Quote): 电话 (Tel): [+86 15531283675]

[+86 13930442199]

邮箱 (Email): [wales@oildrillingpump.com] [jackzhang@oildrillingpump.com]

网址 (Web): [https://www.donglipetroleum.com]

[DL] Safe-Set™ Hammerless Liner Retainer

How It Works (工作原理)



- **Hydraulic Tensioning (液压张紧):** The Hydra-CEL hydraulic tool is attached. Using a standard hand pump, it applies a precise, quantifiable force to compress the liner and seat the gaskets.
- **Hydra-CEL 液压工具连接到位。** 使用标准手动泵，施加精确、可量化的力来压缩缸套并使垫圈就位。
- **Mechanical Locking (机械锁紧):** While tension is held hydraulically, the Lok-CEL mechanical nut is hand-tightened against the pump face to lock in the pre-load.
- **在保持液压张紧的同时，徒手旋紧 Lok-CEL 机械螺母使其紧贴泵体端面，从而锁定预紧力。**
- **Pressure Release & Run (释放与运行):** Hydraulic pressure is released and the Hydra-CEL tool can be removed. The liner is now held 100% mechanically by the Lok-CEL nut, with no hydraulics involved during pump operation.
- **释放液压压力并移除 Hydra-CEL 工具。** 此时缸套完全由 Lok-CEL 螺母进行100% 机械固定，泵运行期间无需任何液压参与。

Core Technology | 核心技术

● Hydra-CEL (Hydraulic Tensioner) | Hydra-CEL (液压张紧装置)

○ **The Power:** A lightweight unit used only during installation/removal. One unit services the entire pump.

○ **动力核心：** 轻量化装置，仅在安装/拆卸时使用。一套装置即可维护整套泵。

● Lok-CEL (Mechanical Lock) | Lok-CEL (机械锁紧装置)

○ **The Security:** A rugged mechanical nut that stays on the pump, ensuring zero risk of hydraulic leak-off during operation.

○ **安全基石：** 坚固的机械螺母，长期保留在泵上，确保运行期间零液压泄漏风险。

Key Benefits | 核心优势

● ⚡ **Speed & Efficiency (速度与效率):** Reduces liner change time to <15 minutes. Enables single-person operation.

○ 将缸套更换时间缩短至 15 分钟以内。实现单人高效操作。

● 🛡️ **Safety First (安全第一):** 100% Hammerless operation eliminates injury risks associated with sledgehammers.

○ 100% 无锤化作业，彻底消除了与大锤敲击相关的工伤风险。

● 💰 **ROI & Longevity (投资回报与寿命):** Prevents stress cracks in brittle Ceramic/Zirconia liners via uniform loading, maximizing their lifespan.

○ 通过均匀施压防止脆性陶瓷/氧化锆缸套产生应力裂纹，最大化其使用寿命。

Broad Compatibility | 广泛兼容性

Designed to retrofit almost any mud pump | 专为适配绝大多数泥浆泵而设计：

● **NOV Brands:** National, Oilwell, Continental Emsco, Lewco

● **Other Manufacturers:** Gardner Denver, Bomco (宝鸡), Honghua (宏华)



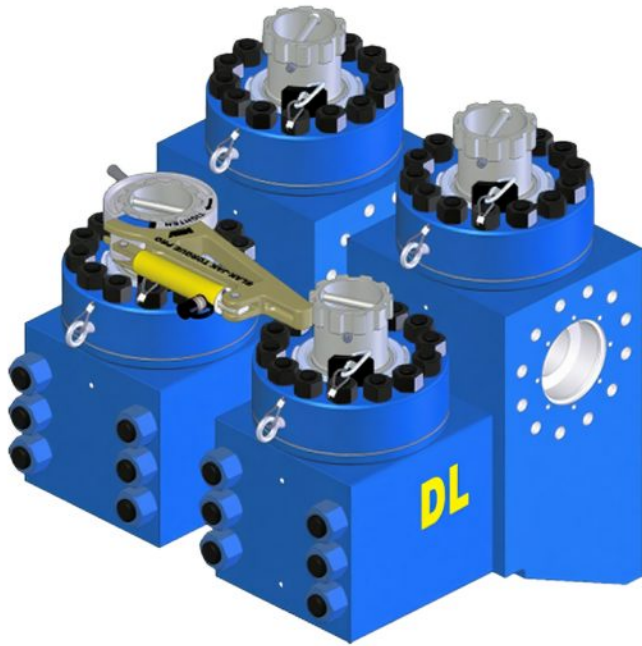
☎ **联系获取图纸与报价 (Contact for Drawings & Quote):** 电话 (Tel): [+86 15531283675] | [+86 13930442199]

邮箱 (Email): [wales@oildrillingpump.com] [jackzhang@oildrillingpump.com]

网址 (Web): [https://www.donglipetroleum.com]

[DL] Safe-Set™ Hydraulic Torque Wrench

How It Works (工作原理)



- **Hydraulic-Over-Mechanical (液压驱动 - 机械锁定)**
- **Actuation:** A specialized hydraulic wrench applies precise torque.
- **驱动:** 专用液压扳手施加精确扭矩。
- **Locking:** The locking ring is rotated 1/4 turn to secure the valve cover.
- **锁定:** 锁紧环旋转四分之一圈以固定阀盖。
- **Operation:** Hydraulics are removed. The system relies on a pure mechanical connection during pump operation.
- **运行:** 移除液压工具。泵运行期间，系统完全依靠纯机械结构连接。

Core Value Proposition | 核心价值主张

- **Unmatched Safety (无与伦比的安全性)**
100% Hammerless. Eliminates injury risks associated with sledgehammers, heavy lifting, and flying debris.
100% 无锤化。彻底消除了与大锤敲击、重物搬运及碎片飞溅相关的工伤风险。
- **Disruptive Speed (颠覆性的速度)**
< 2 Minutes Change-out. Requires only a quarter-turn to lock/unlock. Reduces non-productive time (NPT) significantly compared to traditional methods (10-20+ mins).
更换时间 < 2分钟。仅需旋转四分之一圈即可完成锁紧或释放。与传统方法（10-20分钟以上）相比，显著减少了非生产时间 (NPT)。
- **Engineering Reliability (工程化的可靠性)**
Precise Torque Control. Prevents "Plug Breathing" and washout by ensuring constant, accurate seal compression. Extends fluid end life.
精确扭矩控制。通过确保恒定、精确的密封压缩，防止“阀盖呼吸”和刺漏现象，显著延长液力端使用寿命。

Broad Compatibility | 广泛兼容性

- Plug & Play Design (即插即用设计):** No modification to the fluid end module is required.
无需改造: 无需对液力端模块进行任何形式的改造。
- **Compatible Brands:** National, Oilwell, Continental Emsco, Lewco, Bomco (宝石), Honghua (宏华), Gardner Denver, etc.
 - **Component Fit:** Works with Standard OEM Valve Covers & Mission "L" Style Plugs.



联系获取图纸与报价 (Contact for Drawings & Quote): 电话 (Tel): [+86 15531283675] | [+86 13930442199]
邮箱 (Email): [wales@oildrillingpump.com] [jackzhang@oildrillingpump.com]
网址 (Web): [https://www.donglipetroleum.com]

[DL] Rapid-Fit™ Piston Rod System



How It Works (工作原理)

- **Spring-Loaded Retention (弹簧加载保持)**
- **Operation: During pump operation, patented high-tension springs inside the Rod Link apply a constant, optimal clamping force. This eliminates the risk of loosening due to vibration.**
- **运行模式：在泵运行期间，连接体内部的专利高张力弹簧施加恒定、最佳的夹紧力。这消除了因振动导致松动的风险。**
- **Hydraulic Release (液压辅助释放)**
- **Maintenance: To unlock, a simple hydraulic hand pump is attached to compress the springs, releasing the grip on the rods instantly. No manual unscrewing is required.**
- **维护模式：解锁时，连接一台简易的手动液压泵以压缩弹簧，瞬间松开对杆的夹紧。无需任何手动旋卸操作。**
- **Self-Alignment (自动对中)**
- **Precision: The mechanism naturally centers the piston rod with the pony rod as it clamps, ensuring a perfectly straight stroke inside the liner.**
- **精准对中：夹紧机构在锁定时自然地 will 将活塞杆与中间杆对中，确保活塞在缸套内进行完美的直线运动。**

Core Value Proposition | 核心价值主张

🛡️ **100% Hammerless Safety (100% 无锤化安全)**
Eliminates sledgehammers, cheater bars, and heavy lifting. Prevents crushed fingers and hand injuries (LTIs), helping you achieve "Zero Accident" HSE goals.
彻底消除大锤、加力杆和重物搬运。防止手指挤压和手部受伤 (LTI)，助力实现“零事故”HSE目标。

⚡ **Disruptive Speed (颠覆性的速度)**
< 5 Minutes Change-out. The quick-connect design reduces hours of labor to minutes, minimizing costly NPT for fracking and drilling operations.
更换时间 < 5分钟。快速连接设计将数小时的劳动力缩短为几分钟，显著减少压裂和钻井作业中昂贵的非生产时间 (NPT)。

🎯 **Precision & Reliability (精准与可靠)**
Auto-Alignment & Auto-Clamping. The system automatically eliminates misalignment between the piston and liner, extending component life. Constant clamping force prevents rod breakage caused by over/under-tightening.
自动对中 & 自动夹紧。系统自动消除活塞与缸套之间的对中误差，延长部件寿命。恒定的夹紧力防止因过紧或过松导致的断杆事故。

Why P-Quip? | 为什么选择 P-Quip?

● **Banded Bore™ Technology: Optimizes stress distribution in the fluid end module.**
Banded Bore™ 技术：优化液力端模块的应力分布，延长模块寿命。

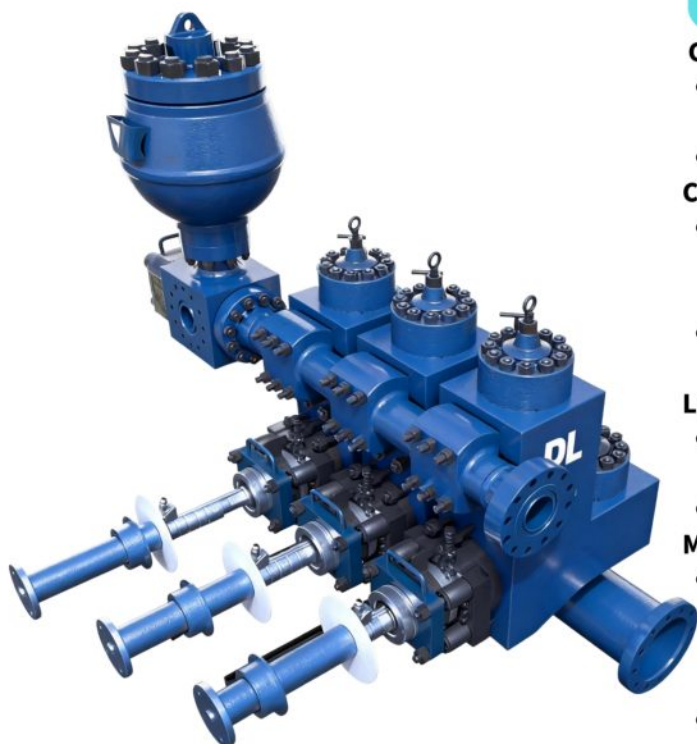
● **Plug & Play: Compatible with major pump brands (National, Bomco, Honghua, Gardner Denver, etc.).**
即插即用：兼容主流泵品牌 (National, 宝石, 宏华, Gardner Denver等)。



☎️ **联系获取图纸与报价 (Contact for Drawings & Quote): 电话 (Tel): [+86 15531283675] | [+86 13930442199]**
邮箱 (Email): [wales@oildrillingpump.com] [jackzhang@oildrillingpump.com]
网址 (Web): [https://www.donglipetroleum.com]

[DL] Rapid-Fit™ Valve Cover System

How It Works (工作原理)



Connection (连接)

- Attach a standard air or hand-operated hydraulic pump to the pressure fitting on the valve cover body.
- 将标准的气动或手动液压泵连接至阀盖主体上的压力接头。

Compression (压缩)

- Pressurize to 10,000 psi (680 bar). Hydraulic pistons compress the internal Disc Spring Stack, releasing the clamp load.
- 加压至 10,000 psi (680 bar)。液压活塞压缩内部碟形弹簧组，释放夹紧负荷。

Lock / Unlock (锁定/解锁)

- Hand-tighten or loosen the Retention Nut against the Locking Plate. No hammers or heavy wrenches required.
- 徒手旋紧或松开靠在锁紧板上的锁紧螺母。无需大锤或重型扳手。

Mechanical Engagement (机械啮合)

- Release hydraulic pressure. The massive stored energy of the springs instantly clamps the valve cover. The system creates a pure mechanical lock—0 hydraulic pressure during operation.
- 释放液压。弹簧储存的巨大能量瞬间夹紧阀盖。系统形成纯机械锁紧——泵运行期间内部零液压。

Core Value Proposition | 核心价值主张

100% Hammerless Safety (100% 无锤化安全)
Eliminates the use of sledgehammers and cheater bars, preventing hand injuries and crushed fingers. Creates an "Inherently Safe" maintenance environment.

彻底消除大锤和加力杆的使用，防止手部受伤和挤压事故。创造“本质安全”的维护环境。

⚡ Minimized Downtime (大幅削减停机时间)
Simple hydraulic release reduces valve change-out times from hours to minutes, significantly lowering NPT costs for drilling and fracking operations. 简便的液压释放操作将阀门更换时间从数小时缩短至几分钟，显著降低钻井和压裂作业的非生产时间 (NPT) 成本。

🔒 Auto-Clamping Reliability (自动夹紧的可靠性)
High-tension springs provide constant clamping force, eliminating "valve cap movement" caused by vibration. This prevents seal failure and fluid end washouts.

高张力弹簧提供恒定的夹紧力，消除了因振动导致的“阀盖微动”。有效防止密封失效和液力端冲蚀（刺泵）。

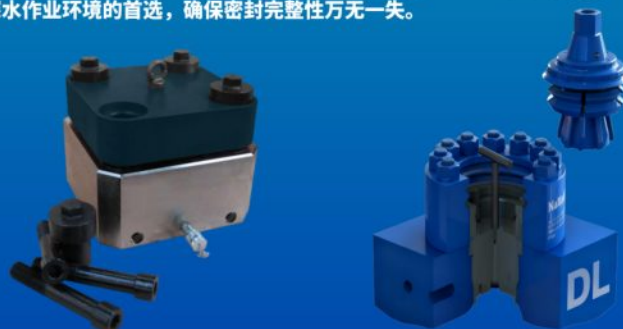
Why Choose P-Quip? | 为什么选择 P-Quip?

Immune to Vibration (免疫振动松动) Unlike threaded systems that can back off, the spring-loaded design maintains constant tension independent of vibration. 相比于容易回退的螺纹系统，弹簧加载设计对应力振动免疫，确保恒定的张力。

Eliminates Human Error (消除人为误差) Clamping force is pre-set by the springs, not by how hard a crew member hits a wrench. Ensures perfect tightening every time. 夹紧力由弹簧预设，而非人员的操作力度。确保每次安装都能达到完美、一致的紧固效果。

Plug & Play Compatibility (即插即用兼容性) Compatible with major mud pump brands (National, Bomco, Honghua, Gardner Denver, etc.) without complex fluid end modifications. 兼容主流泥浆泵品牌 (National, 宝石, 宏华, Gardner Denver 等)，无需对液力端进行复杂改装。

Built for Critical Ops (专为关键作业打造) The preferred choice for Managed Pressure Drilling (MPD), High Pressure Fracking, and Deepwater environments where seal integrity is non-negotiable. 控压钻井 (MPD)、高压压裂和深水作业环境的首选，确保密封完整性万无一失。



📞 联系获取图纸与报价 (Contact for Drawings & Quote): 电话 (Tel): [+86 15531283675] | [+86 13930442199]

邮箱 (Email): [wales@oildrillingpump.com] [jackzhang@oildrillingpump.com]

网址 (Web): [https://www.donglipetroleum.com]



PQUIP 动力端与液力端配件 (PQUIP Power & Fluid End Parts)

- 高压耐磨：优质合金钢锻造，内壁镀铬处理，显著延长寿命。(High Pressure Resistance: Forged alloy steel with chrome-plated bore for extended life.)
- 精准匹配：严格遵循 API 标准，完美适配主流泥浆泵。(Precision Fit: Strictly API compliant, perfectly fits major mud pump models.)
- 卓越密封：独特的几何设计，有效防止刺漏和压力损失。(Superior Sealing: Unique geometry prevents washouts and pressure loss.)
- 抗冲击：专为恶劣钻井工况设计，耐高压冲击。(Impact Resistant: Designed for harsh drilling conditions and high pressure.)



电话 (Tel / WhatsApp / WeChat):

+86 155 3128 3675

+86 139 3044 2199

邮箱 (Email): wales@oildrillingpump.com jackzhang@oildrillingpump.com

官网 (Website): www.donglipetroleum.com

地址 (Address): Zhizhao Industrial Park No.1 Road, Jiumen Hui
Ethnic Township, Gaocheng District, Shijiazhuang City, Hebei Province,
People's Republic of China

WEB BAR

