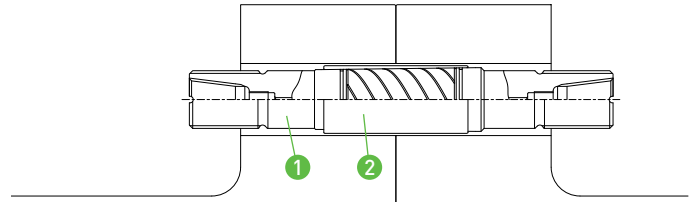




**Hydraulic Coupling Bolt
Installation and Removal**

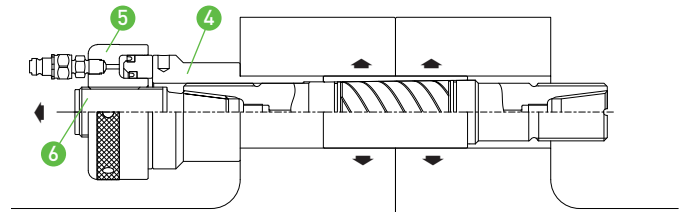
The HYCOBOLT Assembly is Positioned Into the Coupling

- Easy to Install in Clearance Condition
- Achievable Hole Preparation
- Retrofit Design
- All Types of Turbine & Coupling
- Reliable



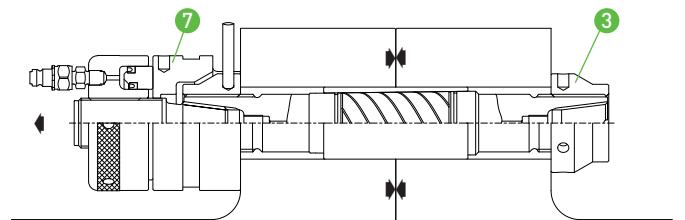
Controlled Expansion of the Sleeve by the Action of the Internal Tapered Bolt & Sleeve

- Fully Fitted Condition Achieved
- No Coupling Slippage or Stuck Bolts
- Fast & Easy to Install & Remove
- Concentricity Established & Held
- Black Nitride Surface Treatment of Bolt



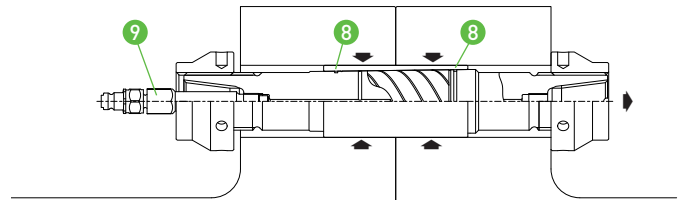
Hydraulic Tensioning Provides Balanced Loading of the HYCOBOLT

- Superior Installation & Removal Process
- Simplified Compact Hydraulic Tooling
- Proven & Safe Taper Thread Connection
- Controlled & Even Bolt Loading
- Unique HYCOBOLT Elongation Verification



After De-tensioning the HYCOBOLT is Removed by Oil Injection of the Internal Taper

- Unique Sealing for Bolt Removal
- Clearance Condition is Re-established
- Predictable & Effective Planning
- No Hole Damage or Re-machining
- The HYCOBOLT is completely Reusable



Key:

- | | |
|---------------------|------------------|
| 1. HYCOBOLT | 6. Puller |
| 2. Sleeve | 7. Load Bridge |
| 3. Nut | 8. Optional Seal |
| 4. Expansion Bridge | 9. Injector |
| 5. Tensioner | |