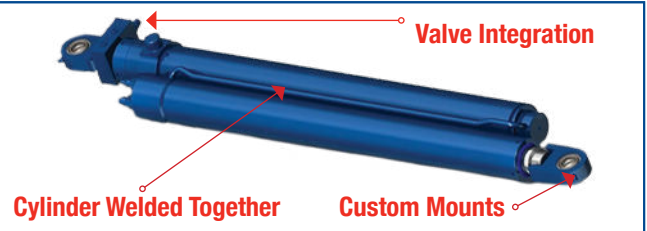


PIGGYBACK HYDRAULIC CYLINDERS

ENGINEERED BY TEXAS HYDRAULICS



A pair of overlapped cylinder tubes for applications requiring short retracted lengths with long stroke capacity. When performance, space, and reliability matter most, Texas Hydraulics Piggyback Cylinders deliver proven durability, precision, and efficiency.

Core Features:

- **Long Stroke & High Force with Compact Retracted Length:**
Overlapping sections provide long stroke without buckling limitations of small rod diameters typically found in telescopic designs.
- **Welded, Leak-Free Construction:**
Welded sections maximize strength & stiffness while eliminating external hoses and hydraulic fittings, providing leak-free reliability.
- **Valve Integration:**
Incorporates load holding valves into to a small hydraulic manifold, eliminating hose compliance thus maximizing hydraulic stiffness.
- **Interchangeable Seals & Internal parts:**
Simplifies maintenance across matching bore sizes.
- **Out & Down Functionality:**
Integrates outrigger leg and jack hydraulic circuits into a single cylinder, eliminating cat track hose management mechanisms.

Optional Features

- **Different Bore & Rod Sizes:**
Sections can contain different bore and rod sizes allowing hydraulic sequencing due to area ratio optimization.
- **Separable Construction:**
Sections can be designed with flanges allowing separate sections to be bolted together, easing transport and installation. The hydraulic tubing is then connected using threaded Lenz fittings to secure tubing into place.
- **Independent Operation:**
Each section can be designed to have separate hydraulic circuits to move independently from the other, beneficial in boom extend applications.
- **Hydraulic Cushions:**
Eliminate jerk providing enhanced comfort, precision & control.
- **Hollow Rod Tube:**
Reduces weight, with minimal affect on compressive load capacity.
- **Position Sensor Integration:**
Can be mounted in one or both sections.

Key Advantages:

- **Compact Power:**
Long stroke with a short retracted length saves space without compromising compressive load carrying performance.
- **Multi-Functional:**
Applications include: out & down, boom extend, platform raise, scissor lift, dump body, load eject, etc.
- **Consistent, Controlled Motion:**
Unlike telescopic cylinders, delivers steady load and speed throughout the stroke length.
- **Easy Serviceability:**
Interchangeable seals across bore sizes simplify maintenance.

Application | Markets



Jack/Outrigger Extend:	Compact retracted lengths for long extended strokes.
Boom Extend:	Maximum reach, maintaining maximized buckling stiffness, with minimal retracted length.
Wrecker & Recovery:	Reliable lift and extension for recovery equipment.
Platform Lift:	Smooth, controlled material handling.

Piggyback cylinder sections are typically welded together, with welded hydraulic tubing between, to minimize cost, weight, complexity, and potential leak points.

- Sequencing Control
- Load Holding
- Position Sensing
- Pressure Sensing
- Proportional Flow Control
- Separable sections w/detachable hydraulic tubing to ease installation.

Specifications

Total Stroke Lengths	2"-1,000" (50mm - 25m)
Maximum Cylinder Diameters	Rod 10" (250mm); Bore 16" (400mm)
Minimum Cylinder Diameters	Rod 0.50" (12mm); Bore 1.25" (30mm)
Maximum Operating Pressure	5,800 psi (400 bar)

Ordering & Support

Contact Texas Hydraulics, Inc. for custom solutions to meet your specific application needs and project requirements.

Email: inquiry@texashyd.com | **Website:** www.texashydraulics.com

