

## About RDI

RDI is a North American manufacturer of high pressure and low pressure unionized piping and manifold systems, with headquarters in Alberta. RDI also offers full-service Inspection and Recertification facilities strategically located throughout Canada and the US. We provide our clients with product sales, custom design and fabrication services, and complete aftermarket service and support for all pressure pumping and flow control equipment.

RDI's Engineering and Design department utilizes the latest technologies in developing and maintaining product standards. RDI is proud to have achieved ISO certification and API licensing, standards critical to meeting our stringent quality objectives. In collaboration with Engineering and Design, RDI's Welding and Fabrication facility manufactures flowline packages, custom skids, and custom orders. Whatever the request, RDI makes it happen.

RDI's Inspection and Recertification facilities are located in Alberta, British Columbia, Pennsylvania, Colorado, North Dakota and Texas. All inspections and recertifications are completed by highly qualified technicians. Once tested, all equipment is entered into our Iron Management System, which allows clients to track asset service histories online.

At RDI, our mission is to provide new and existing clients with on time delivery of quality products and services while continually pursuing customer and employee excellence. When you choose RDI, you are working with the preferred North American manufacturer of flow control products, a company that provides unmatched equipment quality and reliability.













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## Inspection & Recertification

RDI's Inspection & Recertification division provides complete asset traceability with our Iron Management System. Our system allows clients to track asset service histories from anywhere with an internet connection. RDI's recertification programs will significantly increase the life of your equipment and ensure the safety of your operations. All inspections and recertifications are performed by highly qualified UT, MPI Level II, API and AWS certified technicians, who use state of the art equipment and technology.

- Full recertification & post-job maintenance programs available
- Magnetic Particle Inspection (MPI)
- Ultrasonic Wall Thickness Testing (UT)

- Pressure testing, repair & rebuild
- Paint & banding to customer specifications
- Mobile Testing Units

## Welding, Engineering & Custom Fabrication

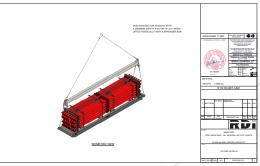
RDI's on-site Welding and Fabrication facility allows us to focus on customer requirements while utilization of the SMAW, GMAW and FCAW processes enable us to tackle almost any fabrication request with accuracy and efficiency. RDI produces low pressure flowline packages and fittings in various sizes and ratings. Along with that, RDI manufactures custom manifold and pipe skids – making us your one-stop-shop.

- Custom manifold and pipe skids
- API Q1, ASME B31.1 pressure vessels and ASME B31.3 process piping certified
- Flare Stacks

- Sand Catchers
- Production Equipment
- Separators High and Low Pressure









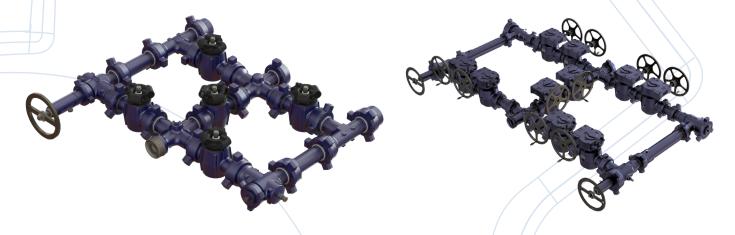




### **Manifolds**

RDI can supply any type of manifold configuration required: choke and kill, frac, cement, multi-well, and customer specific engineered designs. RDI manifolds are available in pressures up to 15,000 psi NSCWP†.

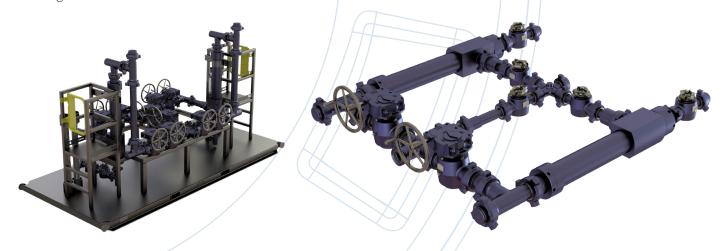
- Available in standard and sour (H2S) service\*
- Engineered containment and non-containment skids are available\*



### **Debris Catcher Manifolds**

RDI's Debris Catcher manifolds are designed to filter and capture debris from the well during completions prior to entering the downstream equipment. RDI's Debris Catcher manifolds are available in pressures up to 15,000 psi NSCWP†.

- Vertical and horizontal models and configurations available in standard and sour (H2S) service\*
- Engineered blow-down style and multiple barrels allow for continuous screening without shutting in the well for cleaning
- Screens available for multiple applications, engineered for easy removal and installation
- Engineered containment and non-containment skids are available\*



### **Swivel Joints**

RDI's Swivel Joints are designed and manufactured using high tensile alloy steel that is suited to handle some of the world's most abrasive environments such as fracturing, cementing, acidizing, and other high pressure applications. The RDI Swivel Joint handles fracturing fluids, extreme temperatures, and high flow rates common in the current shale plays. Additional erosion material under critical ball race areas increases the life of the swivel joint.

- Union connections: 2", 3" and 4" Fig. 1002 and Fig. 1502, standard service 15,000 psi NSCWP+"
- Interchangeable with other domestic manufacturers
- Uniformed wall thickness throughout the swivel bend increases service life
- Large stock of rebuild kits and replacement parts available



## **Plug Valves**

RDI's Plug Valves are designed and manufactured for a wide range of production, flow control, and pressure pumping applications. The proven floating plug design is the basis for all valves and assures tight sealing under high pressure and long service life. The RDI plug valve is available in pressures up to 15,000 psi NSCWP†.

- Models available in standard service and sour (H2S) service\*
- Union connections: 1", 1.5", 2", 3" and 4" Fig. 206, Fig. 602, Fig. 1002 and Fig. 1502\*
- Hydraulic, pneumatic, or gear operators available for all models\*
- RDI repair kits available for all models and include all the necessary parts for in field or in shop maintenance









# Low Torque Plug Valves

RDI's Low Torque (LT) Plug Valves are designed and engineered to exceed the industry's most severe temperature and pressure applications. The bottom entry design allows for easy maintenance, and our replaceable wear inserts allow the valve to be used in the most abrasive environments.

- Models available in standard service or sour (H2S) service\*
- RDI's repair kits are available and include all the necessary parts for in field or in shop maintenance
- Hydraulic and pneumatic actuators or manual gear ops available\*
- 2" and 3" models available in standard service





### **Choke Valves**

RDI offers adjustable and positive choke valves used primarily in choke and kill manifolds, flow thru manifolds, and test manifolds. RDI's chokes have a proven needle and seat design that provides flow restriction in high pressure applications.

- Models available in standard service and sour (H2S) service\*
- Available in pressures up to 15,000 psi NSCWP†
- 2" and 3" Fig. 602 and Fig. 1502 Models available in standard service









# Integral Fittings

RDI designs and manufactures a broad range of high quality, high pressure integral fittings in a wide range of configurations and sizes from 2" through 4" and pressure ratings up to 15,000 psi NSCWP.

RDI also offers a 5" x 7" Universal Fit version of our tees and crosses in a 2" Fig. 1502 configuration. This flexibility positions RDI as one of the most interchangeable manufacturers in the industry.

- Union connections: all sizes of Fig. 602, Fig. 1002 and Fig. 1502\*
- Models available in standard service and sour (H2S) service\*
- Crosses, tees, cushion tees (double cushion 90's), block ells, and specialty fittings are available in many configurations



# **Inline Swing Check Valves**

RDI's Inline Swing Check Valves provide isolation from back flow in high pressure treating lines, fracturing, and well servicing applications. The swing check valve uses a proven flapper and seat design, assuring a tight seal under all operating conditions. The flapper and seat are titanium nitrided to assure long service life and are resistant against a wide range of abrasive fluids. The RDI swing check valve is available in pressures up to 15,000 psi NSCWP†.

- Models available in standard service or sour (H2S) service\*
- Union connections: 2" Fig. 602 and 2" Fig. 1502



# **Top Entry Swing Check Valves**

RDI's Top Entry Swing Check Valves offer one-directional flow control for fluids heavily laden with proppants, ball sealers, and other solids.

- Models available in standard service\*
- Union connections: 3" Fig. 1502, standard and reverse flow



### **Dart Check Valves**

RDI's Dart Check Valve is a spring-loaded valve used in extreme nitrogen and carbon dioxide service. The dart check's independent pressure actuated response system is initiated following a pressure loss, requiring no personnel to be present to commence protection.

- Available in standard service and sour (H2S) service\*
- Union connections: 2" Fig. 1502, standard and reverse flow



### **Pressure Relief Valves**

RDI's Pressure Relief Valves are made to provide over-pressure protection for high pressure equipment such as manifolds, vessels, and reciprocating plunger pumps up to 15,000 psi NSCWP†. These valves make use of the system's own hydraulic force to open at the preset pressure, and will stay open while fluid flow is gradually diverted out of the discharge port until the system pressure drops below the preset limit. Once the pressure of the inlet fluid falls below the set spring pressure, the ball will be pushed back onto its seat and the fluid can pass downstream.

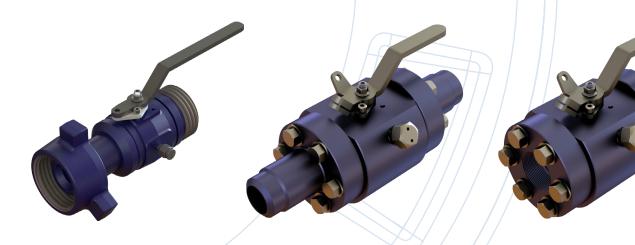
- Models available in standard service\*
- Union connections: 2" Fig. 1502



### **Ball Valves**

RDI's Ball Valves were are designed as an economical light-weight alternative to plug valves, while still maintaining an integral design. The floating ball design assures bubble-tight sealing at pressure, and the standard grease fittings allow the user to flush abrasives from the sealing face. The RDI ball valve is available in pressures up to 10,000 psi NSCWP†.

- Union, flanged and butt weld connections: 2" Fig. 206, Fig. 602, Fig. 1502, and 3" Fig. 206
- Optional pneumatic actuator for ESD applications are available



# Integral Pup Joints

RDI's Integral Pup Joints are designed and manufactured from seamless, forged one-piece construction to give a smooth uninterrupted bore and greater flow. They are used on high pressure discharge lines, flowlines and choke and kill lines. RDI Integral Pup Joints are available in pressures up to 15,000 psi NSCWP†.

- Models available in standard service and sour (H2S) service\*
- Union connections: 2" and 3" Fig. 1502. (4" Fig. 1502)\*
- Ideal for sour (H2S) and abrasive service, these pups are a long wearing alternative when welded or threaded pup joints are not desired
- A retention ring prevents the nut from sliding down the pup and injuring the operator



# **NPST Pup Joints**

RDI's Non-Pressure Seal Thread (NPST) Pup Joints are a lightweight pup capable of up to 15,000 psi NSCWP. The NPST pup joints are available with an optional detachable wing nut that allows fast, easy on-site serviceability. RDI's NPST pup joints are well suited for abrasive applications where a smooth bore is needed to assure minimum turbulence.

- Available in 2", 3" and 4" Fig. 1002 and 1502 standard service (Also 2" Fig. 607 sour H2S service)\*
- NPST pup joints are offered in up to 20 foot lengths
- Special lengths can be provided with minimal lead time



## **Welded Pup Joints**

RDI Welded Pup Joints are designed and manufactured at our own welding facility, which allows us to focus on our customers' needs. Our facility is ASME B31.3 certified and all pup joints are fully pressure tested and certified.

- Available in 2", 3" and 4" Fig. 206 rated at 2000 psi NSCWP† as well as 2", 3" and 4" Fig. 602 rated up to 6000 psi NSCWP, 1502 connections to 10,000 psi and flanged connections to 15,000 psi†
- RDI welded pup joints are offered in up to 20 foot lengths
- Special lengths can be provided with minimal lead time



### **Union Crossovers**

RDI supplies the oil and gas industry with a complete catalogue of integral union crossovers and adapters to suit many applications. RDI offers union x union, union x NPT, union x flange and union x EUE.

- Large inventory of standard lengths and connections
- Custom lengths and other connections can be special ordered\*
- API flanged crossovers can be made available as a monogrammed fitting
- Crossovers can be offered as standard or sour (H2S) service



NOTE: Max NSCWP† for crossovers is the lower pressure rating when using mismatched Union numbers. These crossovers are easily identified by their safety purple color code.

## **Data Headers**

RDI Data Headers are integral pup joints manufactured with threaded outlets to provide access points for gauges, thermometers, sensors or injection equipment.

- Union connections: 2", 3" and 4" Fig. 206, Fig. 602 and Fig. 1502\*
- Outlet ports offered as NPT or Autoclave\*
- Standard length is 2 feet; custom lengths are possible\*



# **Blanking Caps**

Whether being used to contain full system pressure or for the protection of threads while transporting, RDI has a blanking cap for your application.

- Models available in standard service and sour (H2S) service
- All Union connections available
- Various Autoclave and NPT tap configurations available\*





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