

# OILFIELD EQUIPMENT PRODUCTS



For over 60 years OTECO, Inc. has been providing high quality oilfield equipment to the worldwide oil and gas markets.

Operating from our modern 120,000 square foot manufacturing facility in Houston, Texas, OTECO continues to provide products to the high quality standards for which we are known.



<http://www.OTECO.com>

# Gate Valves

## DETAILS

### OTECO Model 72 Gate Valve

**Models**  
**Model 72**  
**Model 66<sup>1</sup>**

**Sizes**  
**2 inch**  
**3 inch**  
**4 inch**  
**5 inch<sup>2</sup>**

**Working Pressures**  
**2,000 psi**  
**3,000 psi**  
**5,000 psi**



#### Model 72 Gate Valve Overview

Designed for the oilfield, the Model 72 gate valve is the proven, reliable choice for applications requiring up to 5,000 psi working pressure and 250 deg. F (121 deg. C) temperatures. The Model 72 gate valve is designed for maximum flexibility and reliability and is ideal for corrosive water flood applications, sour gas and crude oil service, as well as certain wellhead applications.

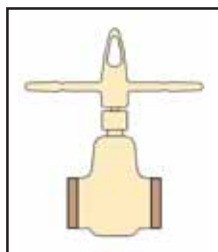
Whether used in your mud system, floor and standpipe manifold, or flow line application, the Model 72 is field proven for easy operation, tight shut-offs, long life, and simple, fast, low-cost field renewal. Manufactured at our Houston facility, each Model 72 is rigorously tested prior to shipment from the factory.

#### Model 72 Features & Benefits

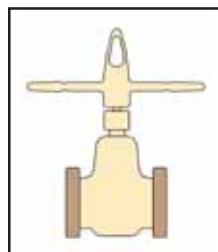
- Utilization of Body Subs allow change out of valve connections without changing valve body or entire valve.
- Full rising, one piece forged gate and stem displays current valve orientation: open, partially open, or closed.
- Extra large ball bearings and heavy duty stem threads minimize torque required for valve operation.
- Proven interlocking gate packing and wear plate design protects the valve body and cap during repeated valve opening and closing.
- Standard gate packings are designed for a wide range of fluid environments.
- Model 72 parts are interchangeable with Cameron type 'S' Flex-Seal valve parts.

Descriptive Numbers by Size and Pressure Rating

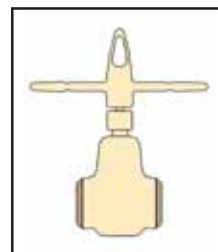
Pressure	Size (inches)			
	2	3	4	5
<b>2,000 psi</b>	V-224	V-324	V-424	V-524
<b>3,000 psi</b>	V-236	V-336	V-436	V-536
<b>5,000 psi</b>	V-250	V-350	V-450	V-550



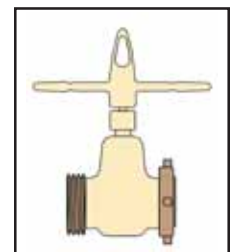
Threaded Subs



Flanged Subs



Buttweld Subs



Union Subs

#### Model 66

Although no longer in production, Model 66 support and replacement parts are still available. Model 66 parts are interchangeable with Cameron type 'R' Flex-Seal valve parts.

#### Notes

<sup>1</sup> Replacement parts only

<sup>2</sup> 4 inch full port with 5 inch connections

### OTECO Pressure Relief Valves



#### Pressure Relief Valve (PRV) Overview

The OTECO type PRV (shear type) Relief Valve helps ensure protection for slush pumps, manifolds, and other expensive components used in drilling operations. The PRV relief valve utilizes shear pins to relieve overpressure during drilling and other operations. Hardened stainless steel stems and stainless steel liner subs provide improved corrosion resistance resulting in higher reliability and longer valve life. With the OTECO PRV pressure relief valve, replacing shear pins is fast and easy because of the easy to remove safety cover. The OTECO PRV is available in 2 inch low, standard, and high pressure, as well as 3 inch high pressure models.

#### PRV Features & Benefits

- A metal chart is installed on every valve detailing shear pin selection specifications.
- Hardened stainless steel stems and liner subs provide corrosion resistance.
- PRV relief valve parts are interchangeable with Cameron style shear relief valve parts.

### Manual Reset Relief Valve



#### Type RR Overview

The type RR manual reset relief valve protects slush pumps and mud manifolds while guaranteeing greater safety in operation. The RR relief valve automatically snaps to a full open position when the predetermined pressure is exceeded or can be manually opened by simply pressing the manual release button. The position of the release button indicates at a glance whether the valve is open or closed. The RR is designed with a pressure setting indicator (available in metric units) which can be adjusted to any setting within the operating range by simply turning a nut on the top of the valve.

#### RR Features & Benefits

- Release pressure setting is not affected by vibration during operation.
- Utilizes stainless steel piston and Cadmium-plated sub for improved corrosion resistance.
- Does not require shear pins.
- Fully enclosed bonnet assembly retains grease coating on moving parts extending service life.
- Bonnet assembly is interchangeable with Cameron Type 'A' and Type 'B' reset relief valves.

### Valve Rebuilding Service

OTECO can rebuild or exchange your worn or damaged OTECO, Cameron Type 'A' or Type 'B' reset relief valve bonnet assemblies. Contact your OTECO distributor or sales representative for more information.

Type  
PRV  
RR

Sizes  
2 inch  
3 inch

Working  
Pressures  
up to 5,000 psi

Connections  
Flanged  
OTECO Style  
Connectors  
Threaded  
Union  
Combinations

Trim Options  
Standard  
Waterflood  
Sour Gas

# Pressure Gauges

## DETAILS

### Models

- Model 6
- Model 7
- Model 8

### Sizes

For Dial Case  
4-7/8" to 8-1/8"

Working  
Pressures  
up to  
20,000 psi

### Optional

Connections

Flanged  
OTECO Style  
Connectors  
Threaded  
Union

Trim Options

Standard  
Waterflood  
Sour Gas

Dial Face

Units  
PSI  
kPa  
Bar  
kg/cm<sup>2</sup>

### Notes

All models are  
available with  
luminous dial  
faces

## OTECO Pressure Gauges

OTECO pressure gauges have a built in dampening mechanism to minimize wear and mechanical shock. In addition, the heavy duty seals restrict line fluid from entering the gauge mechanism. The gauge mechanism itself is surrounded by a special oil providing resistance to extreme temperatures, as well as vibration and shock. For additional safety, a low pressure plug is installed to prevent gauge case and lens damage. All gauges are available for standard, salt water, sour gas, and oil service.



### Model 6

- Standard end connection : combination 2 inch line pipe threaded male with a 1 inch line pipe threaded female connection.
- Pressure range : 0 - 20,000 psi.
- Dimensions : 4-7/8 inch diameter dial case and 9-7/8 inch in height.
- Interchangeable with : Cameron type 'F', Totco type '6', Geosource type 'F', Wadeco model '10', and Gauges International model '6'.

### Model 7

- Standard end connection : 2 inch line pipe threaded female connection.
- Pressure range : 0 - 6,000 psi.
- Dimensions : 7-5/8 inch diameter dial case and 14-3/4 inch in height.
- Interchangeable with : Cameron type 'D', Totco type '4', Geosource type 'D', Wadeco model '12', and Gauges International model '7'.



### Model 8

- Standard end connection : combination 2 inch line pipe threaded male with a 1 inch line pipe threaded female connection.
- Pressure range : 0 - 20,000 psi.
- Dimensions : 8-1/8 inch diameter dial case and 13-1/4 inches in height.
- Large 6 inch dial face incorporates a tough, impact resistant acrylic lens.
- Dual unit-of-measure dial face available.

## Gauge Rebuilding Service

We offer gauge rebuilding and refurbishment services. We can repair worn or damaged gauges to "like new" condition. The new or rebuilt pressure gauge is packed in an individual cardboard box with a thick layer of foam protecting the gauge itself.





## Manifold Fittings

OTECO manufactures ten different styles of manifold fittings in 2 inch, 3 inch, 4 inch, and 5 inch with working pressures ranging from 3,000 psi to 5,000 psi with test pressures up to 10,000 psi. Each fitting can be supplied with either line pipe threads, or Schedule XX or 160 buttweld end connections. Special connections are available upon request. All fittings are hydrostatically tested prior to shipment and full certification can be supplied upon request.

Available OTECO Manifold Fittings include:

- 45° Long Sweep Ells
- 90° Long Sweep Ells
- 90° Long Sweep Ells with 2 in. outlet
- 160° Standpipe Gooseneck
- 160° Standpipe Gooseneck with top outlet
- 180° Standpipe Gooseneck
- Long Sweep Full Flow Cross
- Long Sweep Full Flow Tee
- Long Sweep Tee
- Long Sweep Y

## Standpipe and Manifold Assembly Fabrication Services

OTECO manufactures to customer specifications complete 5,000 psi standpipe manifold assemblies. Every standpipe manifold is sandblasted, epoxy-coated and thoroughly tested prior to shipment.



## Wireline Equipment

OTECO manufactures wireline turnback assemblies and components. In addition, we have replacement rollers for BJ model code Roliguide. OTECO also offers complete wireline guide units and wireline guide hanging assemblies for most beam or angle type derricks.



## Mud Guards

OTECO mud guards come in two models: the MG-600 and MG-800. Our mud guards have proven cost effective in saving the expense of lost drilling fluids, reduced labor for rig wash down, as well as reducing the potential for accidents due to slippery rig floors. The MG-600 is 6 ft. x 10-<sup>3</sup>/<sub>4</sub> in. and can handle drill pipe sizes from 2-<sup>3</sup>/<sub>8</sub> in. to 5-<sup>1</sup>/<sub>2</sub> in. The MG-800 is 6 ft. x 16 in., it's larger cavity is designed for drill pipe sizes from 2-<sup>3</sup>/<sub>8</sub> in. to 6-<sup>5</sup>/<sub>8</sub> in. and can handle larger volumes of line fluids. Both models can be supplied with neoprene or nitrile end and side seals.

## Oil Guards

Similar in design to our mud guards, the OTECO Oil Guard MG-500 is 4 ft. x 6 in. and is designed to accommodate tubing sizes ranging from 2-<sup>3</sup>/<sub>8</sub> in. to 3-<sup>1</sup>/<sub>2</sub> in.

## OTHER PRODUCTS

### Box Wrenches



### Chain Connectors



### Washpipe & Packing



### Tong Pull Back Straps



### Balance Straps





## BOP and Control Head Products

OTECO provides replacement packing units and seals for the Hydril 'GK' & 'MSP' and Regan type 'K' annular blow out preventors. These items are available in natural, neoprene, and nitrile rubber compounds with each unit tested to its full working pressure prior to shipment. In addition, OTECO offers replacement rubbers for Shaffer type '39', Guiberson types 'A' & 'B', and Cameron types 'QRC', 'SS', and 'U' ram type blow out preventors.



## Diaphragms & Bladders

OTECO supplies replacement diaphragms and parts for the Hydril and Mattco 10 and 20 gallon pulsation dampeners. These diaphragms are molded in one piece and are available in 1500 psi, 3000 psi, and 5000 psi ratings. They also have a metal insert molded into the bottom to prevent extrusion into the bottom flange connection. Stabilizers, plates, screws, lock washers, bottom plate gaskets, charging valves, and pressure gauges (0-6000 psi) are also available. OTECO also supplies replacement bladders for the Pioneer Solidsmaster (3 in.), Sandmaster (6 in.) and Siltmaster (4 in.) made from durable nitrile compounds.



## Pipe and Kelly Wipers

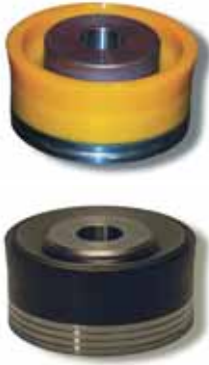
OTECO offers a wide range of pipe and Kelly wipers. These pipe wipers are offered in single, double, oval, and handle bar types and are available in either natural (black), and oil resistant (red) nitrile rubber compounds. In addition, the double wipers are available in solid, split, and split rap-a-round configurations. OTECO pipe wipers offer greater tearing resistance due to a reinforced insert molded to the resilient live rubber. OTECO Kelly wipers are molded from the same high quality rubber as the pipe wipers and are offered for both square and hexagonal Kellys. The Kelly wipers are reinforced with a bonded metal ring to provide longer service life for the wiper as well as the Kelly drive bushing.



## Rotating BOP & Tubing Stripper Rubbers

OTECO manufactures a wide range of models and sizes of rotating BOP and tubing stripper rubbers. The current rotating BOP models offered include the interchangeable parts for the Shaffer Type 50, 74, 79, Lynn International, Shaffer 51, and the Grant 7068. Tubing stripper rubbers are offered for the following stripper heads :

- Beaumont Iron Works PX-70 and PX-107
- Cameron Petromec PC & QD
- Guiberson Type J2 & JU
- Gulfco Type TT & S6
- Hillerman Kelley Type HK
- Hinderliter Type SS, 4-S, & 4-1
- Hydril Type RS
- Larkin Type K & SR
- Norris Hinderliter 4-1
- Oil Center Tool Type J-1, JF-1, Type T-16
- Rector Type R and Type SS



## Bonded Urethane and Premium Pistons

OTECO's innovative bonded polyurethane piston dramatically extends service life in triplex mud pumps with ample water cooling. Harder, more dense polyurethane construction provides superior resistance to abrasive fluids providing optimum service life in harsh drilling conditions. In addition, the urethane construction is especially resistant to chemicals and oil based drilling muds with varying aniline points.

The multi-ply, fabric reinforced backing used in the production of the piston rubbers provide positive, wear resistant seals. High tensile strength, resistance to chemicals, hydrocarbons, and abrasion, long lasting service, and full interchangeability with other API designed pistons makes the OTECO Premium piston a sound value.



## Premium Stem Guided Valves & Seats

The OTECO premium stem guided valve and seat features an extra wide metal seal on the valve flange. The serrated upper surface on the valve gives a longer non-breathing seal between valve body and insert while the rigid seat cross-arms give greater strength and positive sealing. The strong, thick, valve knock off nut holds the insert tightly reducing flex and breathing which lessens the chance of foreign matter getting between valve and insert. The premium stem guided valve and seat provide good value, are economically priced, and weigh less than many competitors valve and seat.



## Washpipe & Packing

OTECO washpipe is precision ground for exact alignment of all flanges, threads, and packing. Each piece is manufactured from high quality alloy steel which is hard surfaced in all critical wear areas for corrosion and wear resistance. Our washpipe packing is molded from a fabric and synthetic composition what has been impregnated with a rubber compound highly resistant to water, oil, and abrasion.

## Piston Rods and other Accessories

In addition to the above products, OTECO also offers a full complement of premium and induction hardened piston rods, crosshead extension rods, valve and cylinder head gaskets, and rod clamps.

# Specialty Items



## OTECO Connector

The OTECO Connector serves the same function as a high pressure flanged assembly. The hub element is the equivalent of a flange, the clamps serve the same purpose as flange bolts, and the seal ring acts as the pressure gasket. The OTECO connector is used in extreme conditions where corrosive or dangerous fluids are present and/or elevated or cryogenic temperatures are encountered.

- Available in Standard sizes 1 inch to 12 inches and Heavy Duty sizes B to F
- The OTECO Connector is much smaller and lighter than a standard flanged connection
- Requires minimum assembly and disassembly time
- The OTECO Connector is competitively priced
- Features precisely manufactured components made from certifiable materials



## OTECO Shock Pads

OTECO manufactures shock pads for offshore rig jacking systems. Each pad is made with specially formulated rubber, molded between layers of corrosion resistant steel plates and is tested under load prior to shipment. This product is available upon request only and is custom manufactured to meet your specific requirements. For more information please contact our Houston office or your nearest OTECO distributor or sales representative.

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A digital version of our Product Catalog can be found on our web site and is available on CD-ROM per request, just call or e-mail.