



**HILTON
FABRICATED &
CUSTOM VALVES**



Hilton Valve Innovation

In 1944 Harold Hilton, an Engineering Officer on a U.S. Navy destroyer, designed and fabricated a replacement valve for a damaged shipboard valve from the ship's maintenance shop. His ingenuity, initiative and experience fabricating valves served him well for a decade until he was discharged and founded Hilton Valve in 1952. Hilton Valve initially specialized in fabricated knife gate valves mainly for pulp and paper mills. Later the company expanded its product line to include large diameter and custom fabricated valves for industries including water, hydropower, energy, process, mining, material handling and maritime. Hilton Valve gained a reputation for design innovation, reliable product performance, and quick deliveries.



Harold Hilton, Founder (right) and early Bonneted Knife Gate Valve

Design Flexibility and Quality

Fabricated construction allows design flexibility for compliance to U.S. and International Standards. Valves can be built of any weldable alloy with selection based on specifications, media and operating conditions. The use of certified plate material assures design integrity and reliable valve quality. Plate material is also well suited to the application of special-purpose coatings and hard facings which are applied at the Hilton facility.

Reduced Manufacturing Time

Plate material is readily available in all alloys which improves lead times and eliminates potential foundry and casting delays. On severe service applications where valve wear surfaces require periodic refurbishing, fabricated plate construction is more easily repaired than cast valves resulting in quicker turnaround and reduced maintenance cost.

Application Design and Collaboration

Hilton creates unique design concepts that match the specific application requirements. By collaborating with customers to define valve performance specifications, Hilton engineers valves to meet diverse and individual customer needs. This process helps the engineers develop a valve that meets the material and application requirements of the customer.

Manufacturing and Engineering Capabilities

Full range of manufacturing capabilities are available including in-house fabrication, welding, hard facing, machining, assembly, testing and quality control. Material and test certificates are available on all valves and welding is performed by certified welders.

Full range of engineering software is available including SolidWorks, AutoCAD Design and Finite Element Analysis to ensure the valve design and performance meet exacting specifications and performance criteria. Products are designed and manufactured to U.S. or international design, dimensional and piping standards and to individual customer specifications as required.



In-house machining, 72" Bonneted Knife Gate Valve

Customization

Hilton specializes in developing customized solutions to meet specific field requirements. Hilton engineering can retrofit damper blades and customize actuation for power plant condenser systems in remote locations with space limitations. Hilton also designs and manufactures hydraulic power units for emergency or backup power. Hilton Hydraulic Power Units (HPU) are custom-designed to meet individual applications and are available in a range of configurations. The HPU accepts various power sources such as electric, and gas or diesel for remote applications.

Field Service and Repairs

Customer commitment begins with quality manufacturing and continues through after-sale support that assures proper valve installation, extended valve life and long-term valve economy. Services include start-up and commissioning of new valve systems, field service and maintenance support for installed valves. Other services include factory refurbishing and repair of valve wear components. Factory repair includes an engineering analysis of components and materials to return valves to new condition. The analysis maximizes valve life at the lowest cost with the quickest turnaround.

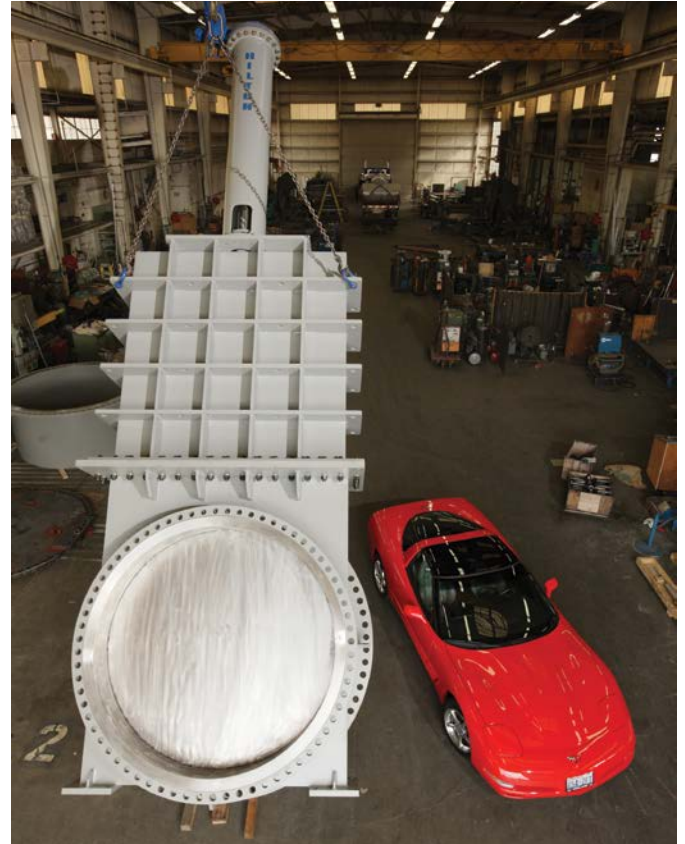
- Start-up and Commissioning Services
- Field Service and Maintenance Support
- Factory Refurbishing and Repair Services



In-house certified welding of all alloys & hardfacing

DeZURIK Difference

In 2012 Hilton Valve was acquired by DeZURIK to become one of the broadest knife gate and engineered valve companies in the industry. The combined resources represent over 120 years of standard, fabricated and custom valve experience and expertise. DeZURIK has a reputation for collaborating with customers to design and engineer valves that provide superior quality, performance and service.



90" Inlet x 102" Outlet Throttling Knife Gate, 30 psi, PG&E Pitt River Dam, Northern California

Wide Selection of Valve Styles

Hilton manufactures a wide variety of valve styles to meet your custom application requirements. The selection charts on the following pages serve as a starting point in the valve selection process. For additional information or to contact your local representative, visit us at DeZURIK.com.



Jet Flow Gates

SIZE RANGE: Through 96" (2400mm)

PRESSURE RATING: up to 400 psi (2800 kPa) CWP

SEATING: Metal or Resilient

MATERIALS: Valves are normally supplied with epoxy coated carbon steel body with bronze seat ring and stainless steel gate. Other materials available upon request.

- High head free discharge up to 400 psi
 - Accurate flow control
-



Fixed Cone Valves

SIZE RANGE: Through 84" (2130mm)

PRESSURE RATING: up to 150 psi (1035 kPa)

SEATING: Metal or Resilient

MATERIALS: Valves are normally provided in carbon steel with stainless steel in critical components. Also available with solid stainless construction.

- Designed for continuous flow control with free discharge
 - Available with valve hood for discharge jet control
 - Optional baffles for energy dissipation
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Throttling Knife Gate Valves

SIZE RANGE: Through 144" (3600mm)

PRESSURE RATING: to 400 feet of head (173 psi)

SEATING: Metal or Resilient

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Typical construction is carbon steel body with stainless steel wetted parts.

- Free discharge up to 100 psi
 - Designed for throttling service
 - Economical alternative to a Jet Flow Gate or Fixed Cone Valve for low head applications
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Knife Gate Guard Valves

SIZE RANGE: Through 144" (3600mm)

PRESSURE RATING: to 400 feet of head (173 psi)

SEATING: Metal or Resilient

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Typical construction is carbon steel body with stainless steel wetted parts.

- Isolation of Jet Flow Gates, Fixed Cone Valves or other flow control valves in free discharge applications



Bonnetless Knife Gate Valves

SIZE RANGE: 2-60" (50-1500mm)

TEMPERATURE RANGE: -40 to 2000°F (-40 to 1050°C)

PRESSURE RATING: 25-300 psi (170-2070 kPa) CWP

SEATING: Metal or Resilient

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.

- AIS Compliance
- Slurry
- Abrasive Liquids
- Dry Materials



Bonneted Knife Gate Valves

SIZE RANGE: 2-144" (50-3600mm)

TEMPERATURE RANGE: -40 to 2000°F (-40 to 1050°C)

PRESSURE RATING: to 400 psi (2800 kPa) CWP

SEATING: Metal or Resilient

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.

- Equipment Isolation
- Repackable Under Pressure



High Pressure, High Temperature Knife Gate Valves

SIZE RANGE: 6-24" (150-600mm)

PRESSURE RATING: ASME Class 600

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.

- Severe Service Designs and Materials



Split Gate Valves

SIZE RANGE: 6-48" (150-1200mm)

TEMPERATURE RANGE: to 2000°F (1090°C)

PRESSURE RATING: to 150 psi (1030 kPa)

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.

- Steel mill blast furnace dust



Rectangular Knife Gate Valves

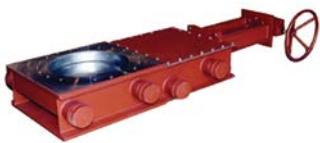
SIZE RANGE: 4-48" (100-1200mm)

- Custom Applications

TEMPERATURE RANGE: to 2000°F (1090°C)

PRESSURE RATING: to 300 psi (2070 kPa) CWP

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.



Bonneted Slide Gate Valves

SIZE RANGE: to 48" (1200mm)

- Column cutting materia handling service

TEMPERATURE RANGE: to 2000°F (1090°C)

PRESSURE RATING: to application requirements

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.



Wedge Gate Valves

SIZE RANGE: 8-48" (200-1200mm)

- Tight shut off control of gases and fluids

TEMPERATURE RANGE: to 2000°F (1090°C)

PRESSURE RATING: to 600 psi (4140 kPa) CWP

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.



Thru-Port Knife Gate Valves

SIZE RANGE: 4-48" (100-1200mm)

- Slurries

TEMPERATURE RANGE: to 2000°F (1090°C)

- Solids

PRESSURE RATING: to 400 psi (2760 kPa)

- Granular Applications

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Typical construction is carbon steel body with stainless steel wetted parts. Optional abrasion and corrosion resistant designs with hard facing available.

- Standing Column Cutting



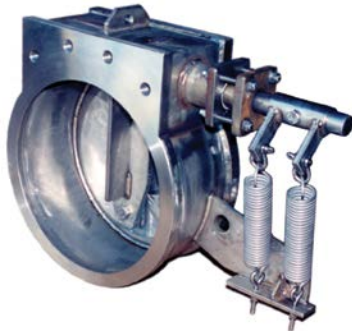
Material Handling Knife Gate Valves

SIZE RANGE: 4-48" (100-1200mm)

TEMPERATURE RANGE: to 2000°F (1090°C)

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.

- Stationary Column of Granular Material



Wafer Swing Check Valves

SIZE RANGE: 12-60" (300-1500mm)

TEMPERATURE RANGE: to 1000°F (540°C)

PRESSURE RATING: to 300 psi (2070 kPa) CWP

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.

- Horizontal Flow
- Narrow Face-to-Face



Tilting Disc Check Valves

SIZE RANGE: 12-60" (300-1500mm)

TEMPERATURE RANGE: to 1000°F (540°C)

PRESSURE RATING: to 300 psi (2070 kPa) CWP

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.

- Large Diameter Flow
- Narrow Face to Face



Swing Check Valves

SIZE RANGE: 3-60" (80-1500mm)

TEMPERATURE RANGE: to 1000°F (540°C)

PRESSURE RATING: to 300 psi (2070 kPa) CWP

MATERIALS: Valves are available in solid or wetted parts construction in any weldable alloy. Optional abrasion and corrosion resistant designs with hard facing available.

- Water Pumping Stations
- Cooling Water Systems
- Station Service (water)

Customized Hydraulic Power Units

Hilton Hydraulic Power Units (HPU) are designed and manufactured to meet custom field application requirements. For additional information or to contact your local representative, visit us at DeZURIK.com.



Hydraulic Power Unit (HPU) Systems

The HPU system skids include all necessary components and a control panel to drive single or multiple hydraulic cylinder valve actuators. Custom HPU skid designs are engineered to meet challenging environmental criteria and site space constraints. Control panels are designed to operate the HPU as a standalone system or integrate with an existing SCADA system.



Low Pressure Hydraulic Accumulator Systems

The low pressure hydraulic accumulator system is configured to deliver continuous power for valve operation and to provide emergency power in case of power failure. For throttling or valve positioning applications, low pressure hydraulic accumulators deliver a steady supply of power for accurate control.

Sales and Service

For information about our worldwide locations, approvals, certifications and local representative:

Web Site: DeZURIK.com E-Mail: info@DeZURIK.com



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