Cornerstone® VALVE

SEVERE SERVICE ENGINEERING

EXTREME VALVES







CORNERSTONE VALVE

SEVERE SERVICE ENGINEERING

Cornerstone® VALVE

SEVERE SERVICE ENGINEERING

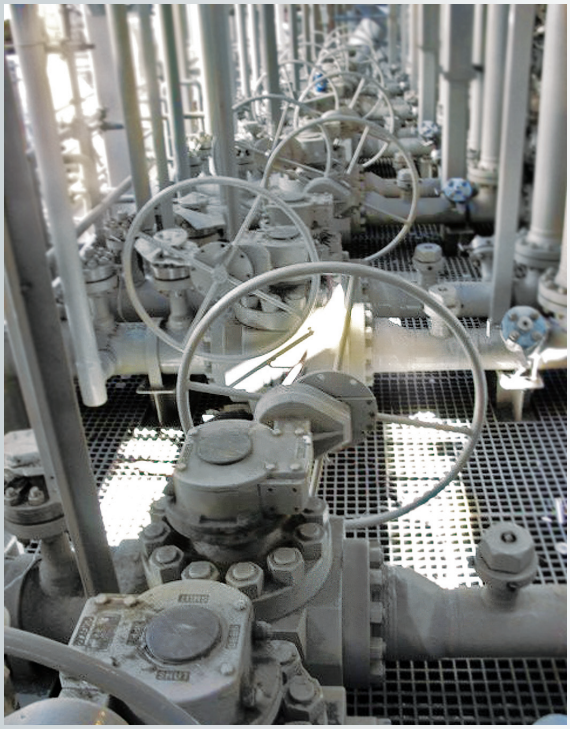


Severe industry conditions can lead to extreme consequences in the blink of an eye. Harsh industry environments can create plant and repair downtime and risks to employee safety. To prevent such disasters, companies around the world turn to the experts at Cornerstone Valve.

Cornerstone's focus on severe-service valves, designed for industry-specific conditions, is legendary. With over 200 years of combined experience in creating valves for brutal conditions, Cornerstone Valve works with its customers to develop valves they can count on – day in and day out.

INDUSTRIES SERVED:

- Oil & Gas Upstream
- Oil & Gas Midstream
- Oil & Gas Downstream
- Power Generation
- Refining
- Chemical & Petrochemical
- Pulp & Paper
- Mining
- Aerospace
- LNG/Cryogenic



QUALITY

In an industry where reliability is a must, why take a chance on unknown product integrity?

Quality is realized at every level of the organization utilizing a process approach platform. Each component within a Cornerstone valve assembly has a certificate (C of C, or CMTR) for verification. Each valve, along with its components, can be tracked to its source with historical records maintained for a 10-year minimum.

Standard operating procedure at Cornerstone Valve includes:

1. Customer valve and testing specifications incorporated.
2. Each valve tested, cycled fully, and leakage verified to applicable industrial API, ISO/ANSI standards.
3. All testing and inspection data points are documented.
4. A complete design package for every valve manufactured
5. Valves certified to the customer requirements and applicable design standard.

Cornerstone produces valves you trust – for your business and employee safety.

SERVICE

Repair Service:

- In-house repair – Call 281-880-8188 with instructions for shipping/authorization
- On-site repair – our trained and certified field service personnel are ready and available to be transported to your site – onshore or off.

Training:

Cornerstone's personnel are available to train your staff in the operation and maintenance of valve product s.

Part of Cornerstone's mission is to help educate clients in the selection of options available for each valve and the importance of those choices. We want to be your partner in developing valve for your business.

Cornerstone® VALVE
SEVERE SERVICE ENGINEERING



Oil & Gas Production

High pressure, high temperature, high cycle rate, extreme reliability is a must. Hard-facing cobalt-based alloys are frequent industry solutions.



Our solidly built ball valves are available with:

- Top Entry Ball Valves
- Top Entry Swing Check Valves
- End Entry Ball Valves
- Rotary Control Valves/Chokes

Oil & Gas Subsea

Deep installations – deep investments. Cornerstone recommends a one-piece top-entry valve with an integral balltrunnions stem for control, alignment and maximum pipe stress resistance during installation.



Our multiple sealing systems assure no leaks and are available in:

- Top Entry Ball Valves
- Top Entry Swing Check Valves

Oil & Gas Topside

Oil & Gas Topside surfaces need to be overlaid with a corrosion resistant alloy.

Hub end connection valves reduce the overall weight. With non-flanged connections, shorter face-to-face means less space, less weight.



Top entry, in-line serviceable valves with hub end make change-out or repair a snap - in place.

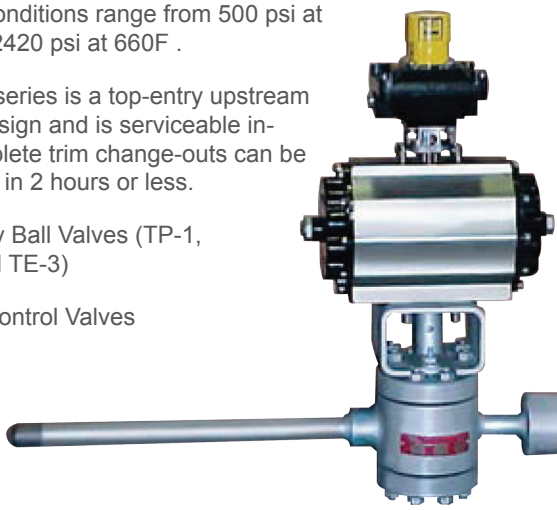
Industry Specific Valves:

- Top Entry Ball Valves
- Top Entry Swing Check Valves
- End Entry Ball Valves
- Rotary Control Valves/Chokes

Power Generation

Industry conditions range from 500 psi at 1065F to 2420 psi at 660F .

Our TP-1 series is a top-entry upstream sealing design and is serviceable in-line. Complete trim change-outs can be performed in 2 hours or less.

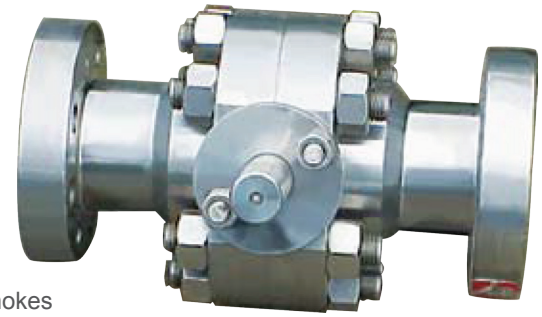


- Top Entry Ball Valves (TP-1, TE-1 and TE-3)
- Rotary Control Valves

Chemical & Petrochemical

These are Cornerstone's workhorse valves. In the face of lethal media, corrosive application and toxic emissions, these valves don't give up.

One of the industry recommended valves has a solids-proof design that has special scraper-seat faces cleaning the ball every cycle – preventing build-up.



Industry Specific Valves

- Top Entry Ball Valves
- Top Entry Swing Check\ Valves
- End Entry Ball Valves
- Rotary Control Valves/Chokes
- Split Body Ball Valves

Refining

Operating conditions to 1650ºF require valves manufactured to meet site-specific safety plans. Suitable metal-to-metal wear parts, live loaded fire seats, body cavity "solids proofing" and self-cleaning surfaces are just part of the specifications available from Cornerstone Valve.



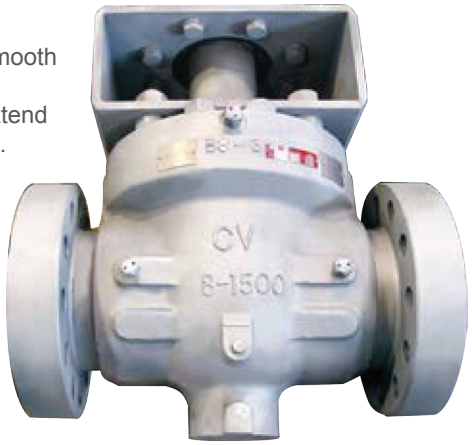
Our valves for refining include:

- Top Entry Ball Valves
- Top Entry Swing Check Valves
- End Entry Ball Valves
- Rotary Control Valves
- Split Body Ball Valves

Mining

Durable valves are called for in this extremely diverse industry. Cornerstone's trunnion mounted ball designs are the choice for rugged conditions.

Live loaded scraper seats, smooth full bore flow passages, and careful material selections extend the service life of your valves.



Our solidly built ball valves are available with:

- Top Entry Ball Valves
- End Entry Ball Valves
- Split Body Ball Valves

Oil & Gas Cryogenic

Gas processing and blowdown systems must be manufactured to withstand temperatures of -50F to -320F and below.

Cornerstone Valve's symmetrical component design permits uniform expansion and contraction. Live-loaded seals allow for intense dimensional changes, yet assure closure tightness.



Cornerstone engineered valves for cryogenic usage include:

- Top Entry Ball Valves
- Top Entry Swing Check Valves
- End Entry Ball Valves
- Rotary Control Valves

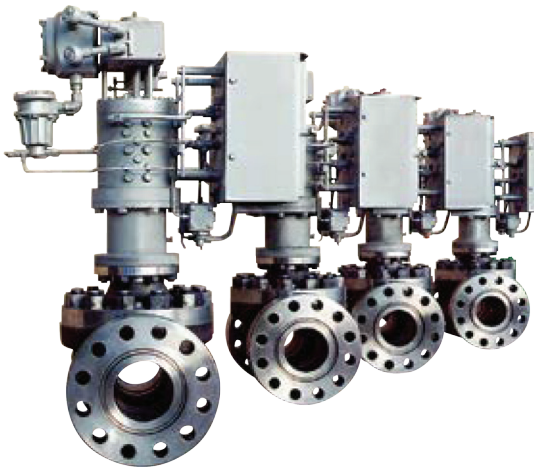
Pulp & Paper

High ph levels, abrasion, and extreme pressure in steam and water systems.

Our recommended ball valves are designed with trunnions and seat spools isolated from media for long-term usage. Constant self-cleaning, solids proofing and careful selection of industry specific coating systems are available in:



- Top Entry Ball Valves
- Split Body Ball Valves



Aerospace

One of Cornerstone Valve's most extreme engineering challenges – valves for noise control, gas and water systems at space launches

The solution - a ball-seat interface design that closes off bubble-tight, full cycle in 17 milliseconds. The quick opening actuators are pressurized with nitrogen to 3,000 psig.

Our products for aerospace include:

- Top Entry Ball Valves
- Top Entry Swing Check Valves
- Rotary Control Valves

Maritime

Nuclear powered vessels require an elite class of standards. Highly detailed documentation and stringent testing include: shock testing, vibration testing and extensive operational testing.



Cornerstone products for maritime industry:

- Split Body Ball Valves
- Top Entry Ball Valves
- Rotary Control Valves

Cornerstone® VALVE

SEVERE SERVICE ENGINEERING

Our Certifications



Certificate of Authority to use the Official API Monogram
License Number: 6A-0321 **ORIGINAL**

The American Petroleum Institute hereby grants to

CORNERSTONE VALVE
1535 Industrial Dr., Suite A
Missouri City, TX

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API-6A** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **6A-0321**

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Gate, Ball, Plug Valves, Check Valves at PSL 1, PSL 2, PSL 3

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: DECEMBER 30, 2019
Expiration Date: JANUARY 19, 2022

To verify the authenticity of this license, go to www.api.org/compositelist.

Vice President of Global Industry Services

American Petroleum Institute

2018-151 | Digital



Certificate of Authority to use the Official API Monogram
License Number: 6D-0164 **ORIGINAL**

The American Petroleum Institute hereby grants to

CORNERSTONE VALVE
1535 Industrial Dr., Suite A
Missouri City, TX

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API-6D** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **6D-0164**

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Ball Valves and Gate Valves

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: DECEMBER 30, 2019
Expiration Date: JANUARY 19, 2022

To verify the authenticity of this license, go to www.api.org/compositelist.

Vice President of Global Industry Services

American Petroleum Institute

2018-151 | Digital



Certificate of Authority to use the Official API Monogram
License Number: 6DSS-0073 **ORIGINAL**

The American Petroleum Institute hereby grants to

CORNERSTONE VALVE
1535 Industrial Dr., Suite A
Missouri City, TX

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and **API-6DSS** and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: **6DSS-0073**

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Subsea Ball Valves

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: DECEMBER 30, 2019
Expiration Date: JANUARY 19, 2022

To verify the authenticity of this license, go to www.api.org/compositelist.

Vice President of Global Industry Services

American Petroleum Institute

2018-151 | Digital



QMS REGISTERED

Certificate of Registration

APIQR® REGISTRATION NUMBER
0450

This certifies that the quality management system of

CORNERSTONE VALVE
1535 Industrial Dr., Suite A
Missouri City, TX

has been assessed by the American Petroleum Institute Quality Registrar (APIQR®) and found it to be in conformance with the following standard:

ISO 9001:2015

The scope of this registration and the approved quality management system applies to the

Design and Manufacture of Valves

APIQR® approves the organization's justification for excluding:

No Exclusions Identified as Applicable

Effective Date: DECEMBER 30, 2019
Expiration Date: JANUARY 19, 2022
Registered Since: MARCH 15, 2004

Vice President of Global Industry Services

accredited by Member of the International Accreditation Forum Multilateral Recognition Arrangement for Quality Management Systems

ANAB

IAF

This certificate is valid for the period specified herein. The registered organization must continually meet all requirements of APIQR's Registration Program and the requirements of the Registration Agreement. Registration is maintained and regularly monitored through annual full system audits. Further clarifications regarding the scope of this certificate and the applicability of ISO 9001 standard requirements may be obtained by contacting the registered organization. This certificate has been issued from APIQR offices located at 200 Massachusetts Avenue, NW Suite 1100, Washington, DC 20001-5571, U.S.A. It is the property of APIQR, and must be returned upon request. **To verify the authenticity of this certificate, go to www.api.org/compositelist.**

2018-0523-02-01 Hybrid

QUALITY REGISTRAR



emerging API

REGISTRATION NO. Q1-0165

Certificate of Registration

The American Petroleum Institute certifies that the quality management system of

CORNERSTONE VALVE
1535 Industrial Dr., Suite A
Missouri City, TX

has been assessed by the American Petroleum Institute and found to be in conformance with the following:

API Specification Q1

The scope of this registration and the approved quality management system applies to the:

Design and Manufacture of Valves

API approves the organization's justification for excluding:

No Exclusions Identified as Applicable

Effective Date: DECEMBER 30, 2019
Expiration Date: JANUARY 19, 2022
Registered Since: MARCH 15, 2004

Vice President of Global Industry Services

This certificate is valid for the period specified herein. The registered organization must continually meet all requirements of API Spec Q1, *Specification for Quality Programs for the Petroleum, Petrochemical and Natural Gas Industry*, and the requirements of the Registration Agreement. Registration is maintained and regularly monitored through annual full system audits. This certificate has been issued from API offices located at 200 Massachusetts Avenue, NW Suite 1100, Washington, DC 20001-5571, U.S.A. It is the property of API, and must be returned upon request. **To verify the authenticity of this certificate, go to www.api.org/compositelist.**

API Spec Q1 Registered

2019-154 | 02.19 | Digital

Client Reference List

- AEP (SWEPCO)
- Airstar
- Albemarie
- Alliance Engineering
- Alstom Power (PA)
- Anadarko
- ARCO
- AMOCO
- Arnold AFB
- Ashland Chemical
- Ato Chem
- BADR Petroleum Co.
- BASF
- Bechtel
- BHP Billiton
- Black and Veatch
- British Gas
- BP (Chemical & Refinery)
- Burlington Resources
- Calpine
- Cameron
- Canyon Express
- Cape Canaveral
- Chevron
- CNPC
- Conoco Phillips
- COW (Terre Haute) PFBC
- Destec Energy (DOW)
- Edison Mission
- Electric Boat
- El Paso Natural Gas
- Empresa de Generacion
- Europipe
- ExxonMobil
- Finch Pruyvn
- Florida P&L (Cedar Bay)
- Fluor
- Formosa Plants
- GCF
- GE
- GPI International
- Great Northern Paper Co.
- Gulf Terra
- Reliant - NRG
- Halliburton
- Hanover Compression
- Howe Baker Engineers
- Jacobs Sverdrup
- Kellogg, Brown & Root
- KHI
- Kvaerner
- Marathon Oil & Petroleum
- Marshall Space Center
- Millennium Chemical
- Mitsubishi
- Modec
- Mustang Engineering
- NASA
- Newport News
- Northrop Grumman
- NOV Wilson
- NREL
- Ocean State Power
- Oil States Engineering
- Paragon Engineering
- Parsons
- PDO (Oman)
- PDVSA
- Pemex
- Petrobras
- Petronas
- QCPC
- Reliant Pipeline
- S-Oil
- SAIC
- Samsun
- Schlumberger
- Seplat
- Serept
- Shell
- Sinopec
- Sonarco
- Sonatrach
- Southern Co. (Orlando)
- SPIC
- Statoil
- Stennis Space Center
- Sunoco
- Technip Offshore Systems
- Teledyne - Brown
- Texaco
- Total Fina. Elf.
- TPS
- TVA (Bull Run, Kingson, Norris)
- TX Utilities (DeCordova, Northlake)
- Unocal
- Valero
- Vandenberg AFB
- VC Summer Nuclear Plant
- VICO
- Washington Group
- Weyerhaeuser
- Williams
- Wilpro



Cornerstone Valve was built on a commitment to quality; attention to detail, stringent testing always to the highest standards, partnerships with clients in solution development – Cornerstone has engineered a history to be proud of.

Since 1990, when Cornerstone Valve was founded in Spring, TX, Cornerstone has adhered to these standards. With a staff of more than 200 years total experience in severe service valving, Cornerstone serves clients worldwide – in the remote deserts of Chile, the arctic blasts of Siberia, and even tiny Trinidad.

Cornerstone has been privileged to design and provide specialty valves for space launches, oil and gas operations, plus workhorse valves that have replaced and outlasted other valves twenty-fold!

We are proud of our history and of our valves. Our pride shows in our work and our partnerships with our clients.

Our History:

1990 – Cornerstone Valve founded

1990 – Aerospace work begun

1991 – US Navy work begun

1991 – First major Oil & Gas order shipped

1993 – API 6D & 6A certification awarded

1994 – First subsea valve produced

2000 – ISO 9001 certification awarded

2008 – Various Valves Hyperbaric tested to max water depth of 4,050 feet

2013 – Cornerstone Valve Aquires Eii

2013 – Facility relocation to Stafford, TX

2014 – API 6D-SS Certification Awarded

2019 - Facility relocation to Missouri City, TX

Cornerstone® VALVE
SEVERE SERVICE ENGINEERING

1535 Industrial Drive, Missouri City, Tx 77489
Tel 281-880-8188 | Fax 281-880-8191 Email: sales@cornerstonevalve.com
URL: www.cornerstonevalve.com
Copyright © 2020