

# PIBIVIESSE

COMBINING UNCOMPROMISING PERFORMANCE WITH UNBEATABLE RELIABILITY





### A VALVE YOU CAN COUNT ON

# OUR STATE-OF-THE-ART VALVES ARE ENGINEERED TO KEEP YOUR CRITICAL OPERATIONS FLOWING

Your valves are a vital component to your process. Our combination of expertise, tireless dedication to quality, and always-improving technology allow us to deliver solutions you can depend on.

Designed to meet the ever-increasing demands of your industry while also standing up to challenging temperatures, pressures, and environments, our manual and automated On/Off and control ball valves are built for cryogenic, high temperature, HIPPS, subsea, and other critical applications.

#### A GLOBAL REPUTATION

Companies all over the world in the Oil & Gas, Petrochemical, Water Transportation, and Power industries have been relying on Pibiviesse valves for decades and with good reason.

Our uncompromising testing process matched with our deep industry knowledge allows us to deliver solutions that pay off both with reliability and performance.

#### THE CIRCOR DIFFERENCE

Known for our highly engineered products and customer-focused approach, CIRCOR specializes in offering customized solutions for the world's most demanding applications.

CIRCOR's roster features market-leading companies in the energy, aerospace/defense, and industrial segments.

As part of the CIRCOR family of well-known global brands, Pibiviesse offers a comprehensive portfolio of resources along with a shared commitment to always finding a better way to solve our customers' unique challenges.

#### THE RIGHT SOLUTION, RIGHT AROUND THE CORNER

With a newly expanded sales and manufacturing center in Houston, you're never far from the service, products, and answers you need to make your project a successful one.

# VALVES EVERY BIT AS TOUGH AS THE INDUSTRIES THEY SERVE

You can't afford downtime. That's why we engineer durability into every one of our valves and offer solutions that stand up to some of the world's most challenging applications.

Primarily found in Oil & Gas applications, our valves are also installed in various applications within Power Generation, Desalination, District Heating, and other industries.

# ON/OFF BALL VALVE APPLICATIONS FOR OIL & GAS

- Processing Facilities
- Isolation Valves
- Emergency Shutdown Valves (ESDV)
- Blowdown Valves (BDV)
- Partial Stroke Valves
- Riser Valves
- > HIPPS

- Corrosive Service
- > Slurry/Abrasive Service
- Low Temperature
- > Cryogenic Service
- > High Temperature
- > Subsea Service
- Critical Service Applications

#### CONTROL BALL (CAGE TRIM) APPLICATIONS

- > Pressure Control
- Flow Control
- Temperature Control
- Level Control
- > Compressor Anti-Surge & By-pass
- Pressurization & Depressurization

- > Loading Control
- Cavitation Control
- > Noise & Vibration Control
- Reducing, Mixing, Metering Stations
- > Blow-down











#### WE SPECIALIZE IN SOLUTIONS

While there are many companies out there offering valves, very few of them offer our level of expertise. And that's important because it's our level of experience and industry knowledge that allows us to find and create the best solutions to your specific problems.

No two projects are alike, and no team is better equipped at creating the perfect solutions than our talented team of experts. Chances are, you'll discover the benefits of Pibiviesse even before your valves are installed.

#### ENGINEERED TO DELIVER

#### BALL VALVES THAT FIT ANY SPEC AND HANDLE ANY SITUATION.

We don't just design our valves to stand up to anything. With a number of options, entry points, and sizes, we also design them to fit anything.

#### ON/OFF

# Available in Side Entry, Top Entry, and Welded Body, as well as Metal and Soft seats, our On/Off Ball Valves can be custom engineered to meet your specific need. We have experience engineering our valves for specific applications such as: HIPPS, SIL3, subsea, cryogenic, high temperature, slurry, abrasive, and corrosive applications.



#### ROTARY BALL

More resistant to wear, the rotary ball valve maintains its reliability even with higher volume, higher velocities, and higher temperatures and/or pressures.

#### CONTROL BALL VALVES

Designed with our proprietary CageBall™ technology, and in accordance with International Standard ISA S75, IEC 534, our Axial Rotary control ball valves offer a number of significant advantages.

- > Eliminates or minimizes hydro or aerodynamic flow control disturbances
- > Reduces noise, vibrations, and cavitation
- > Resists plugging or clogging
- Self flushing
- > Large rangeability can perform the duty of two or three conventional control valves
- > Can provide bi-directional tightness and flow

Our control ball valves are also adaptable and can be customized with: integrated downstream Flow Restrictor, Special Silencer, or Hyper Silencer trim.



#### **CAGEBALL**

With a changeable internal cage dividing the pressure drop into stages, the CageBall valve's design handles mass flow rates granting optimal control performances.

Noise, cavitation, and high frequency vibration are almost totally eliminated.

The attenuating plates are mounted into a replaceable cartridge and have self-cleaning features. CageBall design provides a rangeability of 250:1 and above.



#### HYPER-CAGEBALL

This line of control ball valves is designed for all applications where extremely high pressure drops are required with small initial flow rate. The design combines the high efficiency of multistage type trim with the Cv of a conventional ball valve that can be full or reduced bore. Both the flow path and flow bore can be configured to suit the service condition and to determine the control range to reach over 400:1



# HYPER-CAGE MULTISTAGE

This valve design combines the advantages of Cage-Ball control valve with the advantages of Hyper Cage-Ball. This design has been developed to allow smooth control of high/medium pressure drop with very small initial flow and very large flow at full opening while maintaining anticavitation and self-cleaning features.

#### **DIFFERENT DESIGNS** SAME PERFORMANCE

Our wide range of products include manually operated or automated On/Off and control ball valves for any kind of fluid or gas handling in the Oil & Gas, Water, Steam, and Power Generation industries. In addition, our valves come in a number of designs including:



#### SIDE ENTRY | MODEL E

SIZE 1.5" THROUGH 64"

**CLASSES** 

150 THROUGH 2500 API 2000 TO 15000

STANDARD:

DESIGN -50°F TO 410°F (-46°C TO 210°C)

TEMP SPECIAL APPLICATIONS:

-320°F TO 752°F (-196°C TO 400°C)

Available in a wide range of diameters and pressure classes, our Side Entry ball valves can be made in various grades of carbon steel, stainless steel, and high alloys to stand up to the most severe service conditions.



#### TOP ENTRY | MODEL T

SIZE 2" THROUGH 60"

**CLASSES** 

150 THROUGH 2500 API 2000 TO 15000

STANDARD:

DESIGN -50°F TO 410°F (-46°C TO 210°C)

TEMP SPECIAL APPLICATIONS:

-320°F TO 752°F (-196°C TO 400°C)

Designed to be fully inline and field repairable, the Top Entry valves are used in any critical service application where in-field repairability and quick turnaround are needed, such as; valves with weld end connections, which can be welded directly into the pipeline while still allowing easy maintenance operation.



#### WELDED BODY | MODEL W

SIZE 2" THROUGH 56"

CLASSES 150 THROUGH 2500

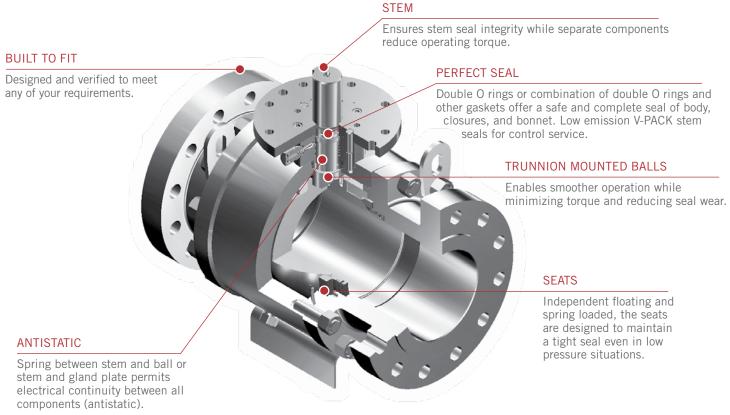
DESIGN STANDARD:

TFMP -50°F TO 410°F (-46°C TO 210°C)

Used for transmission pipelines, pumping, and compression units, our Welded Body is supplied with a bolted bonnet as a standard configuration, or with optional welded bonnet, which removes the potential external leak path.

#### A BETTER VALVE INSIDE AND OUT

Designed with our proprietary CageBall™ technology and in accordance with International Standard ISA S75, IEC 534, our Axial Rotary control ball valves offer a number of significant advantages.



#### CAGEBALL CONTROL BALL VALVE

Contoured valve body design to minimize body cavity and provide optimal performance.





# CERTIFIED PERFORMANCE CERTIFIED DEPENDABILITY

Certifications matter. And Pibiviesse has them. In fact, over the years, we've amassed quite a few certifications including:

- > API 6A, API 6D, API 6DSS, API Q1
- » ISO 9001:2015, ISO 14001:2004, ISO 3834-2:2006
- > OHSAS 18001:2007
- > PED CE-1370-PED-H-PBV 001-16

- > SIL Conformity for : Side Entry > Top Entry > Fully Welded
- > Russia TP TC 010/TP TC 032, TP TC 032 (EAC), TP TC 012
- > Canadian Registration Number (CRN)

# WE PUT OUR VALVES THROUGH EVERYTHING SO THEY'LL STAND UP TO ANYTHING

Creating some of the toughest ball valves on the planet doesn't just happen. It takes a lot of testing, research, and an uncompromising commitment to quality construction.

#### SUPERIOR CONSTRUCTION

Simply put, our ball valves are built to last. From our highly precise machining process to our state-of-the-art low-heat welding techniques that protect the base material from alteration, every valve we produce meets an extremely high standard of consistent quality.

#### RESEARCH AND DEVELOPMENT

At Pibiviesse, we are constantly searching for ways to upgrade the performance and durability of our products. We work with external research centers and universities to study and calculate the valves' behavior in extreme conditions. It's a partnership that's led to SimOne<sup>TM</sup>, a simulation for control valve sizing and valve behavior prediction.

#### **TESTING**

We don't rely on theoretical data. We also subject our products to extensive testing in all sorts of conditions. Our severe testing far exceeds the requirements of the API and ANSI standards, and includes:

- > High pressure gas test
- Cryogenic pressure tests (body and seat) and operational test (down to -196° C/-320° F)
- High temperature pressure tests (body and seat) and operational test (up to 400°C/752°C)
- Fugitive emission test
- Cycling operational "wear resistance" test

- > Bending test
- Torque test
- Hyperbaric (Subsea) test
   (to 400 bar / 4000 meters)
- > Vacuum test
- Hysteresis and dead bend verification for actuator/valve assembly.



#### **EXPERIENCE MATTERS**

Highly engineered construction and stringent testing are just the beginning. Our sales and service teams offer some of the best expertise in the business. Together, we'll work to find the right valve, the right size, and the right customization for your project.

# MEETING TIMELINE EXCEEDING EXPECTATIONS

At Pibiviesse, we pride ourselves not just in meeting your needs but also meeting your deadlines. Our reputation for on-time delivery is second to none.

# DESIGNED TO PERFORM BUILT TO LAST

Throughout the world, some of the industry's largest companies have trusted their critical applications to the extraordinary ball valves and deep level expertise of Pibiviesse. For your next project, install Pibiviesse ball valves. With state-of-the-art construction, uncompromising testing, and incredible technical expertise, it will be a decision that will pay off for years.



CIRCOR is a market-leading, global provider of integrated flow control solutions, specializing in the manufacture of highly engineered valves, instrumentation, pumps, pipeline products and services, and associated products, for critical and sever service applications in the oil and gas, power generation, industrial, process, maritime, aerospace, and defense industries.

#### **Excellence in Flow Control**

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