



### **Critical Control Solver**

PCV Flow Control manufactures engineered and tailor-made valves and equipments; our production range include all type of control valve, safety valve and PRDS from simple single valve to custom-design trim for harsh conditions. PCV Flow also distributes and produces a wide range of industrial automation products.

With our dedicated manufacturing facilities in Italy, our products are made with high quality materials customized to meet our Customers' needs.

PCV Flow Control is faced with great challenges, such as low noise, cavitation-resistance, high pressure difference, high temperature, toxic media and cryogenic valve.

PCV Flow Engineering service team has an experienced, highly qualified expert team of engineers, precipitation of many years of engineering experience, responding to customer needs at any time, quickly solving problems and reducing the loss caused by failure. Whether critical working conditions, or special industries, we can provide solutions.





### **Solutions**

**Petrochemical Refinery** 

**Fine Chemical Industry** 

**Power Industry** 

**Coal Chemical Industry** 

Metallurgical Industry

Air separation equipment

LNG Industry

**Biochemical Engineering** 

**Chemical Fiber Industry** 

**Medicine and Pesticide** 



















#### **CONTROL VALVE SERIES**

C-6911 series is a universal globe valve body, top -guided, single seat control valve. The C-6911 series control valve integrates a range of advantages, with a wide range of applications, including viscous fluid and slurry, and low cost. Due to the simplified structural design of this series of regulating valves and few components, the maintenance is convenient and economical. The C-6911 series regulating valves can be fitted with a series of pneumatic actuators or, as required, provide electric or electro-hydraulic actuators for on-off or continuous adjustment occasions.

C-6911 Series Top-Guided Globe Valve	
Туре	C-6911
Dimension	1/2"-8"
Ratings	150LB-300LB; PN16-PN40
Connections	Flanged (RF,RTJ), BW , SW
Ronnet	STD EXD BELLOWS CRYOGENIC





#### **CONTROL VALVE SERIES**

C-6941 adopts imitation contour plug, fast change valve trim, can adapt to the highest working temperature, the site maintenance is convenient, can be made according to the need to bellows, insulation clip type and other special structure. A-X-290 multi-spring actuator adopts modular design, can be convenient to replace the positive and reverse form, facilitate the use of the site.

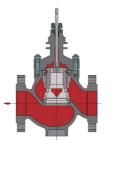
C-6941 Con	trol Valve Contoured Plug
Type	C-6941
71	
Dimension	1/2"-8"
Ratings	150LB - 2500LB; PN16-PN420
Connections	Flanged (RF,RTJ), BW , SW
Bonnet	STD, EXD, BELLOWS, CRYOGENIC



#### **CONTROL VALVE SERIES**

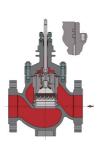
The basic structure of C-6943 series is: balanced / unbalanced type plug-cage guided, single seat pass-through control valve, widely used in simple to harsh process control conditions. All series are designed with quick change valve interior parts, built-in elastic components to ensure that the type structure can meet the maximum working temperature. The valve interior design is both standard, low noise and two-stage. Low noise type is used for high pressure differential compressible fluid (gas or steam), and two-stage cage type is used for requiring high pressure recovery coefficient.

C-6943 Control Valve Cage Guided	
Туре	C-6943
Dimension	1/2"-32"
Ratings	150LB - 2500LB; PN16-PN420
Connections	Flanged (RF,RTJ), BW , SW
Bonnet	STD, EXD, BELLOWS, CRYOGENIC









#### **CONTROL VALVE SERIES**

The basic structure of C-6948 pilot type low noise control valve (steam / gas vent) is: pilot balance valve plug, low noise full continuous cage-guided. The fluid is mainly regulated by the cage of special drilling, and the FTC structure depends on the unbalanced force generated by the fluid flow-off when the valve is closed. The specially designed pilot balance trim only requires a small thrust to open. The full metal hard seal can ensure leakage class V meets under 566°C high temperature condition.

C-6948 Control Valve Plug with Pilot	
Type	C-6948
Dimension	2"-24 "
Ratings	150LB - 2500LB; PN16-PN420
Connections	Flanged (RF,RTJ), BW , SW
Bonnet	STD, EXD



#### **UREA VALVE SERIES**

C-4800 urea valve is designed especially for Urea and Ammonia plants. Materials are adequate for urea and carbamate fluids and comply with the material specifications for this service of main Licensors such as Snamprogetti, Stamicarbon, Urea Casale and others. Connections are obtained directly on the single piece that constitutes the valve body in order to keep down the weight, whereas the shape of internals does not leave dead zones. All these special professional design and successful application experience makes PCV urea valve obtained high cost performance, both quality and performance are in a leading position in the world.

C-4800 Angle Valve for Urea Plant	
Туре	C-4800
Dimension	DN25-DN300 (NPS 1"-12")
Ratings	ANSI 900-2500 DIN & UNI PN160-400
Connections	flanged ends, lens-type seal

#### **UREA VALVE SERIES**

The B-2311 series is a high-pressure butterfly valve specially suitable for urea plant. In SAIPEMI, the valve is required to ensure the minimum flow when the valve is closed, and open the window on the valve plate to avoid the overpressure. In STAMICARBONI, the valve need class IV leakage, will be made into double eccentric valve plate, can also be replaced by Angle valve C-4827.

B-2311 One Piece Body Butterfly Valve	
Type	B-2311
71.	
Dimension	DN100-DN300 (NPS 4"-12")
Ratings	ANSI 900-2500 DIN & UNI PN160-400
Connections	flanged ends, lens-type seal
Bonnet	STD, EXD, BELLOWS, CRYOGENIC







# MULTI-STAGE LABYRINTH VALVE SERIES

C-9000 series is specially suitable for high temperature, high pressure and other harsh conditions. Whether compressible or incompressible fluid, it can ensure its accurate control and long life, can solve the cavitation, noise and other problems. The valve interior consists of a series of perforated discs bolted or welded, which stacked, and the trim has built-in filters to prevent the disc flow from blocking. This series valve does not need the multi hole plate or silencer and can make the process pipe design more compact.

C-9000 Multi-stage Labyrinth Control Valve	
Туре	C-9000
Dimension	1/2"-32"
Ratings	ANSI 150-2500; PN16-420
Connections	Flanged (RF,RTJ), BW , SW
Bonnet	STD, EXD, BELLOWS, CRYOGENIC

#### **UREA VALVE SERIES**

4-3111 Urea three-way ball valve is mainly used for the granulation section of urea plant, The service has severe working condition, serious corrosion and crystallization, high requirements for sealing and leakage levels, Implement the standard ASME16.34, API608, ISO5208, 4-3111 The urea three-way ball valve is a Y-type ball structure, Three valve seats are even, Small friction force, Quick and quick, At the same time, the 4-3111 urea three-way ball valve adopts the heat jacket, Not only improves the heat transfer efficiency of the steam jacket, It also prevents urine crystallization and fluid stagnation, at the same time, Improved the service life of the urea three-way ball valve, Our successful research and development of this technology, It fills the blank of localization of three-way ball valve in the granulation section of large urea plant.

Urea Three-way Ball Valve 4-3111	
Туре	4-3111 Y-type three-way
Dimension	1/2"-8"
Ratings	ASME 150Lb-600Lb; PN16-PN100
Actuator	Manual, Gear, Electric and Pneumatic



# DESUPERHEATER & PRESSURE REDUCER

The C-5700 Pressure Reducing and Desuperheating stations (PRDS) is the most general and compact solution for pressure reduction and desuperheating service of turbine by-pass lines, discharging both to intermediate or low pressure sections of power stations. The spherical body shape design, together with the high quality of construction materials, allow a more uniform wall thickness than the conventional ones, fabricated by welding bodies, reducing P/T fatigue effects and improving welded joints quality. C-5700 are the best solution for steam conditioning, combining high performance flow control with high efficient integrated steam desuperheating.

C-5700 Pressure Reducing and Desuperheating Stations	
Туре	C-5700
Dimension	2"-40"
Ratings	ANSI Class 150-4500 ;Special Class
Connections	Flanged (RF.RTJ), BW





# DESUPERHEATER & PRESSURE REDUCER

C-5900 valve, derived from C-6940 series, is provided with straight-way globe body and cage trim. The pressure reduction is performed through two stages; the first one is intended for flow control, while the second one is a fixed throttling section. The 1st stage is provided with single or multiple cage trim. The 2nd stage may consist of a silencer installed on valve outlet, or, for less severe applications, of a drilled basket mounted under the seat ring. The most significant applications are steam conditioning stations for industrial applications and for medium and low pressure turbine by-pass systems.

C-5900 Desuperheating Control Valve Straight-Way	
Туре	C-5900
Dimension	2"-40"
Ratings	ANSI Class 150-4500; Special Class
Connections	Flanged (RF.RTJ), BW



#### **BALL VALVE SERIES**

The 4-2111 series is a floating full bore ball valve. The ball valve has excellent shut-off performance and minimal fluid pressure drop loss. It meets the requirements of API607 fire test specification and has the functions of anti-fluttering and anti-static of the valve stem, which is suitable for liquid, gas and other fluid On-off control.

4-2111 Floating Ball Valve	
Туре	4-2111
Dimension	DN50-DN500(2"-20")
Ratings	PN1.6-6.3Mpa, ANSI 150-600lb
Sealing	Soft, Metal to metal





#### **BALL VALVE SERIES**

The inner chamber and sphere of the valve are lined with high pressure injection molding process with corrosion resistant and aging resistant polyfluoroethylene (F46) etc, so it has reliable corrosion resistance and sealing. It is widely used in chemical industry, petroleum, metallurgy, medicine and other industrial sectors, to realize the adjustment or shut off of strong corrosion media such as acid and alkali in the production process, and has obvious effect in the control of water treatment process.

4-2301 Fluorine Lined Ball Valve	
Туре	4-2301
Dimension	DN15-DN200(1/2"-8")
Ratings	PN 0.6-1.6Mpa; ANSI 150lb
Connections	Flanged(RF)



#### **BALL VALVE SERIES**

The trunnion mounted ball valve is designed to fix the ball through the upper and lower valve stem or support plate, floating valve seat structure. Trunnion ball valve is divided into soft and M to M ball valve. The valve body is forged or cast, and two piece or three piece valve body is bolted, with DBB and DIB functions.

4-2211 Trunnion	Mounted Ball Valve
Туре	4-2211
Dimension	DN50-DN500 (2"-20")
Ratings	PN 1.6-42Mpa; AN SI150-2500lb
Sealing	Soft, Metal to metal

#### **BUTTERFLY VALVE SERIES**

B-2471 eccentric butterfly valve adopts double eccentric design, when the eccentric valve plate is opened and closed, produce a cam function, without too much torque to make the valve plate off the seat, reduce the deformation of the seat, and like the midline butterfly valve, prolong the service life of the seat. Double eccentric butterfly valve generally uses polyTFE material as its sealed valve seat, and metal valve seat can also be used in the field of high temperature.

B-2471 Eccentric Butterfly Valve		
Type	B-2471	
Dimension	DN50-DN1000 (2"-40")	
Ratings	PN1.6-6.3Mpa; ANSI 150-600lb	
Sealing	Soft, Metal to metal	







#### **BUTTERFLY VALVE SERIES**

B-2971 Triple-eccentric butterfly valve has a tight bidirectional sealing function. This Triple-eccentric structure ensures that the valve plate seal will only contact the valve seat in the closed state, so it does not produce additional friction and wear. This series of butterfly valves from vacuum to high pressure, from low temperature to high temperature, have perfect applicability, metal sealing structures are essential fire safety. Compared with gate valves, globe valves and ball valves , the B-2971 can greatly reduce in size, weight and installation requirements, reducing customer construction and maintenance costs.

B-2971 Triple Eccentric Butterfly Valve	
Туре	B-2971
Dimension	DN50-DN1500 (2"- 60")
Ratings	PN1.6-26Mpa; ANSI 150-1500lb
Sealing	Soft, Metal to metal

