







Quality Assurance

MASCOT provides world class Process Valve solutions, specialising in the design and manufacture of Heavy Duty Industrial Control Valves, Choke Valves, Steam Desuperheaters, Actuated Valves and Manual Valves from its headquarters in Campbellfield, Australia.

MASCOT Valves are ideally suited and widely used throughout the Oil and Gas, Gas Transmission, LNG Processing and Regasification, Power Generation, Petrochemical and Mining Industries for both General Service and Severe Service applications.

Extensive execution and project management capabilities ensures orders are executed on-time and to customer specifications, whether it be for smaller quantity orders, short lead time or complex projects.

A robust Management and Quality Assurance approach ensures exacting technical requirements are guaranteed from initial application engineering and process data analysis through to technical design, assembly and testing covered by stringent industry standards.

MASCOT provides functional and technical assistance during installation and commissioning, and promptly responds to all customer enquiries and issues.

MASCOT's facilities are ISO 9001 and API certified. This ensures that world class Valve products and services are provided to a growing list of global customers.

As a global organisation, we utilise global sourcing resources that fulfil the needs of the customer and are strictly controlled through our Management and Quality Assurance systems.

MASCOT adheres to the following International Industry and Engineering Standards:

- Design and Testing Standards including B16.34 and API 6A
- Testing Standards including ISO60534.4
- Control Valve Seat Leak Testing - ASME FCI F70-2

MASCOT's stringent quality control procedures are also reflected in our capacity for inhouse design which includes the design of Severe Service Trims.





Heavy Duty Process Valves & Associated Products Engineered for General & Severe Service Applications



General Service Control Valves

Severe Service Control Valves

Product Offering

Passing and seizure or sticking are the most common modes of Control Valve failures.

MASCOT's GFLO Control Valve design eliminates these problems, enhancing overall plant and process performance.

MASCOT GFLO Control Valves do not utilise Cage Guided Trim designs and therefore will not gall or stick.

MASCOT Control Valves offer Extended Mean Time Between Planned Maintenance (MTBPM) and the lowest total life cycle cost of any Control Valve available in the market. The design of our General Service Control Valves enable exceptionally tight shutoff and simplistic interchangeability of parts.

Severe Service Multistage Trims are designed in accordance with the latest ISA Control Valve specification guidelines for velocity control in Severe Service applications.

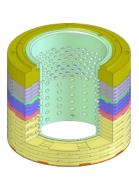
Our Severe Service offering includes cavitation minimisation CAVFLO Trim for liquid applications, noise attenuation MEGAFLO Trim for high pressure gaseous applications, and a TAPERFLO Trim for Severe Service cases with low flow conditions.

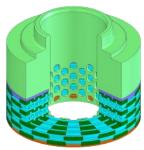
For critical services the Velocity Control VC TRIM is designed to eliminate cavitation in liquid applications and ensure Trim velocity is maintained within specific design criteria.

When used in vapour and gaseous applications, the Multistage VC Trim design controls velocity head through each stage of the Trim reducing high noise levels and process induced vibration.

MASCOT is Globally
Renowned for Application
& Design Engineering,
Machining, Assembly &
Testing of World Class
Process Valves







Steam Desuperheating

Choke Valves & Wellhead Equipment

Actuated & Manual Valves

MASCOT designs and manufactures Steam Desuperheating Valves and Systems for the Continuous Steam Processing and Power Generation Industries.

Desuperheating methods include:

Mechanical Spray
Desuperheaters (MSD). The MSD
utilises nozzles evenly spaced
across the circular circumference
around the Desuperheater body,
which provides economical
turndown capacity.

Variable Spray Desuperheaters (VSD). The VSD utilises a swirling hollow cone spray pattern of injected water directly into the steam line to facilitate efficient atomization of cooling water into the steam flow.

Combined Steam Conditioning Valves (CSCV). Globe or Angle Style configurations are available with spray water being introduced slightly downstream of the vena contracta allowing for simplified and effective design of desuperheating.

Pressure Reducing and Desuperheating Stations (PRDS). A complete system inclusive of piping, Valves, process measurement, and process control, individually designed to meet customer specifications.

MASCOT

High Performance Choke Valves are designed to API 6A and ASME standards. The Heavy Duty design ensures suitablility for Oil and Gas applications. Designs include Positive Choke Valves with a nonadjustable Trim, Needle and Seat Trim and Standard Service Cage and Plug. For Severe Service applications custom Trims are designed to minimise cavitation, reduce vibration and provide noise attenuation.

An extensive range of erosion, corrosion and impact resistant Trim materials are available to withstand the rigors of Choke and Wellhead applications.

MASCOT manufactures and supplies a range of Actuated and Manual Valves including Ball, Butterfly, Globe and Gate Valves. Actuation methods include Manual Operation, Pneumatic, Electric and/or Hydraulic, in a variety of sizes, pressure classes and materials which cover a broad range of applications.









Production Facilities

Project Execution Capabilities

Australian Manufacturing Capabilities

MASCOT's Australian manufacturing capabilities include the manufacture of Valves in a range of pressure ratings and sizes. All are available in an extensive variety of materials and special designs for difficult applications.

The Australian facility utilises vendor partnerships to complete the manufacture of castings and machining of Valve components.

Our workflow methodologies provide flexibility of machine shop loadings and substantial reduction in manufacturing lead times. MASCOT's well established partnerships have a 20-year proven track record of high quality and on-time performance.

Our people are our most important asset. MASCOT's team of highly motivated, qualified and experienced staff work to ensure our customers are provided with the right solutions for their requirements at all times.

Our Campbellfield facility staff work in a 5S/Lean continuous improvement environment and are continuously enhancing our products and processes to meet customer needs and expectations.

This continuous improvement culture is demonstrated in the minimal lead times in which we provide the highest quality Valves to our global customers all around the world.

MASCOT's Campbellfield facility is renowned for excellent design and manufacture of highly engineered Valves.

Assembly & Testing Capabilities

- Hydrotest to ASME B16.34
- Seat Leak Test to ASME FCI F70-2
- Low Temperature Testing
- NDE (Radiography, Dye Penetrant, Magnetic Particle etc)
- Calibration
- Function Test
- Final Inspection

large size, high pressure class, special materials or a project of over 100 Valves, MASCOT has the infrastructure, capacity and willingness to execute orders to customer specification and delivery requirements. MASCOT follows well defined procedures for documentation control, ensuring a smooth flow of all submissions. A proven documentation procedure is a valuable tool for critical vendor data submission and timely

Whether it's a single Valve with

special requirements such as

Industry **Expertise**

customer approval.

- Oil and Gas Production –
 Offshore and Onshore
- Gas Transmission
- Power (Fossil Fuel) Generation
- LNG Processing and Re-Gasification
- Industrial Gases, including Cryogenic applications
- Coal to Chemical
- Petro-Chemical, Chemical and Refining
- Steam Generation and Desuperheating
- Mining typically involving mineral processing
- Severe Service, High Pressure Applications
- Special engineered solutions



Machining

Forgings





Extensive equipment such as large machining centres and C.N.C. lathes are capable of producing Valve components in a wide range of sizes.

Forge shop capabilities include drop forgings and open die forgings to 1000mm diameter in a range of standard and special materials for bonnets, flanges, plugs and seat rings.

Foundary & Castings

Non-Destructive Testing





To ensure superior reliability of castings, our foundries utilise high technology equipment, computer controlled machining facilities, electric induction furnaces, and research and development flow testing-equipment. They cater for both ferrous and non-ferrous castings such as Carbon Steel, 316 SS, 304SS, Duplex SS, Inconel Aluminium Bronze and Monel.

Non-Destructive Testing (NDT) is performed on all high pressure Valves. Testing is carried out as per customer specifications and requirements. Testing methods include Ultrasonic Testing (UT), Radiographic Testing (RT), Dye Penetrant Testing and Positive Material Identification (PMI).

Additional information on our products and capabilities can be found at www.mascot-global.com



Control Valves

High Performance Control Valves utilising Heavy Duty design suitable for Industrial applications. MASCOT manufactures General and Severe Service Control Valves, Cryogenic Globe and Butterfly Control Valves, Rotary Style Valves, High Pressure Butterfly Valves, Eccentric Plug Style Valves, and Characterised Ball Valves.



Choke Valves

Choke Valves API 6A and ASME Heavy Duty design suitable for Oil and Gas. We manufacture Positive Choke Valves with a Nonadjustable Trim, Needle, and Seat Trim and Standard Service Cage and Plug. Severe and Erosive Service Choke Valves include cavitation minimisation, noise attenuation and vibration reduction.



Steam Desuperheating

Steam Desuperheating for Continuous Steam Processing and Power Generation. These include Mechanical Spray Desuperheaters, Variable Spray Desuperheaters, Combined Steam Conditioning Valves either Globe, Inline or Angle Style and combined Pressure Reducing and Desuperheating Stations.



Actuated Valves

MASCOT manufactures and supplies a range of Actuated Valves including Ball, Butterfly, Globe and Gate Valves.
Actuation and accessories are either supplied using MASCOT's own manufactured product, or third party actuators and accessories specific to customer needs and requirements.



Manual Valves

MASCOT manufactures and supplies a range of Manual Valves including Ball, Butterfly, Globe, Gate and many more. We supply these in a range of materials and pressure classes.



After Sales Services & Support

MASCOT has a strong after sales service and support network and is fully committed to support MASCOT products wherever they are installed. Support is available in the form of engineering, technical, installation and ongoing operational support.



Capabilities include providing manpower to cover site shutdowns and service requirements.

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