

Copes-Vulcan is a long-established manufacturer of state-of-the-art control valves, actuators and steam conditioning equipment for dealing with liquids, vapors and gases.

Their products are rugged enough to deal with the most exacting of customers' demands - in terms of both duty cycle and application setting - and to withstand exposure to extreme temperatures, large pressure drops or heavy vibrational forces. In addition, their innovative mechanisms ensure the highest degrees of operational safety.

Additional services include start-up consultation, training on maintenance practices, field servicing, support with plant refurbishment and upgrading activities, identification of potential issues that could impact on operational efficiency, and decommissioning consultation.



COPE-S-VULCAN®

**AUTHORISED
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As a trusted lifecycle partner to many of the world's critical flow control systems, Copes-Vulcan together with Dawcul ensure customers in Eastern Europe benefit from high standards of engineering excellence.

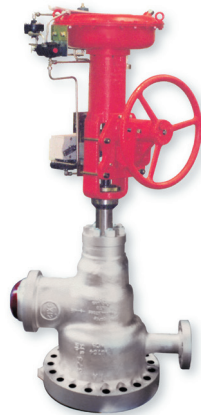
Desuperheaters

Pressure Reducing Desuperheating Valve (PRDS)

The PRDS is a single seat, angle valve that combines pressure and temperature reduction in one compact device.

The high pressure, high temperature vapour enters the main branch, is reduced in pressure and coolant is introduced. The high velocities and turbulent flow conditions that are present immediately following the pressure reduction allow for rapid atomization of the coolant.

The PRDS is best suited to applications requiring continuous modulation..



FEATURES

- ◆ High quality cast body
- ◆ Smooth body contours to reduce stress concentration
- ◆ Fully guided plug reduces wear
- ◆ Trim is fully accessible through the bonnet for ease of maintenance
- ◆ Solid valve stem eliminates thermal stress experienced in hollow stem designs
- ◆ Unique water mixing provides superior control and eliminates piping thermal liners

Products

Desuperheaters

PRDS
MNSD
VAD

Control valves

SD (Severe Duty) Globe
General service

Multiple Nozzle Spray Desuperheater (MNSD)

The MNSD offers optimum performance and range in a variable spray tube design. It fills the performance gap between the limited capability of a simple mechanical spray type desuperheater and the virtually unlimited capability of Copes-Vulcan's Variable Orifice Desuperheater. The MNSD offers high temperature capabilities and up to Class V leakage rating.

FEATURES

- ◆ Temperature control to within 8°C (15°F) of saturation with the ability to hold set point within a tolerance of 6°C (10°F)
- ◆ Standard maximum available Cv of 10.5 (Kv of 8.9)
- ◆ Water flow turndown of 150:1 or higher
- ◆ User friendly design - nozzles and trim assembly can be removed without disconnecting the actuator



Copes-Vulcan

- ◆ No need for separate cooling water control valve
- ◆ Designed for applications with temperatures up to 620°C (1150°F)
- ◆ Available in standard classes 600, 900, 1500 and 2500 per ANSI B16.5
- ◆ Cooling water inlet pressures up to 24 MPag (3500 psig) – higher pressures on application
- ◆ FCI 70-2/ANSI Class IV or Class V shutoff capability
- ◆ Suitable for vertical or horizontal installation
- ◆ Standard ANSI connections are 80mm (3") raised face flange (steam) and 40mm (1.5") raised face flange (water)
- ◆ Designed to resist thermal fatigue

Variable Annulus Desuperheater (VAD)

The VAD is a cost effective line size desuperheater. It is readily available to satisfy general desuperheating and gas cooling applications.

A dynamically contoured, stainless steel spray head concentrically located within a short section of pipe (body), the pipe acts as the desuperheater's outer body and pressure boundary.

It fits into the main vapor line via either line size flanged or butt weld end connections for easy installation.



FEATURES

- ◆ Temperature control to within 5°C (10 °F) of saturation
- ◆ Horizontal or vertical installation
- ◆ High rangeability 15:1
- ◆ Coolant pressure need only be 0.5 bar (7 PSI) superior to vapor
- ◆ Self-regulating 360 degrees coolant annulus for uniform distribution.
- ◆ No spray nozzles to introduce blockage concerns
- ◆ Full atomization over the entire operating range
- ◆ Minimal vapor side pressure drop
- ◆ No thermal liners required.
- ◆ Butt weld or flanged to ANSI 150, 300, 600 or DIN PN10, 16, 40, 64, 100.
- ◆ Body: Carbon, Chrome Moly, and Stainless Steel. Spray Head and Wetted Parts: Stainless Steel

Control Valves

Severe duty control valves

The SD-Severe Duty valve is Copes-Vulcan's premium severe duty and critical service control valve design.

Designed specifically for severe duty applications, it is the preferred style of valve for applications such as pump recirculation, feedwater control and feedwater start-up, flashing or cavitating service, critical pressure drop gas and steam service, and any potentially noisy or vibration-prone service. It is also widely used for nuclear "N" stamp and seismic applications.



FEATURES

- ◆ Identifiable by round, bowl-like appearance
- ◆ DN18 to 600 (0.75 through 24 inch)
- ◆ Pressure class 150# through 4500#
- ◆ Thick walls and spherical shape optimises strength
- ◆ Trim (plug, cage & seat) sets compatible with GS style
- ◆ Preferred for nuclear applications (seismic)

General Service Control Valves

Representing significant refinement in design and performance for general service globe style control valves, the GS-General Service Valves combine advanced levels of body configuration, trims and actuation to produce a valve assembly capable of premium performance at a competitive price. They are ideally suited for non-severe flow control of most liquids, steam and gases and provide reliable, economical performance in heater drains, gas and fuel oil control, feedwater control, steam/gas pressure reduction and many other power and process flow control operations.



FEATURES

- ◆ Identifiable by sculpted, streamlined appearance
- ◆ DN18 to 600 (0.75 through 24 inch)
- ◆ Pressure class 150# through 600#
- ◆ Thinner walls optimise cost savings
- ◆ Trim (plug, cage & seat) sets compatible with SD style

Dawcul is an Authorised Distributor for Copes-Vulcan across Eastern Europe.

For more information please contact your local regional representative.



Your partner in energy since 1977