

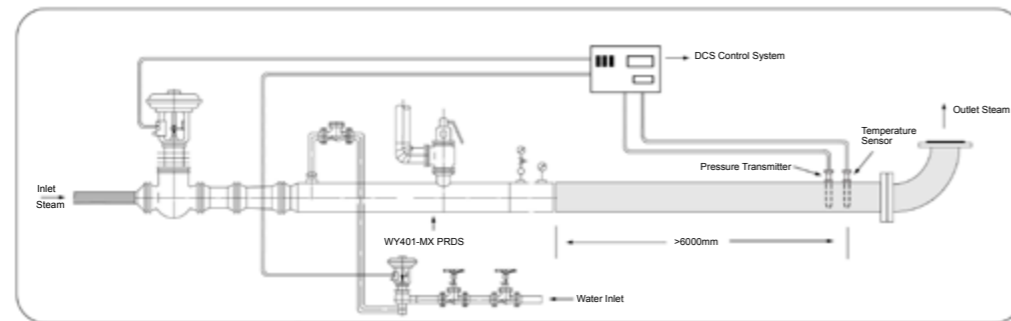
PRESSURE REDUCING DESUPERHEATER

WY401-MX

WY401-MX pressure reducing desuperheater system is especially designed for small steam flow and gives higher controlling accuracy under minimal flow conditions.

Unlike WY301-MX, WY401-MX is split PRDS, the pressure reducing and temperature reducing is carried out by PRV and desuperheater system respectively, but assemble as together.

The WY401-MX PRDS is suitable for middle pressure and temperature reduction purpose, basically, its design pressure is <3.82 MPa, design temperature is < 450 DegreeC, steam flow range is from 20% to 100%.



BASIC PARAMETERS

Available inlet pressure: $P1 < 3.82 \text{ MPa}$

Available inlet temperature: $T1 < 450 \text{ DegreeC}$

Available Inlet flow rate: 20%~100%

Outlet pressure controlling accuracy:

$P2 < 0.98 \text{ MPa}$, accuracy range: $\pm 0.04 \text{ MPa}$

$0.98 \text{ MPa} < P2 < 3.82 \text{ MPa}$, accuracy range: $\pm 0.06 \text{ MPa}$

$P2 > 3.82 \text{ MPa}$, accuracy range: $\pm 0.15 \text{ MPa}$

Outlet temperature controlling accuracy: $\pm 4 \text{ DegreeC}$

Noise Level: <85 dbA

RECOMMENDATIONS

Minimum distance of Temperature Sensor from the point of water injection should be 10 to 12 mtrs

It is recommended to install a strainer of 0.8 mm mesh before water control valve

Spray water should be very clean (equivalent to boiler feedwater)

Instrument quality air is required

Inlet isolation valve is needed

Floor support to safety valve is needed

FEATURES

Designed and manufactured for small flow purpose, ensure the best controlling performance under minimal flow range.

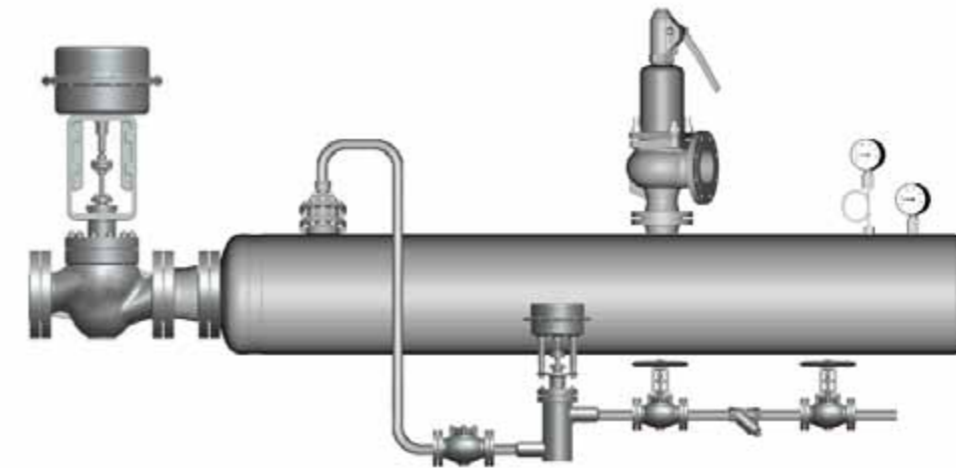
The pressure reducing valve adopts with cage type and balance design, gives advantages of higher adjusting capacity and sensitivity to small flows.

The valve cage is multi-holes designing, not only give the stable pressure reduction performance, but also give the advantage of anti-cavitation and reduce the noise level.

For the desuperheating part, the various types are available, can be venturi design or multi-nozzle structure, offers with more selection for different working requirement and conditions.

The feed water control valve is also design for small flow purpose, the valve select the needle trim to ensure the accurate water supply for spraying and get best desuperheating performance under small flow conditions.

WY401-MX PRESSURE REDUCING DESUPERHEATER SYSTEM



Assemble Parts

- Pressure reduction**
 Pressure Reducing Valve (PRV)
 Throttle Orifice Plate
- Desuperheater System**
 Classical Venturi Design
 Double Venturi Design
 Multiple Nozzle With Venturi Design
- Feed Water System**
 Feed Water Control Valve
 Globe Valve
 Throttle Valve
 Strainer
 Check Valve
- Safety System**
 Spring Loaded Safety Valve
- Instrument System**
 Pressure Gauge
 Thermometer
 Pressure Transmitter
 Thermocouple
- Others Parts**
 Connection Pipe
 Counter Flange and Fastens

Applications

Most of applications with controlling requirements for small flow purpose

Standards

NB/T47033-2013
 Manufacturing acc. to ASME
 IBR, CE certificated on request

Basic Parameters

Available inlet pressure: $P1 < 3.82 \text{ MPa}$

Available inlet temperature: $T1 < 450 \text{ DegreeC}$

Available Inlet flow rate: 20%~100%

Noise Level: <85 dbA

Design

Pressure Class	Custom-design, acc to specifications
Size	Outlet from DN80 to DN150 (3" to 6") Additional sizes on request
Design Temperature	Maximal. 450 DegreeC Higher temperature on request
Actuator	Electric Pneumatic Other actuators on request
Installation	Horizontal
Connection	Flange (ASME B16.5, GOST-12820, JIS) Butt weld (Acc to customer's request)

Materials

Valves	SA 216 WCB SA 217 WC6 ZG20CrMo
Pipes	SA-106B SA-355 P11 15CrMo

Additional Materials on request