# STEAM DESUPERHEATING SYSTEM

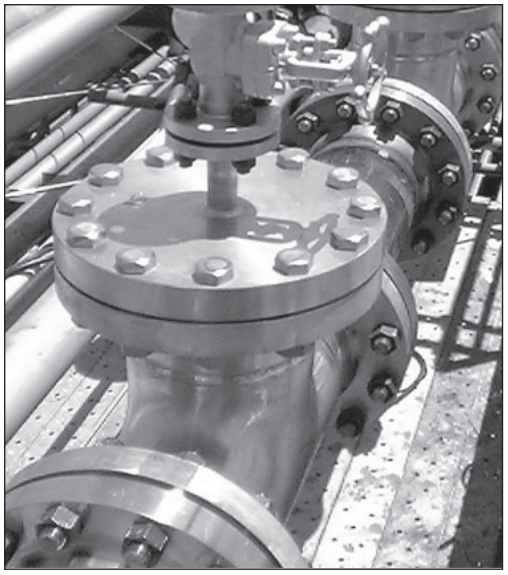
## MODEL RGDS

### SPACE-SAVING, HIGH-PRECISION DESUPERHEATING SYSTEM

## Features

**A space-saving system to reduce the pressure and temperature of superheated steam with high precision. Produces saturated steam without moisture contamination.**

1. Enables previously unattainable low flow velocities of 5 m/s (typically over 10 m/s).
2. Enables desuperheating with simple and compact piping.
3. Alleviates concerns of moisture contamination of the steam process.
4. Highly accurate temperature and pressure reduction by simply entering the target pressure value.
5. Prevents uneven heating due to superheated steam (e.g. in heat exchangers).
6. Protects equipments such as chillers from heat.
7. Prevents overheating during steam depressurisation.



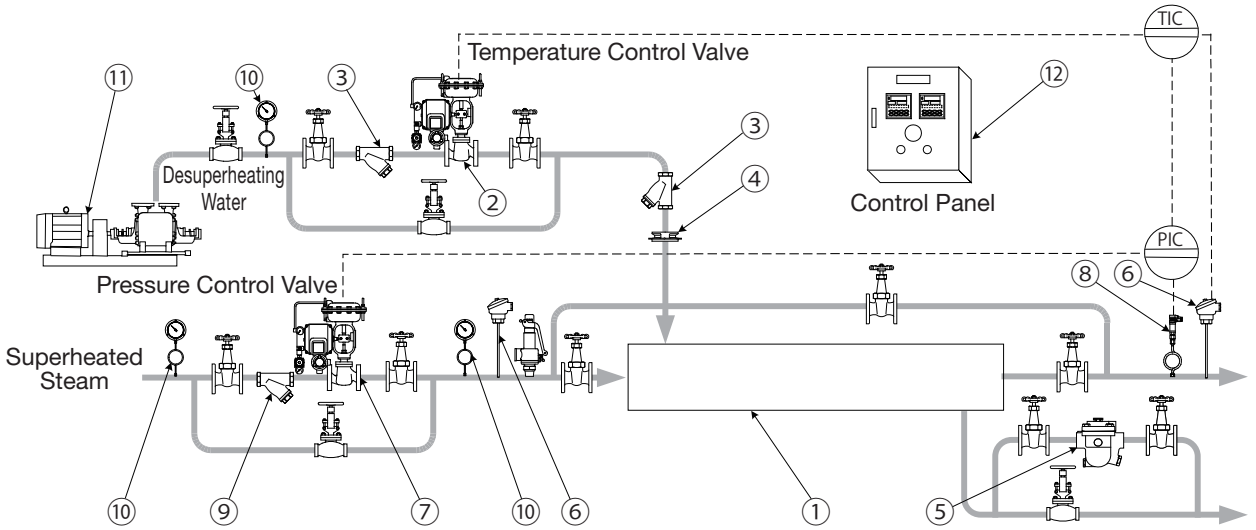
## Specifications

| Model | | | RGDS | | | |
|---|---|---|---|---|---|---|
| Size | | | 50 to 200 | | | |
| Steam Flow Rate* (kg/h) | | | 200 to 30,000 | | | |
| Fluid Velocities (m/s) | | | 5 to 50 | | | |
| Maximum Operating Pressure (MPaG)** | | PMO | 1.0 | | 2.0 | |
| Maximum Operating Temperature (°C) | | TMO | 300 | | 425 | |
| Applicable Fluid | | | Steam | | | |
| Standard Flange | | | JIS | | ASME/JPI | |
| | | | 10KFF | 20KRF | Class 150RF | Class 300RF |
| Required Utilities | Water Injection (MPa) | | Differential pressure***: 0.5 to 1.0 | | | |
| | Air for Instrumentation (MPaG) | | 0.3 to 0.9 | | | |

* Steam flow rate to be desuperheated depends on size and pressure. Contact TLV for details.
1 MPa = 10.197 kg/cm$^2$
** Maximum Operating Pressure of Desuperheating Section
*** Steam Differential Pressure for Water Mixing and Separation Section
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): Maximum Allowable Pressure (MPaG) PMA: 2.0
Maximum Allowable Temperature (°C) TMA: 425

**⚠ CAUTION** To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range.
Local regulations may restrict the use of this product to below the conditions quoted.

## System Configuration Example




| No. | Description | No. | Description |
|---|---|---|---|
| ① | Water Mixing and Separation Section | ⑦ | Pressure Control Valve |
| ② | Temperature Control Valve | ⑧ | Pressure Sensor |
| ③ | Y-Strainer | ⑨ | Y-Strainer |
| ④ | Check Valve | ⑩ | Pressure Gauge |
| ⑤ | Steam Trap | ⑪ | Pump |
| ⑥ | Temperature Sensor | ⑫ | Control Panel |

NOTE: Contact TLV for details.

Manufacturer
TLV CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001
ISO 9001
ISO 14001