



TECHNICAL DATASHEET

SCR Rupture Discs for Steam Condenser System Safety

DonadonSDD SCR reverse acting rupture discs are essential safety devices that prevent sudden pressure variations from damaging industrial plants. Reverse acting rupture discs have a convex disc camber that remains unaltered under operating pressure until reverse pressure is reached and this can ensure long service life. DonadonSDD SCR rupture discs uses advanced sector technology and provide improved performance and reliability to offer precise protection in the most high-risk applications, making DonadonSDD SCR rupture discs the best choice for your plant's safety. Our SCR Rupture Discs are specifically designed to protect steam condenser systems from overpressure. The discs feature a full metal design with micro-scored laser sections that ensure high reliability, strict tolerance, and improved efficiency of the vacuum system. The use of a PTFE seal membrane, which is notoriously permeable, is no longer required.

Keyfeatures & technical benefits

High Certification Standards:

Our SCR rupture discs are certified to the highest safety standards, including PED 2014/68/UE (CE STAMP), ATEX EX II 2 GD (CE STAMP), PER 2016 UK Statutory Instruments 2016 No 1105 (UKCA STAMP), and CU TR 032 (EAC STAMP).

Advanced Technology:

SCR rupture discs obtained using our patented Laser NS NanoScored technology are reverse-acting discs with micro-scored calibrated sections opening in petals, reducing the risk of petal detachment.

Versatile Design:

Designed for easy installation in customer's flanged coupling (or with additional spacer rings to adapt at the existing space between flanges and provide easy installation) and has a long lifespan under cyclic and pulsating pressures.

Reliable Performance:

Withstands thousands of cycles without compromising their reliability, with ratios up to 95% between operating and rupture pressure. Strict tolerance on the bursting point ensures reliable protection.

Rapid Rupture:

Disc ruptures in a few milliseconds and with full opening along scoring petals lines on the downstream side of the disc.

Non-Fragmenting:

DonadonSDD SCR Rupture Discs ruptures along the scored line without generating any fragments.

Temperature Resistance:

ideal for applications with significant temperature variances due to reduced sensitivity to temperature fluctuations.

Vacuum Resistance:

Full vacuum resistant, providing a full vent area without the need for vacuum support.

Why Choose DonadonSDD SCR Rupture Discs?

- DonadonSDD SCR Rupture Discs are certified to the highest safety standards, providing reliable protection for steam condenser systems.
- Our patented NS NanoScored technology allows us to micro-score any industrial material for the best possible rupture disc.
- Our full metal design with micro-scored laser sections ensures high reliability and strict tolerance while improving the efficiency of the vacuum system.
- Our SCR Rupture Discs are resistant to absolute vacuum and can be installed without the need for supports, making them versatile and convenient for a variety of applications.

TECHNICAL DATA

MODEL	SCR
MATERIALS	Stainless steel, Alloy 201, Alloy 400, Alloy 600, Alloy 625, Alloy C276

DonadonSDD is now part of **Baker Hughes** 

DIMENSIONS	From DN300 (12 inches) to DN900 (36 inches)
RUPTURE PRESSURE	0,5 – 1,5 bar g (Depending on size and material)
TOLERANCE	from +/- 5 % to +/- 10%
OPERATING TEMPERATURE	up to 600°C
FRAGMENTATION	No
OPERATING MARGIN	90% - Can reach up to 95% depending on service conditions.
RESISTANCE TO VACUUM PRESSURE	Yes, self-supporting under vacuum conditions
CORROSION RESISTANCE	Very good
INSTALLATION	Designed to be installed directly between flanges
RUPTURE SENSOR	Electrical

PERFORMANCE ATTRIBUTES

Operation Ratio



up to 95%

Non Fragmenting



yes

Vacuum Resistant



yes

Sanitary



no

Vapor/Gas



yes

PROCESS MEDIA

CERTIFICATIONS

