

EMCO Single hole/Multi stage Depressurizing Unit for Gasses Type SDP-G

Principle

EMCO single hole multi stage depressurizing unit are used to reduce the pressure in a number of stages to a desired pressure. The gas passes each stage at sonic or critical velocity. When the pressure is reduced so is the density of the gas or steam. In order to maintain a constant velocity the cross sectional area is increased after each stage

The calculation is based on R.W. Miller and Ward-smith.

Each of the pressure reducing stages are connected and supplied as a unit

Construction

Design and calculation standards

: R.W. Miller: Flow Measurement Engineering Handbook, Ward-Smith ISO 5167 etc.

Sizes

: 1/2" - 24"

Pressure rating

: 150 - 2500 lbs

Orifice plate shape

: Square edge concentric.

Thickness calculation

: ASME standard.

Plate thickness

: Minimum 3 mm, thickness is calculated to handle the differential pressure.

Discharge coefficient

: Determined by the thickness of the plate

Distance between each stage

: 1 - 2 times inner pipe diameter.

Material, plates

: AISI 316 (standard), and other erosion resistance materials on request

Material, spool piece

: P235GH (A106 Gr. B or C), AISI 316, AISI 321, Duplex Hastelloy, other materials on request.

Mounting style

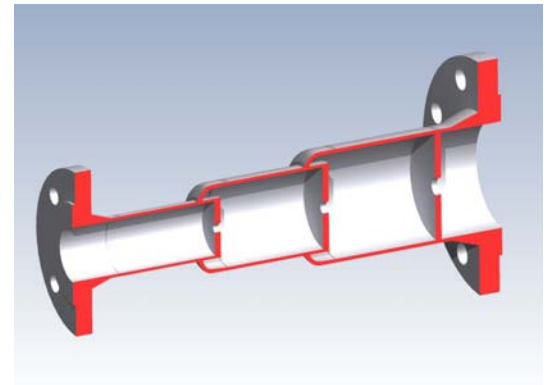
: Between flanges according to ANSI B16.5 or DIN Standards or butt weld ends.

Overall length

: Depends on number of stages and pipe size. Each SDP-G is calculated individually.

Documentation

: Material certificate according to EN 10204-3.1.
Noise calculation.
Is noise level above acceptable level
Multi hole plates have to be used



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