

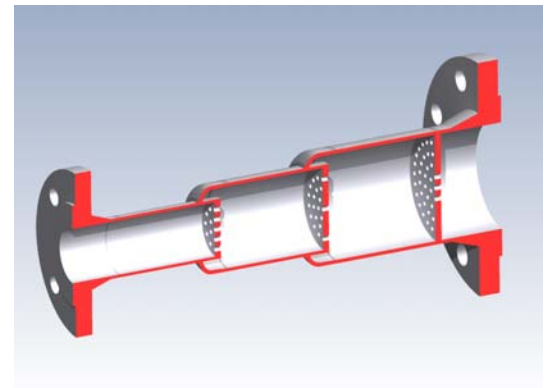
EMCO Multi hole/Multi stage Depressurizing Unit for Gasses Type MDP-G

Principle

EMCO multi hole multi stage depressurizing unit are used to reduce the pressure in a number of stages to a desired pressure and to secure as low noise development as possible. The gas passes each stage at sonic or critical velocity. When the pressure is reduced the density of the gas or steam is also reduced. Higher velocity results in higher noise level. Therefore the design of the unit secures that the velocity through the stages of pressure reduction does not increase. 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 MDP-G is calculated individually.
Documentation	: Material certificate according to EN 10204-3.1. Noise calculation.



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