

## EMCO Restriction Plate Series IRB/1 for RF Flanges

### Principle

EMCO restriction plates are used to restrict the flow in order to prevent damage on pipe line equipment on the upstream side in blow down systems or to limit the flow / pressure to avoid damage on equipment on the downstream side. The plates can be calculated according ISO 5167 as thin restriction orifice plates, or thick plates according to R.W. Miller/Ward-Smith.

### Construction

- Design and calculation standards : ISO 5167, Shell Flow Meter Engineering Handbook, R.W. Miller: Flow Measurement Engineering Handbook, etc.
- Sizes : 1/2" - 24", DN 15 – DN 600
- Pressure rating : 150 - 2500 lbs, PN 10 – PN 400
- Orifice plate shape : Square edge concentric.
- Thickness calculation : ASME standard B31.1, B31.3.
- Plate thickness : Minimum 3 mm, thickness is calculated to handle the differential pressure, See technical specification.
- Discharge coefficient : Determined by the thickness of the plate
- Material : AISI 316, Duplex, Monel, 6Mo, Titanium Hastelloy, Zirconium, Inconel, others on request.
- Mounting style : Between Raised Face flanges according to ANSI B16.5 or DIN standards.
- Handle : With name plate in AISI 316 with the following inscription : TAG no., serial no. pressure rating, inner pipe dia., bore, material.
- Documentation : Material certificate according to EN 10204-3.1.  
Aero dynamic noise calculation for gas.  
Hydro dynamic noise calculation for liquid.  
If noise level is above acceptable level,  
Multi hole plate or multi stage pressure reduction is the solution.

