

Flow Conditioner



Flow Conditioners and Flow Straightener

based on

ISO-5167 standard

Flow Conditioner or Straightener

Series FLCS

✓ Principle

FLCS flow conditioners are usually used before primary elements in flow measurement of steam, liquid and gas to decrease turbulence rate of flow. This parameter is shown by Reynolds's Number, therefore the flow conditioners can reduce the Reynolds number.

✓ Construction

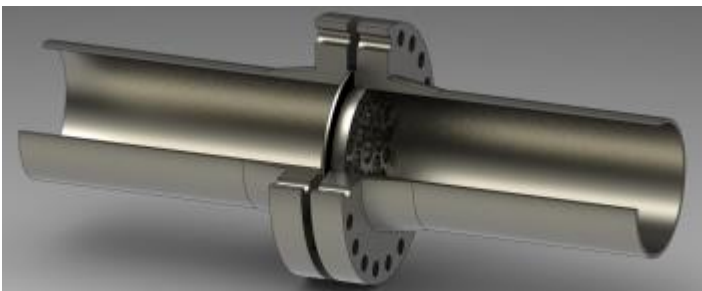
Design standards : ISO 5167

Sizes : DN 50 - 900 according to ISO 5167

Bore/diameter (β) : Depend on calculation.

Pressure rating : PN 10 - 640, 150 - 2500 lbs., ISO PN 20 -420

Material : Stainless Steel (Especially AISI 316 and other types), Carbon Steel, Monel, Inconel, Super Duplex, 6Mo and others on request.



Raised Face Flanges

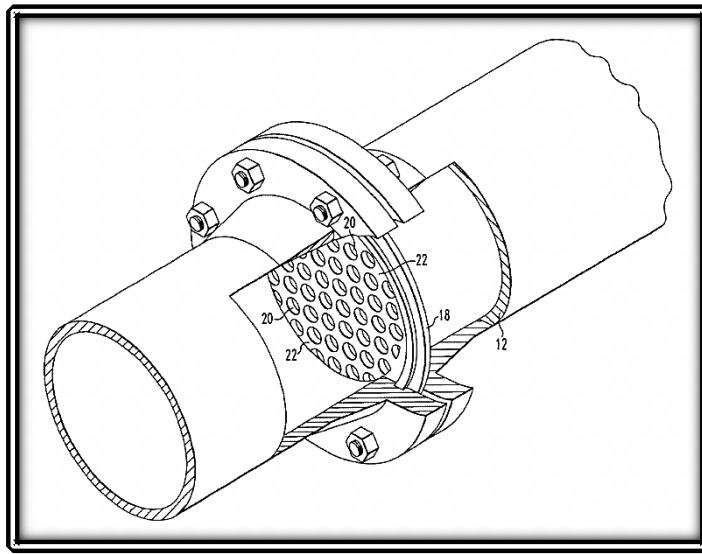
Ring Type Joint flanges



✓ Technical Data

Pressure loss : Depending on sizes and quantity of bores. Each item needs a pressure drop calculation.

Limits for Re. No. : Whenever the reducing Reynolds is required.



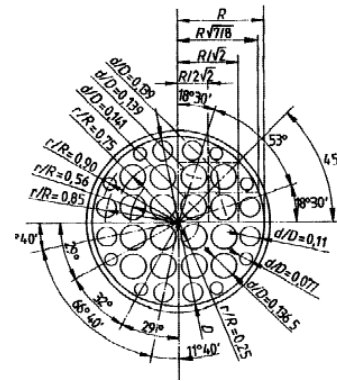
ZANKER Flow Conditioner Type or A

Types and Varieties:

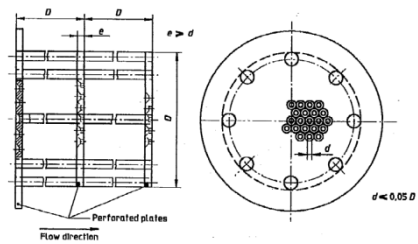
According to ISO 5167 there are five approved types of Flow Conditioner as below. The choice of a conditioner depends on the nature of velocity distribution which has to be corrected and to the pressure loss which can be tolerated.

NOTE: Following drawings are from ISO 5167 Standard

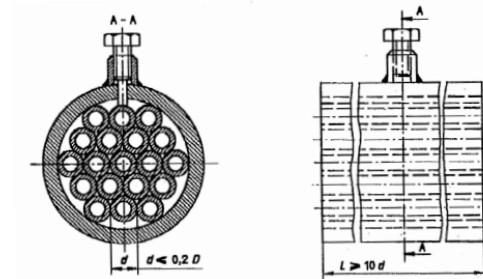
Type A: ZANKER Conditioner



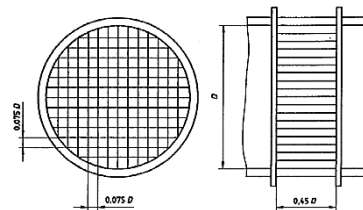
Type B: SPRENKLE Conditioner



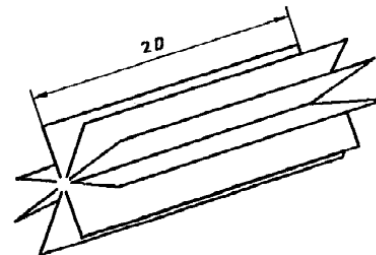
Type C: Tube Bundle Conditioner



Type D: AMCA Straightener



Type E: ETOLLE Straightener



Some Samples of Flow Conditioner:

