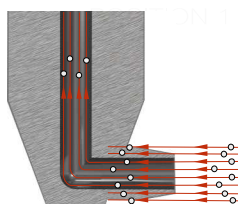


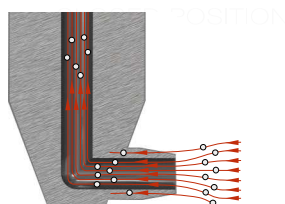


DESCRIPTION

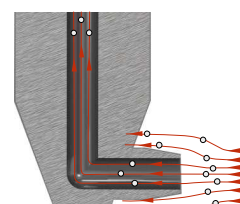
Isokinetic Steam Sampling Probes are used to obtain a representative sample from the saturated and superheated steam. An appropriate analysis system starts with a correct sampling probe in process. If we do not take a representative sample process, we will never be able to have a reliable analysis system. This basic comment is sometimes undervalued in projects. We can spend large amounts of money buying analyzers or conditioning systems, but if we don't have the right process sampling probe, probably we won't get the expected results.



$V_{sample} = V_{local}$
Isokinetic sampling



$V_{sample} > V_{local}$
Entrainment Undersampled



$V_{sample} < V_{local}$
Entrainment Oversampled

The Isokinetic probes requires that the velocity of the fluid entering in the sample nozzle is exactly the same as the velocity of the streaming being sampled at the location of sample nozzle.

The bore of the nozzle and the size of the port shall be in accordance with calculated data (IECTR61831 or ASME D1066 and PTC19.11).

Each Isokinetic probe must be designed taking in account temperature, stresses, pressure, vibration, erosion, and strength of the attachment to the pipe.

MATERIALS

Usually these probes are manufactured in A182 316SS, however Manvia can manufacture these probes in other exotic materials. The process conditions must be considered.

For the design of this type of probes, it is necessary to have some data. Please fill the Annex of this document in case you require an offer.

Date

Customer Information

Contact Name

Company

Street Address

City

County

Postcode

Phone Number

Email Address

Tag Number Probe

Fluid to be sampled:

Process Condition

Maximum Flowrate in Process Pipe (during normal operation) (Kg/hr):

Normal/Average Flowrate in Process Pipe (during normal operation) (Kg/hr):

Operating Temperature (during normal operation) (°C):

Operating Pressure (during normal operation) (barg):

Process Pipe

Process Pipe Material

Process Pipe OD (in):

Process Pipe design temperature (°C):

Process Pipe design Pressure (barg):

Process Pipe Wall (in) or Schedule:

Process Pipe Insulation Thickness (mm):

Isokinetic Probe data:

Process Connection:

Material

If Flanged: Indicate Size, type and Rating of flange:

If Flanged: indicate distance from process pipe OD to raised face of flange on process pipe (Nozzle length "M" mm.):

Note: "L" Insertion Length (mm) : calculated by Manvia

