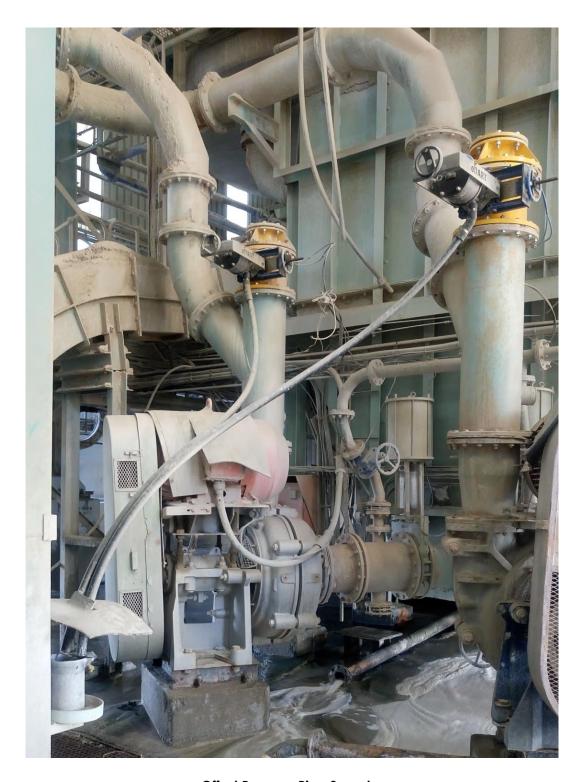


Application Brochure – Offset Centre Pipe Sampler

E-PUB-02-0003 Version 02, 2019-06-25



Offset Pressure Pipe Sampler

The offset pressure pipe sampler is used to take a primary process control sample from a pumped or pressurised line. For all pressurised lines of 250 NB and larger, the use of an offset centre pipe sampler to increase the representivity of the final sample is recommended.



Application Brochure - Offset Centre Pipe Sampler

E-PUB-02-0003 Version 02, 2019-06-25

Application

There are two main variants depending on the specified use of the sample:

- If supplied with a continuous nozzle, then this sampler is suitable for supplying a sample to an on-stream analyser.
- If supplied with a recirculating nozzle then this sampler is suitable, along with a poppet sampler, for producing a shift or composite sample without the discard stream. It is an advantage to eliminate the sample discard stream as this in turn means less pipes and pumps required to return it to the process.

Features

These samplers feature a robust nozzle made from stainless steel and cast liner in polyurethane. The nozzle ensures that a sample is taken from the centre of the pipe, in a well-mixed turbulent zone.

The recirculating nozzle ensures a fresh stream is directed to the measurement zone where the secondary poppet sampler is located.

Options

- The continuous nozzle entrance:
 - o Open, or
 - Wedge wire grill to minimise choking of the nozzle or sample pipe.
- Slurry air release valve on the top of the recirculating nozzle to prevent air build up in the measurement zone.
- The Offset pipe samplers are offered with a polyurethane lined "throat" that increases the turbulence and mixing in the sampling region.
- The sampler can have both the recirculating and continuous nozzle, for applications requiring both an OSA sample as well as an independent Secondary shift/composite sample.
- Retrofit option retrofit existing pressure pipe samplers, thereby saving the customer on additional pipework and extended installation costs.

Advanced Design

The samplers design is heavily influenced by computational fluid dynamics modelling to produce the most representative sample possible.

