## Process control sampling in action

eDART process control sampling includes the primary sampler, which may be placed either in a pressurised or unpressurised line. The sample may then be directed to an On-Stream Analyser or a suitable poppet sampler variation for secondary sampling so a fixed volume may be taken to the lab. The highly reliable results of the eDART sampler systems yields high confidence that process control people can rely on.
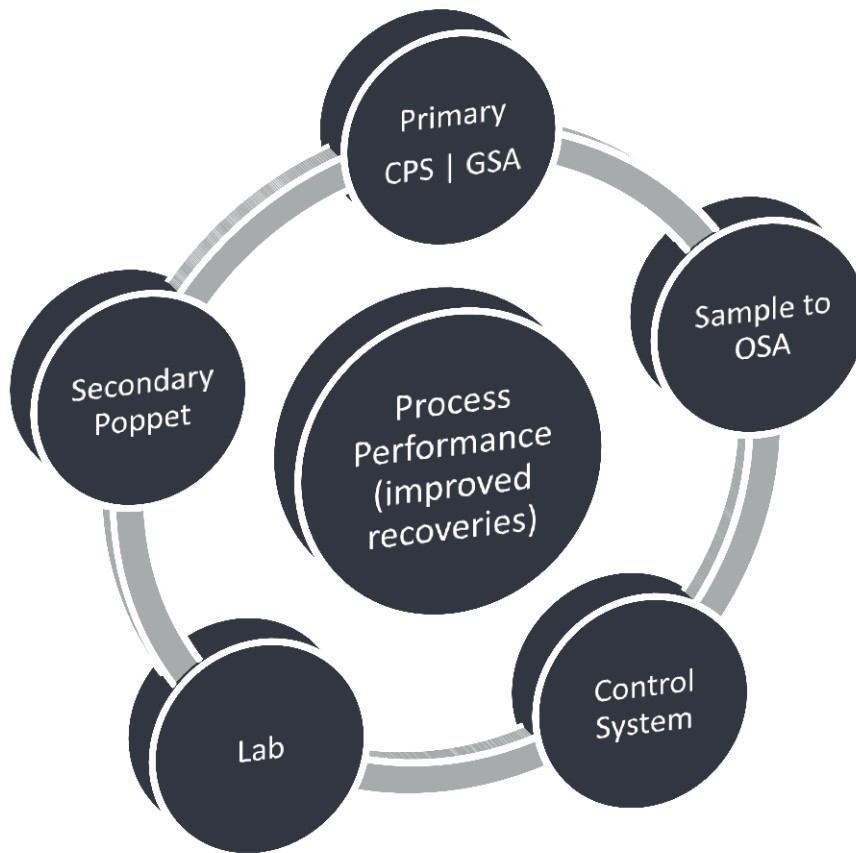
This chart is one example to show the results from the On-Stream Analyser fed from an eDART Gravity Sampler at a major copper producer in Zambia is highly correlated to the independent reference data from the laboratory.

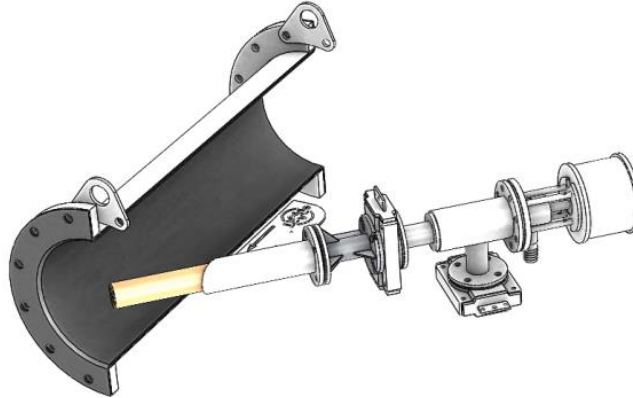This chart is a measurement of good overall plant performance.
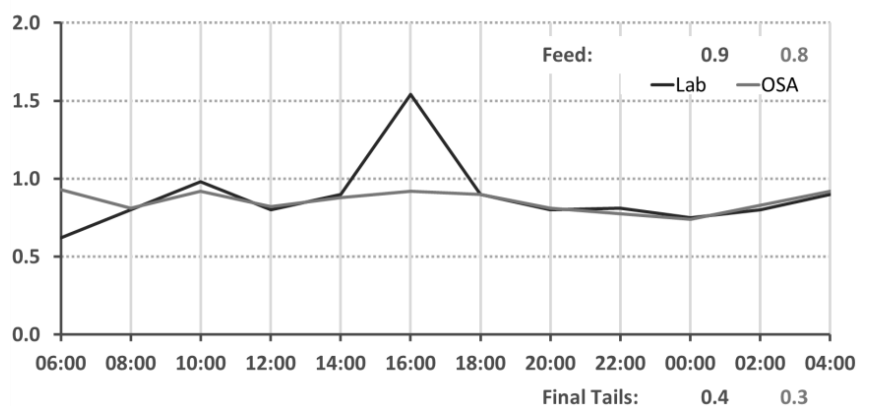
Centre Pipe Sampler (Pressurised) (PCS)

Here is a selection of pressurised primary samplers that have been developed to retrieve the sample from the central slurry core of the pipe flow:

Offset
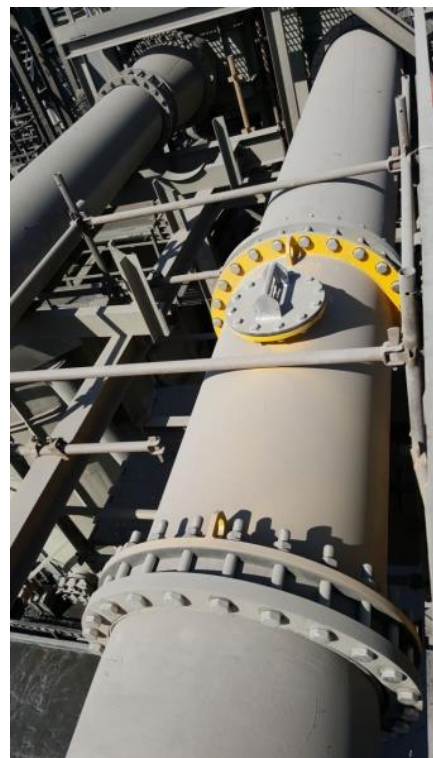
Horizontal

Sample Splitter

Gravity (Non-Pressurised) (GSA)

Non pressurised lines have their flow cut across the height of the stream. The primary sampler may be reduced by bypassing the cutter with portals which pass straight through. These have been developed to minimise turbulence in the vicinity of the cutter.

Reducing Cutter

### Static Cutter

Secondary Sampler

The **poppet sampler** and its variants have been available for three decades and is popular as an economic process control sampler. It is useful for automatic periodic sampling to get composite or shift samples in order to track the plant performance; for sampling campaigns to establish the metallurgical performance of a piece of equipment, or flotation bank.
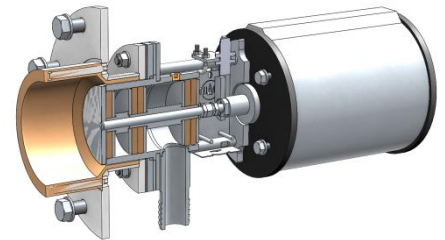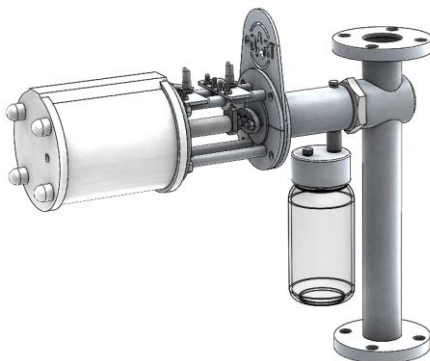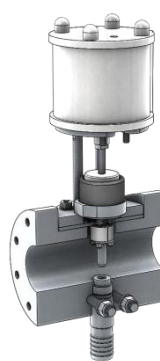
Poppet Samplers
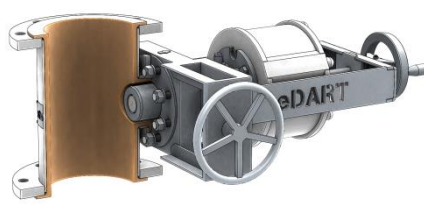
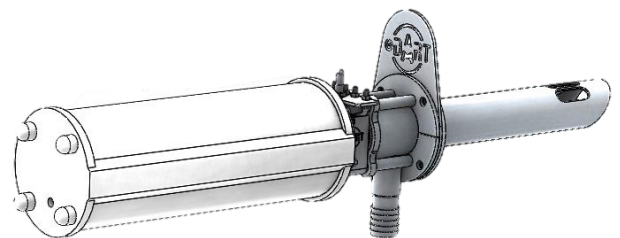| Standard	Thief	Coarse

Corrosive	Viscous	Dry

Applications

- Grab samplers
- Sampling campaigns
- Plant commissioning
- Composite/shift sampling
- Equipment calibration
- Calibration of densitometers
- Monitoring of grind PSD
- Plant feed density