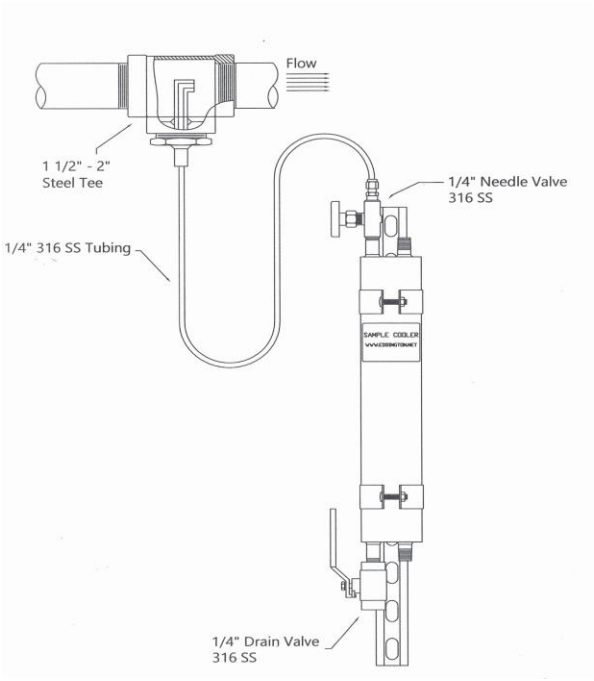
Isokinetic Single-Port Steam Sampling Nozzle

PRODUCT DATA SHEET



An isokinetic steam sampling nozzle is designed to extract a representative sample of steam from a pipeline or process vessel, while maintaining the same velocity as the main flow to ensure accuracy.

Application

Used in chemical processing and industrial steam systems to collect steam samples for quality analysis. Such as moisture content, purity, and chemical composition.

Design Features

- Precision-machined nozzle ensures consistent sampling velocity.
- Corrosion-resistant materials for steam service
- Customizable connection type to suit installation
- Optional sample conditioning equipment

Nozzle Specifications

Parameter	**Specification**
Nozzle Diameter	Typically, 0.152" to 0.402" (custom sizes available)
Material of Construction	Stainless Steel (type 316), Alloy Steel, or per user specification
Connection Type	Flanged, Threaded, or Welded
Operating Pressure	Up to 600 psi
Operating Temperature	Up to 486°F
Velocity Matching	Designed for isokinetic conditions – sample velocity matches main flow

Values above are typical and may vary based on actual steam density, temperature, and system design.

Installation Guidelines

1. Install Nozzle perpendicular to the main steam flow for accurate sampling, preferably in vertical downward flow 35 diameters upstream and 4 diameters downstream from any disturbances.
2. Insert Nozzle approximately 0.2 radius from the inner wall of steam line (Assuming turbulent flow)

Ordering Information.

- Pipe Size and schedule
- Steam pressure and temperature
- Steam flow rate/velocity
- Nozzle material
- Connection type
- Required conditioning equipment: Coolers, pressure reducing valve, flow indicator, high temperature shutoff, ect.

Made in the USA.