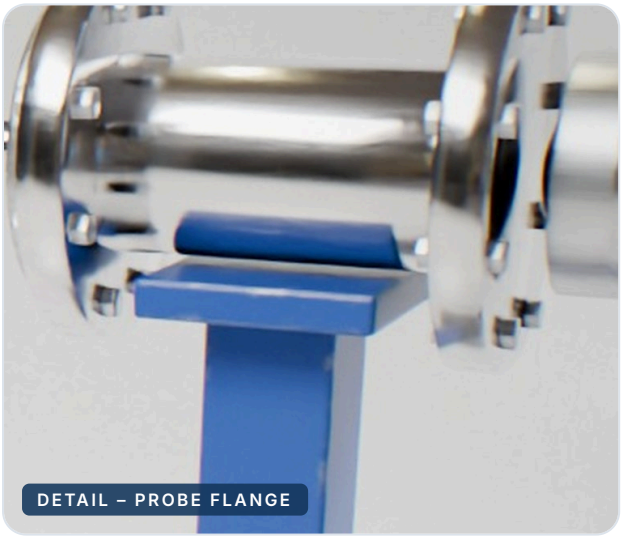
PRODUCT DATASHEET

Heated Self-Cleaning Syngas Sample Probe

Heated blowback sample probe for raw syngas





DETAIL – PROBE FLANGE

OVERVIEW

The Tech Inc. Heated Self-Cleaning Syngas Sample Probe (model TI-SGPHT) draws a continuous sample of raw syngas, the hot, dusty, hydrogen-rich gas made by gasifying coal, for the plant's process and safety analysers. The probe filter is heated to keep tar and water in the vapour phase, and short nitrogen blasts (blowback) clear dust from the filter while the plant runs. It is fitted at the gasifier outlet and other dirty-gas points, ahead of the sampling cabinets.

MODELS AND CONFIGURATIONS

- **TI-SGPHT** – heated, self-cleaning probe for raw syngas.
- **Probe length and mounting** – insertion length and flange to suit the line, to client specification.
- **Spare probe filters** – replacement elements for dirty service.

TYPICAL DESIGN DATA

Sample	Raw syngas containing hydrogen, carbon monoxide, dust and tar
Probe heating	Electric, with temperature matched to process conditions
Filter element	Sintered metal or ceramic, to client specification
Cleaning	Nitrogen blowback, timed or on filter pressure drop
Wetted materials	Stainless steel or Alloy C-276, to client specification
Process connection	Flanged, to client specification
Hazardous area	Electrical equipment selected for the hazardous-area classification, or to client specification

APPLICATIONS

Gasifier outlet monitoring and raw syngas analysers on coal and lignite gasification plants producing methanol, ammonia and fertiliser, hydrogen and synthetic natural gas.

KEY ADVANTAGES

- **Self-cleaning** – nitrogen blowback keeps the filter open with the plant on line
- **No condensation** – the heated filter keeps tar and water in the vapour phase
- **Representative sample** – filtered at process conditions, close to the sample point
- **Less maintenance** – fewer filter changes and blocked sample lines
- **Complete sample path** – probe, sampling cabinets and purge panels from one maker

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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