

GENERAL

Caproco offers a range of probes designed to sample the biofilm activity present in a process system. The biofilm probe incorporates a sampling stud design, which facilitates the accumulation of bacteria.

Microbiological activity is recognized as a significant contributor to corrosion problems encountered in many industries, but until recently it has been difficult to identify its occurrence and quantify the resulting damage. A testing system was needed that would allow easy sampling and identification of all types of bacteria present, along with an indication of the severity of attack. Caproco's biofilm probes are an important component to the MIC (microbially influenced corrosion) detection system.

APPLICATION

The biofilm probe is designed to be mounted flush in the pipe wall, with the probe face of five studs exposed for accumulating bacteria. The flush design gathers samples of the microbial activity present in residues along the pipe wall, and is useful in locations which are regularly pigged.

The exposed stud samples are analyzed through the use of the Caproco Hydrogenase Test Kit, and the results can be quantified by the Caproco MIC Analyzer Instrument.

Caproco biofilm probes are used in testing for:

- Anaerobe and sulphate reducing bacteria (SRB)
- Aerobes

The biofilm probe samples can also be used in common testing techniques such as epifluorescence.

The Caproco MIC system allows operators to evaluate the effectiveness of implemented biocide treatments in controlling bacterial-induced corrosion.

The sampling system is designed to avoid erroneous readings taken due to accumulation of dead bacteria on the stud. This is a common problem that can be found with other biofilm probes on the market.

SPECIFICATIONS

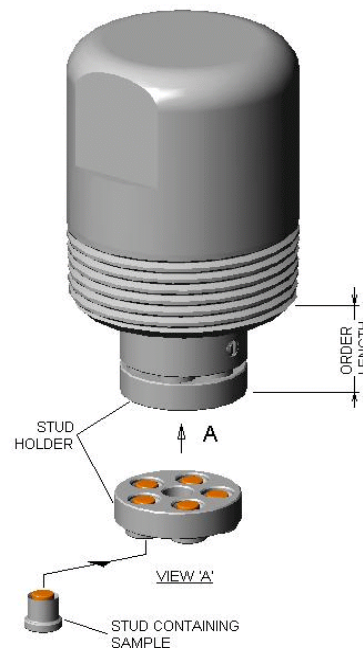
Maximum Operating Pressure	3,600 / 6,000 psi (24.8 / 41.4 MPa)
Maximum Operating Temperature	500°F (260°C)

Caproco biofilm studs are encapsulated and sealed in a plastic insulating body, while the exposed steel surface is sterilized prior to packaging.

Caproco biofilm probes are manufactured from 1018 carbon steel with mild steel sampling studs. Probe bodies and studs are available in alternative materials upon request.

Standard Caproco fixed probes use a threaded bull plug configuration and are intended to be used in locations that can be depressurized for service. An adjustable-length style is available, which allows usage in different locations of varying wall thickness.

The probes are available in either 5 stud or 2 stud configurations, and are designed to be mounted in 1", 1½", 1¾" and 2" NPT thread-o-let fittings.



CONTACT CAPROCO FOR SIZING AND PART NUMBERS