Engineering News

Steam Coils

Background

Steam has long been an efficient solution for heating, yet heat exchanger longevity and design challenges have always posed problems.

To tackle this, Evapco Europe A/S now shares practical guidelines, helping you design more durable and reliable steam heating systems.



Objective

The purpose of this is to define the key design and manufacturing constraints that Evapco Europe A/S applies when providing steam heating coils, ensuring coil longevity.

The Guidelines:

The following describes the fundamental limitations for coils with Stainless steel tube, involving steam as the primary heat transfer fluid.

- Steam inlet condition dry saturated No superheat considered
- Condensate outlet No sub-cooling considered
- Maximum tube length 3000 mm
- Maximum header length per section 1500 mm
- Maximum 2 rows per header
- Maximum steam pressure 12 barg (13 barA) 191.6 °C
- Aluminium fin material thickness suggestions
 - Up to <=1 barg (2 barA) use 0.12 mm Aluminium fins
 - o From 1 barg (2 barA) to 3.5 barg (4.5 barA) use 0.18 mm Aluminium fins
 - Above >3.5 barg (4.5 barA) use 0.25 mm AlMg fins

For further information please contact us.

