Project Planning Information for Pipes

Contact information

Company	
Street	
Post code / Town	
Country	
Web site	
Contact person	
E-mail	
Phone	

Application of Electrical Trace Heating System

Frost protection	☐
Temperature maintenance	☐
Heating up and temperature maintenance	☐

Piping information

Length	m
Nominal bore	mm
Pipe material	
Specific heat of the pipe material*	J/(kg·K)
Pipe weight per meter*	kg/m
Wall thickness*	mm
Density of the pipe material*	kg/m³
Number of valves	pcs.
Number of flanges	pcs.
Number of supports	pcs.
Number of pumps/filters	pcs.
Number of drains/vents	pcs.
Location ☐ indoor ☐ outdoor ☐ buried	

Thermal insulation information

Material		
Thickness		mm
Thermal conductivity	W/(m·K) at mean temperature	°C
Density*		kg/m³
Specific heat*		J/(kg·K)
Upper limit temperature of thermal insulation material		°C

Product information

Medium	
Density*	kg/m³
Specific heat*	J/(kg·K)
Phase change temperature* (if undergo)	°C
Latent heat of fusion*	J/kg

Process data

Initial temperature*	°C
Final temperature*	°C
Required heat up period*	h
Maintain temperature	°C
Max. allowed temperature of the product	°C
Min. ambient temperature	°C
Max. ambient temperature	°C
Startup temperature	°C

Temperature limitations

Max. operating pipe temperature (continuously, trace heater energized)	°C
Max. exposure heater temperature (intermittently, trace heater de-energized)	°C

Electrical data, area classification, approvals/certifications

Supply voltage		V AC
Frequency	☐ 50Hz	☐ 60Hz
Installation in potentially explosive atmospheres	☐ Yes	☐ No
Temperature class		
ATEX		☐
IECEx		☐
CSA		☐
EAC		☐
INMETRO		☐
KOSHA		☐

* required for temperature raise

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