

Project Planning Information for Vessels

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

Vessel properties (please attach drawings)

Body	cylindrical		rectangular	
Type	horizontal		vertical	
Bottom (for vertical vessel)	flat		dome	
Top (for vertical vessel)	flat		dome	
Sides (for horizontal vessel)	flat		dome	
For vertical vessel	height	m	∅	m
For horizontal vessel	length	m	∅	m
For rectangular vessel (H x W x L)	x		x	m
Supports	feet	slab	saddle	
Number of supports				pcs.
Specific heat of the vessel material				J/(kg·K)
Wall thickness*				mm
Density of the vessel material*				kg/m³
Location	indoor		outdoor	

Thermal insulation information

Material	
Thickness	mm
Thermal conductivity	W/(m·K) at mean temperature
Density*	kg/m ³
Specific heat*	J/(kg·K)
Upper limit temperature of thermal insulation material	°C

Product information

Medium	
Density*	kg/m ³
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		
Other		

Temperature control

Provided by
Customer
BARTEC
Only temperature sensor by BARTEC
If by BARTEC,
Local controller
Controller in distribution panel
Distribution panel in hazardous area
Controller
Electronic
Mechanical