

Project Planning Electric Boiler and Tank Heating Systems

1. General Information

1.0 Quotation for company _____
1.1 Street / P.O. Box _____
1.2 Country/Post Code/City _____
1.3 Phone _____
1.4 Fax _____
1.5 Editor _____ Dep. _____ Extension _____
1.6 Quotation date _____
1.7 Owner of plant _____
1.8 Address _____
1.9 Editor _____ Dep. _____ Extension _____

2. Boiler/Tank Information

2.0 Boiler/tank diameter m _____
2.1 Boiler/tank height / -length (please attach drawings) m _____
2.2 Boiler/tank material _____
2.3 Boiler/tank wall thickness mm _____
2.4 Boiler/tank inner coating _____
2.5 Position: vertical foots
horizontal plane ground
2.6 Type of support _____
2.7 roof: flat cambered
ground: flat cambered
2.8 If conical, cone height m _____
2.9 Min. liquid level m _____
Norm. liquid level m _____
2.10 Insulation material _____
2.11 Insulation thickness mm _____
2.12 Coefficient of thermal conductivity of insulation W/mK _____
Please indicate in case of temperature rise:
2.13 Spec. heat of boiler/tank-material kJ/kgK _____
2.14 Spec. weight of boiler/tank-material kg/dm³ _____

3. Product Information

- | | | | |
|------------|---|-------------------|--|
| 3.0 | Product | | |
| 3.1 | Medium | | |
| 3.2 | Spec. weight | kg/m ³ | |
| 3.3 | Spec. heat | kJ/kgK | |
| 3.4 | Heat of fusion | J/kg | |
| 3.5 | Desired constant temperature of product | °C | |
| 3.6 | Max. ambient temperature | °C | |
| 3.7 | Min. ambient temperature | °C | |
| 3.8 | Wind speed | m/s | |
| 3.9 | Temperature rise of product | | |
| | A. Starting temperature | °C | |
| | B. Final temperature | °C | |
| | C. Desired period of temperature rise | h | |

4. Electrical Data

- | | | | | | |
|------------|-----------------------------------|-------|--------------------------|----|--------------------------|
| 4.0 | Existing voltage | V | | Hz | |
| 4.1 | Installation in hazardous area | yes | <input type="checkbox"/> | no | <input type="checkbox"/> |
| | if yes, temperature class | | | T | |
| 4.2 | Certificates and Approvals | | | | |
| | VDE | _____ | | | |
| | PTB | _____ | | | |
| | TÜV | _____ | | | |
| | Others | _____ | | | |

5. Temperature Limiting Values

- | | | | |
|-----|----------------------------------|----|--|
| 5.0 | Max. temperature of insulation | °C | |
| 5.1 | Max. temperature of boiler/tank | °C | |
| 5.2 | Max. temperature of coating | °C | |
| 5.3 | Max. temperature of product | °C | |
| 5.4 | Will the boiler/tank be flushed? | | |
| | If yes, at which temperature | °C | |