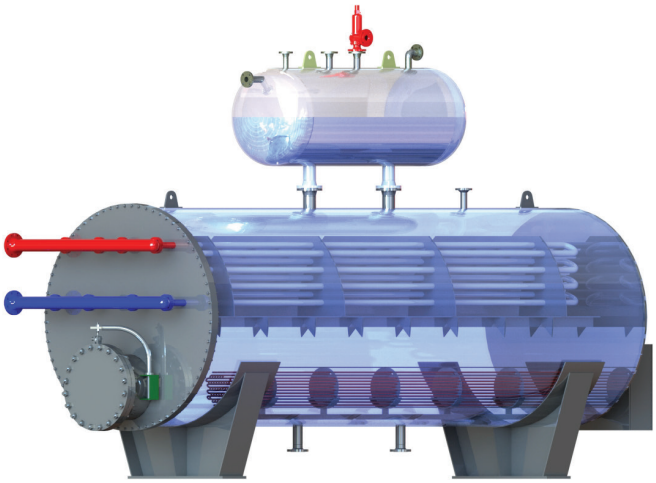
WATER BATH HEATER SYSTEM

THE KEY TO THERMAL AND PROCESS HEATING

Bath Heater is an indirect heating solution where tube bundles containing flowing process fluids such as natural gas or crude oil are heated through submergence in a heated medium

Dfiniti leverages deep expertise in thermal engineering to design, fabricate, and supply fully integrated Bath Heating Systems. Our solutions are crafted to deliver superior efficiency, reliability, and performance.



A complete system comprises:

- Tube Bundle
- Expansion Tank
- Skid Structure
- Heat Exchange Tank
- Heater (electric or fired)
- Control Panel and/or Burner Management System
- Temperature Sensors and Other Instruments

Product Features

- Isolates process from direct heat source
- Heat source can be through electric or fired burner
- A safer operation with indirect heating
- Bath medium can be in the form of Water, Water + Glycol, Thermal Oil or Molten Salt
- Ideal for high pressure applications with lower cost as compared to direct heating

While operating temperatures are typically lower than those of direct heating, materials of construction in a Bath Heating System are often less stringent when compared to direct heating equipment.

The cost savings can be significant, especially in high-pressure applications (above 250 barg) and when exotic materials are required on wetted parts.

Specifications

	Electric Type	Fired Type (Natural or forced draft burner)
Source	Electricity	Fuel gas, Oil, Dual fuel
Capacity	Typically below 1000kW	Fuel gas, Oil, Dual fuel
Bath Medium	Water (<90°C)	
	Water + Glycol (80°C - 98°C)	
	Thermal Oil (<240°C)	
	Molten Salt (<400°C)	
Design Standard	API 12K, ASME Code (Electric Heater and Control Panel can be supplied with ATEX/IECEx certifications for explosive environment)	
Design Temperature and Pressure	As per project specification	
Control System	Thyristor or Contactor	BMS

Applications

Due to large footprint, a Bath Heating System is typically used in onshore applications as follows:

- Fuel Gas for dew point control
- Gasifying for cryogenic process
- Viscosity reduction for oils and other mediums
- Gas transmission line/pressure reduction station on Joule-Thomson effect

SINGAPORE MALAYSIA CHINA INDONESIA UAE

Singapore [Office]
7030 Ang Mo Kio Avenue 5,
Northstar #08-65,
Singapore, 569980
RCB No: 201539578M

Malaysia [Factory]
No. 31, Jalan Gemilang 6, Taman Perindustrian Cemerlang, 81800
Ulu Tiram, Johor, Malaysia
Reg No: 1202241-W

sales@dfiniti-t.com
www.dfiniti-t.com
Dfiniti Technologies
T +65-6908 0869 | F +65-6282 0218