

RECOMMENDED HIGH TEMPERATURE SYSTEM COMPONENTS & SUPPLIERS





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PIPE

Flanged Installation

To 1-1/2" diameter

ASTM A-106 Grade B schedule 40 seamless carbon steel pipe

Greater than 2"

ASTM A-53 Grade B schedule 40 seamless carbon steel pipe

Threaded Installation

To 1" diameter

ASTM A-106 Grade B schedule 80 carbon steel pipe

From 1" to 2"

ASTM A-106 Grade B schedule 40 carbon steel pipe

Greater than 2"

Threaded installations are not recommended

FLANGES

To 4" pipe diameter

ASTM A-181 1/16" raised face 300 lb rating

Greater than 4"

ASTM A-181 1/16" raised face 150 lb rating

FLANGE GASKETS

Flexible graphite

(Grafoil™, Garlock™ or equal).

Expanded/filled PTFE below

450°F/232°C (Goretex™, Garlock™ or equal)

BOLTS

ASTM A-193 Grade B7

NUTS

ASTM A-194 Grade 2H

THREAD SEALANT

Deacon 770 P or L or LA-CO Slic-tite Paste

VALVES

Control valves

Globe valves provide metal to metal sealing

Isolation Valves

Gate valves provide 100% shut off, 0 pressure drop when open

PUMPS

Centrifugal

Dean (RA2000/3000 series), MP (HTO series)



Positive Displacement

Viking Internal Gear Universal Seal

PUMP SEALS

Tungsten carbide vs silicon carbide face type mechanical seals are recommended

O-RINGS/SEALS

To 250°F/121°C

Nitrile rubber

To 400°F/204°C:

Fluoroelastomer (Viton™ or equal)

Above 400°F/204°C:

Perfluoroelastomer (Chemraz[™], Zalak[™], Kalrez[™] or equal).

INSULATION

Closed cell (Pittsburgh Corning foamed glass) is recommended for all installations.

Mineral fiber, fiber glass or calcium silicate can be installed on straight pipe runs or other locations where the potential for leaks is low. The material should not be used with 2' of a potential leak point. Flanges should not be insulated.

Founded in 1988, Paratherm—Heat Transfer Fluids has become a leading U.S. manufacturer of specialized heat transfer fluids and system cleaners. The firm offers a wide range of heat transfer fluids (currently 8 fluids and 3 cleaners) covering temperatures from -137°F to +650°F. The company has a network of distributors and warehousing locations throughout North America and globally to offer regional service and quick delivery.

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