

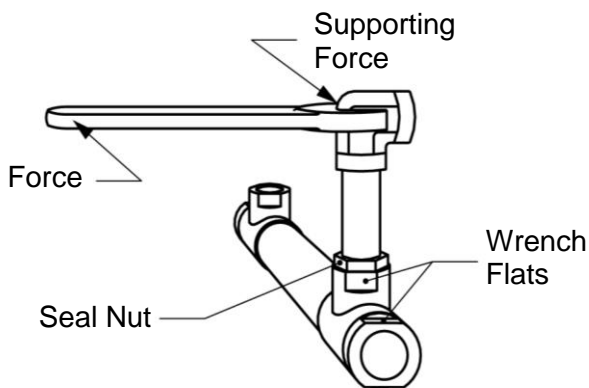
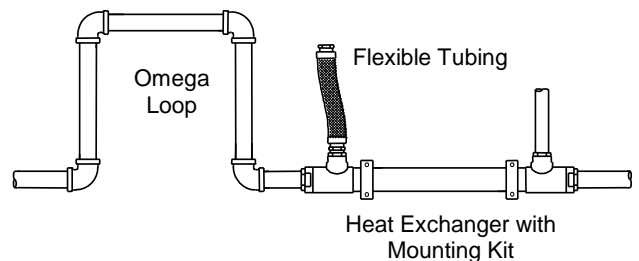
SHELL & TUBE HEAT EXCHANGER INSTALLATION

Follow these instructions for safe operation and to reduce the risk of damage to the heat exchanger. Maximum heat transfer performance is obtained by connecting the heat exchanger for counter-current flow (the two fluid streams flowing in opposite directions). This is obtained by connecting the outlet of one fluid stream on the same end of the heat exchanger as the inlet of the other.

Proper Installation Design

To minimize the thermal, mechanical and dynamic stresses on the heat exchanger:

- Mount the heat exchanger on a supporting structure. Never hang it from the plumbing. Optional mounting kits are available for all Exergy shell and tube heat exchangers.
- Isolate the heat exchanger from sources of vibration or impact.
- Include flexible hose couplings or stress-relief loops (omega loops). Tubing generates less operational stress than pipe.
- Match the proposed piping sizes to the heat exchanger fittings. A larger pipe connecting size may indicate a system mismatch.
- Do not exceed the maximum operating pressures or temperatures.



Proper Installation Technique

- Avoid putting any bending force on fittings by supporting the wrench with an equal and opposite force as shown in the diagram on left.
- Avoid damaging the heat exchanger by using the wrench flats provided.
- Exergy can supply optional seal nuts, which are used to eliminate Teflon tape or other pipe sealants and will prevent over-tightening of NPT fittings. If used, install and adjust the piping system first. Tighten the seal nuts against the heat exchanger last.