# Diamondback<sup>™</sup> Features: Double-wall, diamondback protection

# DOUBLE WALL CONSTRUCTION

The double wall construction provides positive

#### DIAMONDBACK DESIGN The diamondback name refers to the unique

indication of potential cross contamination between the shellside and tubeside fluids to satisfy the new codes.



tube-in-tube design which produces over 47 vented leak paths between the tube walls. Should



either tube fail due to corrosion, erosion or abrasive action, the resulting leak is channeled between the tube walls to a vent space created by the double tubesheets between the head and shell flanges. This produces a telltale leak on the outside of the unit where it can be detected before contamination of either medium in the heat exchanger can occur.

# High efficiency performance and protection against cross-contamination

## HIGH EFFICIENCY

Thermal performance of the diamondback design is comparable to a conventional single tube heat exchanger of equal size and square foot surface area which allows the double wall unit to be used in place of an existing single wall unit with minimal effect on performance.

#### NO LOSS IN SURFACE AREA COMPARED TO SINGLE WALL DESIGNS

Bell & Gossett solved the problem of making small radius bends in the double wall tube while maintaining the same quality as in single wall units. The result is a double wall unit with the same surface area as a single wall design. This means no size penalty as the result of reduced tube counts.

### LOW LEAK PATH PRESSURE DROP

Diamondback Double Wall Tube requires no more than a 2 psig system pressure to produce visual evidence of a tube failure. This guarantees double wall integrity under the most adverse of system conditions.

#### MECHANICALLY ROLLED TUBES FOR LEAK-FREE JOINTS

Diamondback Double Wall Tube is mechanically rolled into both tubesheets. The mechanical rolling of tubes is the industry's standard in shell and tube heat exchangers. Mechanical rolling means a reliable leak-free joint at a much lower cost to you than a welded or brazed joint.

