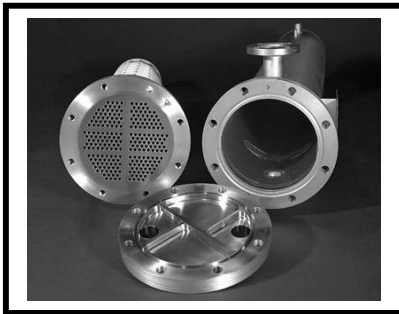


# The ABC Advantage



## *Why go to Allegheny Bradford for your Heat Exchanger requirements?*

Simple... we go out of our way to make sure our sanitary Heat Exchangers are the most innovative and best in the market!! Here are some of the ways we accomplish this mission.....

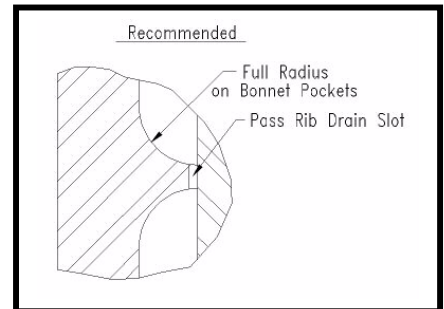


### **Bioprocess Engineering (BPE) Standard:**

From the outer shell right down to the tubes, Allegheny Bradford meets BPE's recommended practices. The BPE Standard was compiled to make the best possible equipment for the bio-pharmaceutical arena. So you can be assured that you are receiving a quality product every time you purchase from ABC.

### **Better Drainability:**

ABC has always been on the cutting-edge of new product development. To better achieve the drainability objectives of BPE, our latest engineering innovation includes fully radiused pass-pockets in each bonnet quadrant. This feature promotes enhanced drainability when the exchanger is sloped.

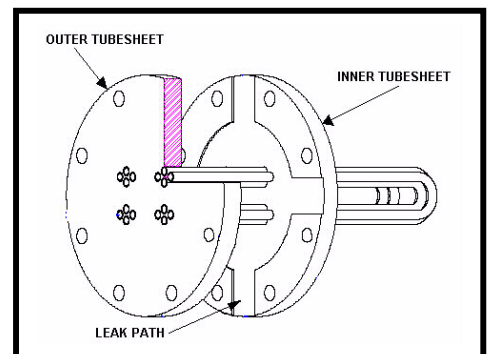


### **Hydraulic Expansion Capabilities:**

ABC uses state-of-the-art, HydroSwage® technology to hydraulically expand the tubes to the tubesheets. The expansion zone is accurately monitored and adjusted to minimize any possible stress, crevice corrosion, and metallurgical changes. The HydroSwage® utilizes high-pressure water to hydraulically expand and produce clean joints, thereby eliminating surface flaking and spalling inside the tube compared to conventional rolling methods that mar and work harden the "work-affected" zones.

### **Sanitary Designs:**

ABC is always looking for ways to make their HXR's as sanitary as possible. The Double Tube Sheet prevents cross contamination due to mechanical shock (i.e. earthquake) or thermal shock. If either the seal weld on the outer tubesheets or the tube-to-tubesheet joint is breached, the leaking fluid cannot cross the gap between the tubesheets to cross-contaminate the opposing media.



### **Borescopic Inspection:**

ABC is proud to be a leader in quality. All completed Heat Exchangers include a visual borescopic examination of the tube-to-tube sheet joints. This inspection ensures product contact surface compliance.

As a leader in the manufacturing of Heat Exchangers, you can trust Allegheny Bradford Corporation for both quality and innovation.