TANTALUM EQUIPMENTS

The leading anti-corrosion character, outstanding electrical, physical and mechanical properties of tantalum is ideally suited for condensing, re-boiling, preheating and cooling of nitric acid, hydrochloric acid, bromic acid, sulfuric acid and combinations of these acids with many other chemicals. **TAF** tantalum equipments are fabricated from electron beam melted tantalum high purity rod, sheet and tubing. Equipments and components are designed and manufactured to meet specific operating conditions. **TAF** tantalum equipments include...

- Bayonet heater, heat exchangers, condensers & Coils.
- Thermocouple Protection sheaths seamless,
 Seam welds or machined from bar stock.
- Pump casings, shafts & impellers.
- Distillation columns & boilers.
- Evaporation boats.
- Clad dip pipes & heaters.
- Paddle stirrers & agitators.
- Deep drawn or fabricated crucibles.
- Furnace parts for use at temperatures up to 2500C.
- Repair Kits for tanks, vats & other, glass-lined Containers.



Shel& Tube Heat Exchanger



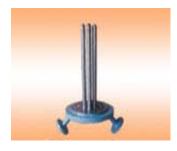
Bayonet Heater



Tantalum Reactor

<u>Material Comparison:</u>

| | TANTALUM | IMPREGNATED GRAPHITE | HASTELLOY |
|-----------------------------------|------------------|-------------------------|-------------------------------|
| Production Downtime | None | Often | Seldom |
| Maintenance Costs | None | Very High | Little |
| Capital Costs | High | Low | Medium |
| Product Purity | No Contamination | Graphite Flakes | Heavy Metals Contamination |
| Corrosion | None | Yes | Yes |
| Drainabillity | complete | Liquid Holdup | Complete |
| Heat Transfer Fluid Compatible | Yes | No | Yes |
| Potential Catalyst to Process | No | No | Highly Caustic |
| Dual Containment Design | Standard | Impossible | Optional |



Tantalum Bayonet Refurbished



Tantalum Reactor

