

## Titanium Tube Bundle



Unit Superheater Engineering, as part of the UnitBirwelco Group designed and manufactured two tube bundles for a major Oil refinery in the UK.

Project overview –

- ④ Tube Bundle size: 1.7m Diameter by 8.5m Long
- ④ Tube Bundle weight: 15 Ton
- ④ Design Code: PD 5500 : 2018 CAT 2
- ④ Materials
  - 2500 Seamless Tubes - 19.05mm o/d x 16 BWG x 8.5m Long in Titanium Material ASTM B338 GR12 UNS R53400
  - Tubesheets - Carbon Steel to ASTM A350 LF2 explosively clad with Avesta 254 SMO
  - Baffles and Carcass - Stainless Steel Avesta 254 SMO
- ④ Tubes were checked by Positive Material Identification and Eddy Current Testing
- ④ Tubesheets and Baffles were all machined and drilled in-house by our CNC drilling machines
- ④ Each tube is roller expanded into three grooves in tubesheet hole for permanent fixing
- ④ Tube Bundle is hydrostatically tested in house to 600 psig.



The use of anti-corrosive materials will increase the longevity of the equipment in service, saving the customer considerable money by reducing downtime and the need for carbon steel replacements.

### CONTACT

For Power Services contact:

Steve Foligno on:

Tel: +44 (0)1792 654091

Email: [s.foligno@unitbirwelco.com](mailto:s.foligno@unitbirwelco.com)