

OIL & GAS

High Precision Tubing Solutions
for Demanding Oil & Gas Applications

HIGH PRECISION TUBES FOR DEMANDING ENVIRONMENTS

OIL & GAS



TUBING EXCELLENCE

With over 70 years of engineering expertise in supplying high precision tubes, Fine Tubes and Superior Tube work closely with customers worldwide developing high specification tubing solutions to help them solve their technical challenges. We manufacture high performance tubes in an ever expanding range of stainless steel, nickel, titanium and zirconium alloys for supercritical Oil & Gas applications.

V

TUBING INNOVATIONS

Fine Tubes and Superior Tube benefit from a world-class reputation for innovative and high quality tubing solutions geared towards the Oil & Gas industry. Here are a few examples:



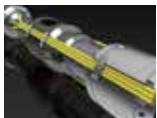
1970

Technological advances for subsea developments in the 1970's.



2013

Fine Tubes awarded 9COM Approval with Saudi Aramco and to supply stainless steel, nickel alloy and titanium tube products.



1988

Fine Tubes manufacture data logging tubes for the downhole oil and gas markets.



2015

Fine Tubes contributes to the Advanced Well Equipments Standardization Group (AWES), setting industry standards for the manufacture of tubing encased conductor (TEC).



2003

Fine Tubes manufacture super pressure instrumentation tubing operating at up to 60,000 psi (4,100 bar).



2015

Superior Tube supply heat exchanger tubing for a new FPSO vessel operating in the Santos Basin Field Development, Brazil.



2013

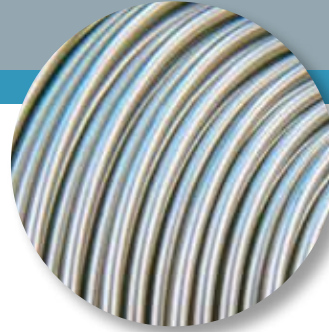
Fine Tubes supply Parker Hannifin with corrosion-resistant 6Mo alloy tubes bound for use in the BP Schiehallion field, North Sea.



2015

Fine Tubes receives NORSOK M-650 approval to supply Super Duplex UNS S32750.

TUBING INNOVATIONS



TUBING SOLUTIONS



TUBING SOLUTIONS

OIL & GAS

The Oil & Gas sector represents one of Fine Tubes and Superior Tube's principal markets for supply of a wide range of tubular product forms and materials. Our products have been successfully applied in some of the most aggressive subsea and downhole conditions and we have a long proven track record of supplying products that meet the strict quality requirements of the oil and gas sector.

Superior Tube and Fine Tubes offers coiled and straight length tubing in a wide range of corrosion resistant stainless steels, titanium alloys and nickel alloys. We have extensive experience in product supply and innovation in this sector, from the technological advances required for subsea developments in the 1970s up to the deepwater challenges of the day.

OIL & GAS APPLICATIONS

- Downhole, hydraulic and chemical injection control lines
- Control lines in subsea umbilicals
- Flowline control line tubing for pipe-in-pipe bundles
- Downhole gauge cables
- Pressure housings for MWD/LWD tools
- Wellhead control panel
- Well monitoring
- Coriolis flow meters
- Hydraulic tubing for control measuring devices and pumps
- Topside Umbilical Termination Units (tutu)
- Autoclave and high pressure applications
- Well chemical injection units
- Topside instrumentation and impulse lines
- Control and injection line tubing for subsea equipment

Downhole hydraulic control & injection lines

Fine Tubes and Superior Tube supply bare line or encapsulated coiled tubing for downhole hydraulic and chemical injection lines in a range of corrosion resistant stainless steel and nickel alloys.

Downhole data logging for intelligent well completions

Welded & cold-drawn coiled tubing for the mechanical protection of Tubing Encased Conductor (TEC) and Tubing Encased Fibre (TEF) cables, control lines and sensing cables.

Subsea & umbilicals

Superior Tube and Fine Tubes supply high quality umbilical control line and chemical injection tubing. Our seam-welded and redrawn products provide a lower-cost alternative to traditional seamless subsea umbilicals, while delivering equal performance.

Topside control & instrumentation

Our expertise in processing special grade stainless steel and nickel alloys make us the ideal partners for the supply of instrumentation packages used in the topside construction of Offshore FPSO, FPSS's, Spars and TLP's.

Pressure housing

Fine Tubes and Superior Tube supply casing for down hole drilling sensors for directional drilling tools Measurements While Drilling (MWD) and Logging While Drilling (LWD).

Subsea control & instrumentation

Up to 2,000 m under the sea, our corrosion resistant tubes are deployed in critical control units for hydraulic pumps, subsea Christmas trees and manifolds. Operating conditions can require our products to be rated up to 60,000 psi operating pressure.

HIGH PRECISION TUBES FOR DEMANDING ENVIRONMENTS

OIL & GAS



V

MANUFACTURING CAPABILITIES

ALLOYS

Superior Tube and Fine Tubes produce a wide range of custom-sized tubing in an ever expanding range of alloys – available in four different product forms, i.e. seamless, welded, welded & plugdrawn, welded & redrawn (Weldrawn®) finish.

SEAMLESS, WELDED, WELDED & PLUGDRAWN, WELDED & REDRAWN

Stainless Steel 316, 316L, 316Ti, 317L, 321, 6Mo, 17-4PH, 15-5PH, 904L, Nitronic 50™, Duplex (S31803), Super Duplex (S32750)

Nickel 59, 400, 625, 718, 800, 825, C22, C276, MP35N

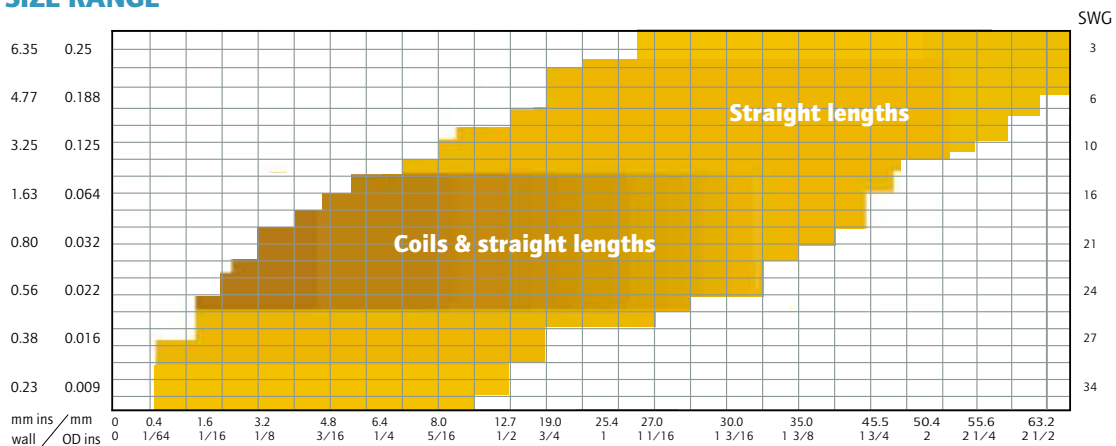
Titanium Ti CP (Grade 1 and Grade 2)

We also manufacture tubing in many other grades. For details please contact us.

PRODUCTION FACILITIES

- Pilger mills
- Draw benches
- Tube welding mills - In-line weld mills
- Controlled atmosphere heat treatment
- Bright annealing
- Pickling & passivation plant
- NDT ultrasonic & eddy current testing
- Hydrostatic testing
- Radiographic examination
- Polishing capabilities
- Full chemical and physical laboratory analysis

SIZE RANGE



Our tubing sizes typical for oil and gas applications range from 3 mm (0.118 in) outer diameter (OD) up to 31 mm (1.22 in) OD in seamless, welded, welded & plugdrawn and welded & redrawn.

Coil lengths without orbital joints are supplied up to 1,500 m (5,000 ft), and up to 13,500 m (45,000 ft) with orbital joints.

MANUFACTURING CAPABILITIES



TUBING CAPABILITIES

Fine Tubes and Superior Tube offer a full range of tubing solutions for multiple oil and gas applications.

1 Downhole hydraulic control lines

2 Umbilicals/dynamic risers

3 High pressure control and instrumentation

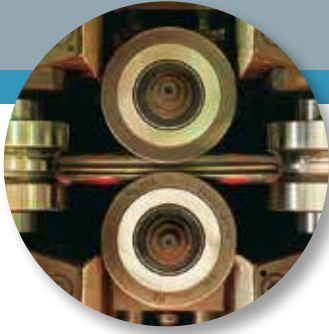
4 Downhole data logging/smart wells

5 Downhole MWD/LWD pressure housing

6 Hydraulics and instrumentation

HIGH PRECISION TUBES FOR DEMANDING ENVIRONMENTS

OIL & GAS



TUBING QUALITY

V

TUBING QUALITY

QUALITY SYSTEMS APPROVAL

- ISO 9001
- ISO 14001 (Environmental)
- TUV Directive 97/23/EC
- P.E.D. Pressure Equipment Directive
- NORSOK M-650
- Statoil TR2385 Compliance
- NADCAP Ultrasonic Testing
- NADCAP Heat Treatment
- NADCAP Fusion Welding

CUSTOMER APPROVALS

- Saudi Aramco
- ADNOC
- ADMA
- ADGAS
- KNPC
- NPCC
- PDO
- Saipem Spa
- Technip
- ZADCO

PROJECT LIST

V

PROJECT LIST

WORLD PROJECTS

- BP Claire Ridge (North Sea)
- BP Quad 204 (Shetlands)
- Egina Oil Field (Nigeria)
- Golden Eagle (North Sea)
- Goliat (Norway)
- Ichthys (Australia)
- Jasmin Conoco Philips (North Sea)
- Santos Basin Field Development (Brazil)

GCC PROJECTS

- Badra Oilfield (Iraq)
- Barzan Gas Field (Qatar)
- Manifa FDP (Saudi Arabia)
- Nasr FFD (U.A.E.)
- Ruwais 4th NGL Train Project (U.A.E.)
- Satah FFD Project (U.A.E.)
- Shell Majnoon (Iraq)
- Umm Lulu Field Development (U.A.E.)
- Zakum Oil Field Development (U.A.E.)

GLOBAL PRESENCE

Through the partnership between U.K.-based Fine Tubes and U.S.-based Superior Tube both companies can offer increased capabilities, leading to significantly reduced lead times, an extended product portfolio, increased global reach and outstanding customer service.

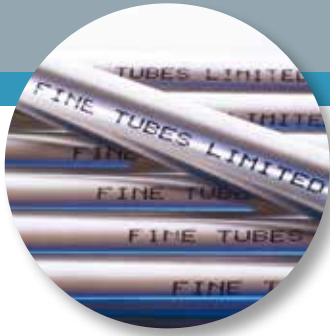
Our tubing experts deliver high precision tubing to customers in over 35 countries worldwide.

In addition to tube mills in the United Kingdom and the United States, we have sales offices in Germany, France, India and the United States as well as an extensive network of partners in Asia, Europe and the Middle East.

Fine Tubes and Superior Tube are collectively a unit of AMETEK, Inc., a leading global manufacturer of electronic instruments and electromechanical devices.

HIGH PRECISION TUBES FOR DEMANDING ENVIRONMENTS

OIL & GAS



FINE TUBES

Plymbridge Road
Plymouth
PL6 7LG
UNITED KINGDOM

E: oilandgas.finetubes@ametek.com
T: +44 (0) 1752 876416
F: +44 (0) 1752 733301

www.finetubes.com



SUPERIOR TUBE

3900 Germantown Pike
Collegeville, PA 19426-3112
UNITED STATES

E: oilandgas.superiortube@ametek.com
T: +1 610.489.5200
F: +1 610.489.5252

www.superiortube.com



SALES OFFICES

Sales Office Europe West

23, Rue Antigna
F-45000 Orléans
FRANCE

E: sales.fr.finetubes@ametek.com
T: +33 (0) 238775-702
F: +33 (0) 238812-407

Sales Office Europe Central

AMETEK GmbH
Rudolf-Diesel-Strasse 16
40670 Meerbusch
GERMANY

E: sales.de.finetubes@ametek.com
T: +49 (0) 7345 235 8467

Sales Office India

AMETEK Instruments India Pvt Ltd
601, Raaj Chambers
Old Nagardas Road
Andheri (East)
Mumbai - 400 069
INDIA

E: sales.in.finetubes@ametek.com
T: +91 (0) 22 6196 8200
F: +91 (0) 22 2836 3613

Sales Office U.S. West

11631 NE 73rd Street
Kirkland, WA 98033-8107
UNITED STATES

E: dirk.fanning@ametek.com
T: +1 425.985.1398

Sales Office U.S. East

3900 Germantown Pike
Collegeville, PA 19426-3112
UNITED STATES

E: donna.l.brown@ametek.com
T: +1 610.489.5260

