High performance metal products for hostile and corrosive subsea, downhole and offshore applications

Our high quality metal products offer maximum wear, pressure and corrosion resistance for extended product life, reduced downtime and maintenance costs in extreme environments.

- High Pressure, Stainless Steel and Nickel Alloy Tubes
- High Lubricity and Hardness Engineered Shaped Components (ESC)
- Hardenable and Conductive Metal Strip
- Hardfacing Powder Coatings
- Roll Bonded Clad Plate
SPECIALTY METAL PRODUCTS FOR OIL AND GAS APPLICATIONS

CRITICAL OIL & GAS APPLICATIONS

1. Downhole hydraulic control lines
2. High pressure control instrumentation and flow meters
3. Downhole data logging/smart wells
4. Pfnodal® bearing components in drill bits
5. Downhole MWD/LWD pressure housing
6. Topside and onshore instrumentation
7. Hardfacing metal powder coatings
8. Non-sparking tools
9. Electronic connectors
10. Battery components
11. Shaped charges for well perforation
12. Clad plate for pressure vessels
HIGH PRESSURE, PRECISION TUBE

High quality, NORSOK-approved metal tubes engineered to perform without failure for maximum corrosion and pressure resistance up to 60,000 psi.

PRODUCTS
• Seamless stainless steel, nickel alloy and titanium tubes from 3 mm (0.040 in) to 31 mm (1.25 in) outer diameter OD
• Welded stainless steel and nickel alloy tubes from 3 mm (0.118 in) to 28 mm (1.25 in) OD
• Welded and drawn coiled tubing up to 15,000m (with orbital joints)

APPLICATIONS
• Downhole hydraulic control lines
• High pressure control & instrumentation
• Downhole data logging/smart wells
• Downhole MWD/LWD pressure housing
• Topside and onshore instrumentation
• Subsea Xmas trees and manifolds
• Flow meters

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Click for more details

www.finetubes.com
HARDFACING POWDER COATINGS

Surface coating powders manufactured to have the precise thermal spraying characteristics, to enhance the performance of a workpiece.

Advantages include improved hardness and machinability, corrosion resistance, wear and heat resistance to extend life and offer total component cost savings.

APPLICATIONS

- Hardfacing: thermal spray, spray and fuse applications for highly abrasive and corrosive environments. Oil field equipment includes drill rods, shafts, tubes, couplings, cutter bars, augers, cylinders.
- Precision chemical filtration in extremely corrosive environments.
- Powder metallurgy, corrosion protection, and geometric re-tolerancing.

PRODUCTS

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<th>OTHER PRODUCTS</th>
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*HAC is AMETEK’s equivalent to HASTELLOY C. HASTELLOY is a Cabot Corporation trademarked product. I600 is AMETEK’s equivalent to INCONEL 600. INCONEL is an International Nickel Company, Inc. trademarked product. M400 is AMETEK’s equivalent to MONEL 400. MONEL is an International Nickel Company, Inc. trademarked product.

www.powderclad.com

Click for more details
METAL STRIP & ENGINEERED SHAPED COMPONENTS

Metal Strip

High performance metal strip products manufactured via wrought powder metallurgy.

Our materials change be roll-tempered to desired mechanical properties. Our Spinodal products (C72900 and C72650) can be further hardened for spring properties in electronic connectors. Our Nickel products are available with the highest conductivity of commercially available Nickel products.

Products and Applications
- AM388™ (UNS C72650) strip for non-sparking tools
- AM388™ (UNS C72650) Pfinodal® (UNS C72900) strip for electronic connectors
- Pfinodal® copper alloy strip (UNS C72900) for parabolic cone shaped charges used in well perforation
- Nickel 201/270 strip for rechargeable battery components

Engineered Shaped Components (ESC)

High strength Pfinodal® (UNS C72900) bearing materials used to extend drill bit life in demanding drill bit bearing applications.

Our production processes and heat treatments combine to ensure the high hardness and non-magnetic properties required in a bearing material for bearing sleeves, bushings, washers and caps.

Products and Applications
- Pfinodal® (UNS C72900) ESC for tri-cone drill bits
- Pfinodal® (UNS C72900) shaped charges for well perforation

www.ametek-ct.com
CLAD METAL PLATE

Clad metals produced by our roll-bond technology combine two or more metals into a single sheet or plate that can be cut, welded or formed into a finished part ranging from chemical processing chambers and pressure vessels to small applications and clad pipe. We specialize in cladding stainless steel or nickel alloys to carbon steel.

Because of the properties offered by clad metals, and the wide variety of cladding and backing materials available today, these metals can be combined to make custom materials for a wide range of demanding industries, including health, chemical and petroleum processing and defense.

ADVANTAGES

If the problem is unique, then the solution could well be a clad metal. In all cases, clad metals provide combinations of properties and advantages not available in monolithic metals.

- Excellent thermal conductivity
- Superior strength
- Lighter weight
- Custom sizes and alloy combinations
- Small lot sizes and short lead time

PRODUCTS AND APPLICATIONS

- Pressure vessels
- Transition plates

www.powderclad.com
AMETEK Specialty Metal Products (SMP) is a division of AMETEK, Inc. a leading global manufacturer of electronic instruments and electromechanical devices with annual sales of approximately $5 billion.

AMETEK has 18,000 colleagues at more than 150 operating locations, and a global network of sales, service and support locations in 30 countries around the world.

The Specialty Metals division consists of five businesses and operating facilities in the United States and the United Kingdom. All are proven experts in the manufacture of advanced metallurgical products including precision metal strip, ultra-thin foil, specialty shaped wire, engineered shaped components, thermal management products, high purity powders, precision tube and clad plate.

These high performance metal products are used around the world for critical applications in a range of industries including aerospace, automotive, defense, medical, electronics, oil and gas and nuclear.

ABOUT AMETEK SPECIALTY METAL PRODUCTS

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