1776 HDD



PREMIUM COPPER

OBF SERVICES LLC

HORIZONTAL DRILLING COMPOUND

LEAD FREE | FRICTION FACTOR 1.2

- Will not build up in thread roots
- Prevents galling& thread damage
- Used in light to medium drilling conditions
- Used for large diameter HDD operations



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WARRANTY Because the conditions of use and the supervision of application are beyond our control, we assume no liability for any product failure or other damage beyond the purchase price of the material furnished by us. No agent, representative, or employee of this Company is authorized to change this provision, which relates to all goods delivered, whether sold, delivered as samples, or otherwise. Each user should independently determine the suitability of this product based on their specific application.

PRODUCT DESCRIPTION

1776 HDD PREMIUM COPPER COMPOUND is a cost effective copper-based tool joint and rod lubricant for light to medium drilling applications. 1776 contains copper and zinc, as well as EP additives to prevent galling and thread damage. The lead-free formulation of 1776 prevents compound build-up in the thread roots, a common problem with some other compounds. 1776 can be properly applied by hand brushing or by automatic application systems. 1776 will not continue to make up during drilling operations as will some slicker compounds.

The premium grease base provides protection to the threads under the high stresses of HDD equipment, and is wash-out resistant to prevent wash-out during operations. **1776** is nonflammable and can be applied at temperatures as low as 0°F.

APPLICATION

1776 HDD PREMIUM COPPER COMPOUND is used as a tool joint compound and rod lubricant in light to medium duty HDD operations. It can be applied to threads by brushing or using automatic lubrication systems on many HDD rigs.

TYPICAL OBSERVATIONS

Color	Copper/Brown
Appearance	Smooth Paste
Density, lb/gal@ 77°F (25°C)	9.9
Specific Gravity @ 77°F (25°C)	1.108
Dropping Point, ASTM D-2265	390°F (199°C)
Flash Point, ASTM D-92	440°F (227°C)
Friction Factor	1.2
Penetration, ASTM D-217 @ 77°F (25°C	330–340
Base Oil Viscosity cSt @ 40°C	360
Corrosion Preventive Properties, ASTM	D-1743 125°F (51°C) Pass
Evaporation Loss, ASTM D-972 @ 210°	F (98°C) 1.80%
Oil Separation, ASTM D-1742 @ 77°F (2	25°C) <1.0%
4-Ball, Weld Point, Kgf (ASTM D-2596)	200 Pass, 250 Weld
Salt Spray Test, ASTM B-117	500+ hours
Copper Strip Corrosion, ASTM D-4048	Pass
Temperature Range	0°F to 400°F (-17°C to 204°C)
Shelf Life (unopened container)	Four years