

TM 133 (Nickel Boron) is a state of the art

providing a very low coefficient of friction in wear applications without reduction of hardness experienced with other coatings. TM 133 is an engineered surface deposit coating which is readily applied to a variety of substrates that produce an extremely slick, abrasion & wear resistant surface. This coating has a columnar structure with a nodular surface that provides it with superior abrasion resistance and superior resistance to fretting galling. TM 133 has three times the wear resistance of a Mid Phosphorus Nickel. TM 133 has a lower coefficient of friction than coatings containing Teflon. Unlike Teflon, which will start to decompose at 600° F, TM 133 will maintain its integrity up to the melting point of the deposit.

USER BENEFITS

Uniform Coating Pleasing Light Gray Color Excellent Release Properties

Extreme Abrasion Resistance Can Be Applied to any Metal

PROPERTIES

Hardness (VHN)

As Plated Heat Treated

Chemical Composition

Nickel Thallium

Boron

Melting Range

Thickness Controllability

Wear Resistance

(Falex Test per ASTM D 2714)

Corrosion Resistance (.001" Deposit ASTM-117)

TYPICAL VALUE

63-65 RC

Up to 74 RC

89-95%

2.5-6.0%

2.5-5.0%

1922-2102 F/ 1050-1150 C

.00001-.010"

Weight Loss in grams: .0002"

200 Hours (Can be improved considerably with an undercoat of TM 103)

This deposit can be used as a replacement for Hard Chrome, Carbide and even Titanium Nitride

Uncontrolled Copy 09/06/05gm



PO Box 1266 Dayton, Ohio 45403 (937)253-5311