

Hard-Cut® NG / NG CF (Straight Cutting Oils)

FEATURES

- Excellent Machinability
- High Pressure Capable to 2000 psi
- High Purity Base Oil
- Maximizes Tool Life
- Non-Irritating
- Non-Toxic
- Very Clean and Low Residue
- Very High Flashpoint

GENERAL DESCRIPTION

Hard-Cut NG and NG CF are the Next Generation®, hence “NG”, in the full line of straight oils developed, manufactured and offered by Hangsterfer’s. The Hard-Cut NG series are the most advanced straight oils on the market. No other competitive products can compare to the Hard-Cut NG’s complexity. Hard-Cut NG contains an infused combination of Synthetic and Vegetable compounds and derivatives. The infusion process results in the perfectly blended and aligned molecular structures, which allow for the lowest possible viscosity without compromise to lubricity or flash point levels.

APPLICATIONS

Primary		Secondary
Cutting	Honing	Boring
Grinding	Milling	Polishing
Gun Drilling	Turning	Surface Grinding

MATERIALS

Primary		Secondary	
Aluminum	Stainless Steel	Brass	Magnesium
Chromium Alloys	Steel	Composites	Powdered Metals
Nickel Alloys	Titanium	Copper	Precious Metals

INSTRUCTIONS

Hard Cut NG series is normally used where any cutting oil is used, as is, and on most materials. The Ozonic 203 and VS-315 are recommended to clean Hard Cut NG series at the machine, in process, or as a final utility clean.

MAINTENANCE

Maintenance: While straight oils are not susceptible to the broad range of problems encountered with a water-based fluid, regular maintenance does improve their performance and extend their life. The Hard-Cut oils are designed to reject foreign contaminants, such as metal fines. If the performance of the oil begins to deteriorate, remove the oil from the machine and allow settling in a drum or settling tank for 3-7 days. Fines and contaminants will settle to the bottom. After settling, return the top 80% to the clean machine. In order to get the maximum life from your oil, keep the sump free of cleaners, solvents, rust inhibitors, coolants, water and other contaminants, which may reduce performance.

Cleaning: All Hard-Cut oils are formulated to minimize cleaning time. They are cleanable in both aqueous and solvent systems. For best results use a Hangsterfer’s Ozonic series cleaner or recommended aqueous cleaner. Both style cleaners work best at removing Hard-Cuts when heated to 104°F (60°C).

PRODUCT CHARACTERISTICS

Product:	Hard-Cut NG	Hard-Cut NG CF
Form	Liquid	Liquid
Color	Red	Amber
Odor	Mild	Mild
Specific Gravity	0.85	0.83
Viscosity: SUS @ 100°F	63	66
cSt @ 40°C	11	12
Flash Point, COC, °F/°C	335 / 168	330 / 165
Fire Point, COC, °F/°C	345 / 173	350 / 176
Pour Point, °F/°C	-125 / -87	-125 / -87
Solubility in Water	<0.01	<0.01
Boiling Point, °F/°C	572 / 300	572 / 300
Vapor Pressure, mm Hg @ 25°	<0.01	<0.01
pH @ 10%	N/A	N/A
Chlorine	Added as EP Additive	N/A

WASTE TREATMENT

While Hangsterfer's oils resist contamination and degradation, contamination may require the oil to be disposed. In the normal use of oils, tramp oils enter the system that may change the disposal procedures. Some Hangsterfer's oils contain very long chain chlorinated paraffins that may be disposed of as non-hazardous if properly noted. Dispose of in accordance with local, state, federal and international laws. As with most used cutting oils, they can be refined or used in energy recovery systems.

SHIPPING UNITS

All Hangsterfer's products are available in pails, drums and Intermediate Bulk Containers (275 or 330 gallons). All products are distributed worldwide.

Date: July 27, 2006 Revised: January 25, 2016

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