

## Hard-Cut NG 22 (Straight Cutting Oil)

### FEATURES

- Very High Flash Point
- For High Pressure Through The Tool
- Low Foam
- Low Mist
- Non-Toxic and Non-Hazardous
- Advanced Synthetic Oil
- Lower Residue
- Lower Consumption

### GENERAL DESCRIPTION

Hangsterfer's has introduced the Next Generation (NG) of our world famous Hard-Cut line of cutting oils. Hard-Cut NG 22 allows Precision Swiss Automatics to perform at their maximum speeds and feeds. The molecular structure of our Hard-Cut NG 22 delivers extreme pressure and anti-wear additives to the tool work-piece interface without compromise to other features that you expect. The unique molecular structure allows the Hard-Cut NG 22 to be free flowing under high pressure through the drill tooling, without foaming. Hard-Cut NG 22's molecular structure behaves in a much different way as compared to ordinary cutting oils. In regard to fire potential, the molecular alignment is in itself, self extinguishing, and greatly lowers the risk of fires.

### APPLICATIONS

Primary		Secondary	
Cutting	Tread Cutting	Broaching	Honing
Gun Drilling	Tread Forming	Gear Cutting	Sawing
Reaming	Turning	Grinding	Stamping

### MATERIALS

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

### MAINTENANCE

**Maintenance:** While straight cutting 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 it to settle in an empty 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 inhibit performance.

**Cleaning:** All Hangsterfer's Cutting 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, VS-315 or recommended aqueous cleaner. Both style cleaners work best when heated to 140°F (60°C).

## PRODUCT CHARACTERISTICS

<b>Product Name: Hard-Cut NG 22</b>	
Form	Liquid
Color	Red
Odor	Mild
Specific Gravity	0.89
Viscosity: cSt @ 40°C	22.5
Flash Point COC, °F/°C	405 / 207
Fire Point, COC, °F/°C	478 / 248
Pour Point, COC, °F/°C	> 0 / > -18
Solubility in Water	<0.01
Boiling Point, °F/°C	487 / 253
Vapor Pressure, mm Hg @ 25°	<0.01
pH @ 10%	N/A
Chlorine	Added as EP Additive

## WASTE TREATMENT

Dispose of in accordance with local, state, federal, and international laws. As with most used cutting oils they can often be re-refined or used in energy recovery systems.

## SHIPPING UNITS

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

Date: 7/27/06 Revision: 8/22/12

Disclaimer: All reasonable care has been taken to ensure that the information contained in this publication is true and accurate. No warranty is expressed or implied regarding the accuracy of the data. The general description, recommended uses, application data and statements in the product literature are guidelines. Because this product may be used for a variety of applications over which Hangsterfer's Laboratories, Inc. has no control, Hangsterfer's Laboratories, Inc. assumes no liability for incidental, consequential, or direct damages of any kind, regardless of causes, including negligence. Also, seller is not liable for any loss, damage or liability resulting from the use of the product in the buyer's manufacturing processes or in combination with other substances. MSDS's are available for all Hangsterfer's products and should be consulted as needed.



ORTHOWORLD



Proud Member  
NATIONAL ASSOCIATION OF  
Manufacturers

