



HD CF Series Cutting Oils

Dyna-Plex 21C® HD CF Series Cutting Oils are clear, chlorine-free, active cutting oils for the machining of difficult metals where a high degree of anti-weld capability is required. These new-technology fluids are based upon highly-refined base oils augmented by synthetic lubricity agents and extreme pressure additives. They produce excellent finish on parts, prevent welding and tearing, and prolong tool life. These oils will stain non-ferrous metals and should not be used in machine lube or hydraulic systems. All oils in the series contain effective anti-mist and non-silicone defoamant additives.

HD 1300 CF is a heavy-duty cutting oil designed for tough operations on low-machinability alloy and stainless steels.

HD 1100 CF is a 32 cSt, moderate-duty version of HD 1300 CF. It is particularly appropriate for gear hobbing and gear shaping as well as general-purpose machining applications on carbon, alloy, and stainless steels.

HD 1320 CF is a more highly-additized version of HD 1300 CF, formulated for use in extremely difficult cutting and forming operations. It can be used as spike oil for particularly difficult jobs and for cutting oil reclamation. It is compatible with the NS CF Series Oils.

HD 22 CF is a 22 cSt, heavy-duty cutting oil often recommended for high-speed machining in Swiss and CNC machines.

HD 1000 CF is a 15 cSt, cutting and grinding oil intended for use in high-speed operations such as grinding, gear grinding, deep-hole drilling, and gun drilling. The anti-foam package prevents air entrapment in high-velocity and high-pressure applications.

Dyna-Plex 21C HD CF Series Cutting Oils are particularly well suited for moderate and high-speed machining of difficult metals:

- Formulated to prevent excessive built-up edge in cutting operations
- Chlorine free
- Built for compatibility with all Dyna-Plex 21C NS CF Series Oils
- Reduce smoke and mist
- Machines remain clean and free of varnish and sludge
- Low-foaming in high-speed machining and grinding
- High flash point reduces the risk of fires

<u>PROPERTY</u>	<u>ASTM TEST METHOD</u>	<u>HD 1320 CF</u>	<u>HD 1300 CF</u>	<u>HD 1100 CF</u>	<u>HD 1000 CF</u>	<u>HD 22 CF</u>
Viscosity @ 40°C, (cSt)	D-445	38	34	32	15	22
Color	Visual	Clear	Clear	Clear	Clear	Clear
Flash Point, °F	D-92	400°F	400°F	400°F	370°F	390°F
Sulfur	D-129	Present	Present	Present	Present	Present
Active Sulfur	D-1662	Present	Present	Present	Present	Present
Phosphorus	D-1091	Present	Present	Present	Present	Present
Chlorine	D-4327	None	None	None	None	None
Lubricity Agents	IR	Present	Present	Present	Present	Present

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