

SYN 90

Code 7141

High Performance Synthetic Metalworking Coolant

DESCRIPTION

Callington SYN 90 is a mineral oil free, boron free, oil rejecting, synthetic metalworking coolant. It is designed for difficult machining operations on metals such as stainless-steel alloys, titanium and nickel alloys.

It is for use in soft water as well as hard waters and exhibits low foam, without use of a silicon based defoamer. It provides excellent stability under a wide range of water conditions, providing outstanding machine cleanliness, and extremely long life.

APPLICATION

Callington SYN 90 exhibits exceptional machining characteristics and is capable of replacing mineral oil based cutting oils and soluble oils, in operations such as broaching, gear hobbing, and deep hole drilling.

Callington SYN 90 is extremely stable, provides excellent corrosion protection and is very clean in use, reducing product usage and maintenance requirements. It is equally suitable for use in large centralised coolant systems and for small individual coolant sumps.

BENEFITS

- Unique lubricity and surfactant technologies provide superior lubrication compared to conventional mineral oil based neat cutting oils and soluble oils, without use of chlorinated or sulphurised additives.
- Excellent stability and resistance to microbial growth, providing extremely long fluid life, and reducing fluid and waste treatment costs.
- Mineral oil, chlorine, boron, silicon, formaldehyde release biocide and nitrite free, safe to use and friendly to the environment.
- Excellent corrosion protection even in hard water conditions.
- Low foaming in all water conditions, despite containing no silicon-based antifoams, ensuring continuous machining, and eliminating use of tank side antifoams.
- Rejection of tramp oil for easy removal, providing excellent machine and component cleanliness.
- Compatible with yellow metals therefore safe to use in machines with copper, brass and bronze components.

Metal Working Fluid Technologies For Industry

RECOMMENDED DILUTIONS (consult your Callington sales engineer for recommendation specific to your application)

Material	Stainless Steel	Titanium	Nickel Alloys
Operation			
Grinding Honing	4%	4%	6%
Turning Drilling Milling	5%	5%	6%
Deep Hole Drilling	5%	6%	8%
Gear Cutting	6%	6%	8%
Broaching	8%	8%	8%

TYPICAL DATA (note: data is typical and does not constitute a specification)

Concentrate	Test method	Typical result
Appearance	Visual	Clear, pale yellow
Density	DIN 51757, ASTM D1298	1.06
Solution		
Appearance 5%	Visual	Clear, colourless
pH 5%	DIN 51361, ASTM E70-97	9.0
Refractometer Factor		1.3

Storage: Keep container closed, prevent exposure to frost, and prevent water ingress. Store in cool, dry conditions, avoid direct sunlight. Indoor storage is preferable.