

FUCHS ECOCOOL GLOBAL 20

Meeting the requirements of automotive component manufacturers around the world.

The culmination of years of intensive research and development and recipient of multiple patents, FUCHS ECOCOOL GLOBAL 20 represents a milestone in metalworking fluid design. The solution allows automotive OEMs and suppliers for the first time to use a single metal cutting fluid for the manufacture of components from engine blocks, pistons and brake systems to wheels, gears and driveline components.

FUCHS ECOCOOL GLOBAL 20 has been designed to meet the varied requirements of different OEM and supplier stakeholders, including leaders responsible for the safe, efficient running of production facilities and equipment.

Boosting productivity of plant equipment and operations.

One of the key responsibilities of plant staff is to improve the efficiency of operating equipment. This includes taking steps to minimise downtime, increase productivity and boost the quality of manufactured output.

ECOCOOL GLOBAL 20 supports these responsibilities in the following ways:

Increases machine utilisation rate.

- Increases machine uptime
- Higher production rates
- Fewer work stoppages
- Reduces system cleanouts
- Longer tank life
- Lower consumption
- Reduces coolant purchase cost
- Reduces waste disposal cost
- Eliminates (or reduces) tank-side additives
- Reduces environmental impact

Sump Life Simulation Test

Products that perform well in this test are likely to maintain their pH and emulsion stability over long drain intervals, are easy to maintain, and require minimal use of tank-side additives. ECOCOOL GLOBAL 20 maintained an acceptable pH while a common industry coolant failed, indicating poor tank life.

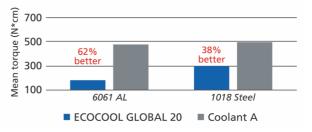


Increases machine efficiency.

- Increases production
- Accelerates cutting
- Increases feed rates
- Improves surface quality
- Lowers rework costs
- Reduces scrap costs

Friction Simulation / Tap Torque Test

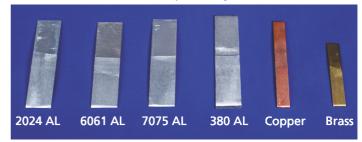
Lubricating characteristics are evaluated by measuring the torque required to tap metal substrates. Lower torque means increased tool life, improved surface quality, reduced scrap, and increased production speeds through higher metal removal rates.



Increases coolant utility.

- Increases operational flexibility
- **Expands use across multiple departments**
- Eliminates the need for multiple coolants
- **Reduces operational complexity**
- **Reduces inventory complexity**
- **Reduces costs**

Multi-metal Compatibility Test - Pass

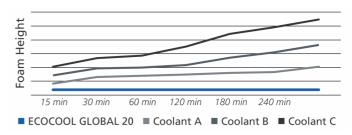


Improves operational efficiency.

- Reduces maintenance time
- Minimises work stoppages
- Improves tool life
- Improves surface finish
- **Reduces rework costs**
- **Reduces tool costs**
- **Reduces consumption**
- Reduced housekeeping

CNOMO Foam Test

The ability to control foam is tested by circulating the fluid at a high turnover rate. ECOCOOL GLOBAL 20 foams up to 56% less than three leading industry coolants.



Simplifies maintenance requirements.

- Eliminates emulsion splitting
- **Extends coolant lifecycle**
- **Eliminates residues**
- **Reduces consumption**
- **Reduces maintenance time**
- Eliminates (or reduces) tank-side additives
- **Reduces costs**

Hard Water Stability Test – 2000 ppm Ca



Increases operator acceptance

- Proven non-irritating to skin
- **Nearly odourless**
- Enhanced workplace environment

Skin Irritation Test

The Bovine Udder Skin (BUS) test is an industry acceptable method of predicting a chemical's effects on human skin. ECOCOOL GLOBAL 20 is designated as "not irritating" to humans by a certified third-party lab.

Supports global operations requirements.

- Complies with most corporate restricted chemicals lists and the National Chemical Registry simplifies implementation.
- Approval from the 19 top industrialised countries enables global roll-out and use.
- Available globally.
- Global support network provides peerless technical services.

National Chemistry Requirements Acceptance

