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"Information on the process to apply the GreenCut® on the manufacturing floor."
It is interesting that I was asked for this information the first time in 20 years and thousands of inquiries. There's the assumption that everyone 'knows' about cutting fluids and that their installation into the cutting machine in question is public knowledge. I will endeavour to address this oversight now.

Attached is pdf "**Lubecorp GreenCut® Concentrated Operational Presentation"** for your overview.

Cleaning test machine(s)
The machine in question: Lathe, milling machine, power saw, grinder, etc., should have it's sump (tank) and connecting pipes/hoses cleaned out thoroughly by (power)washing, scraping and rubbing as required. Thereby eliminating all foreign liquids and solids: such as all previous leftover cutting oils/fluids, water, paint and biocide remnants including bacteria liquid and solid deposits. The machine working/cutting surfaces to be buffed with steel wool or plastic cleaning pads to a clean metal, with no buildups and/or rust. Finish with wipe-down with oily rag, including tramp oils, is fine as a finish (part of standard sound machine maintenance practise).

GreenCut® operational mixture
We suggest premixing GreenCut® with water in a larger tank or container before adding the mixture to the tank(sump).
For example: add 100 litres of water to the tank and mix in at a 20:1 ratio water/GreenCut 5 Litres of GreenCut. Hand mix with a stick or by air pressure bubbling for a few moments until the mixture is visibly stirred and homogeneous. The water is to be clean tap water, and either hard (preferred) or soft. Water pH should be about pH 7 in order to arrive at a finished 9 pH of the 20:1 GreenCut mixture. If the water is softer -say about 8 pH, then the final mixed Water/GreenCut should read about pH 10, giving a spread of 2 pH to work with initially.

This can be maintained in the machining operation by Checking the pH of the sump using pH litmus test paper strips (0 to 14 rating) for colour match. pH to be between 9 and 10 for optimum performance. When the pH reads lower than pH 9 top up the sump with some pure GreenCut, say ½ Litre of GreenCut to +-20 Litre size sump, pump it thoroughly through the pump and check again to get to the right pH.

Always watch for over-dilution of the GreenCut mixture. GreenCut usually gets used up faster than the water (GreenCut is chemically attracted to all metals, including the cuttings and the cutting machine). If you see rust spots, it's your final visual warning that your GreenCut ratio is leaner that 50:1 and is overdue for immediate adjustment.

Under extreme conditions such as tapping/threading a richer GreenCut mixture may be used such as 15:1 or even 10:1 with appropriate feed/speed of the cutting action. Normally this is not required in any alloy machining, always considering tool feed/speed, including GreenCut/water misting applications.

Your finished work piece now has rust protection 1 molecule thick, until it is wiped off with a rag or washed off, including rain.

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GreenCut® Foaming

No foaming under proper mix and hard water conditions until about 500 PSI. Then Lubecorp Antifoam can be added at a ratio of 4,000:1 Sump : AntiFoam.

Anti Foam does not affect the cutting operation of the tool in question but eliminates the foaming issue. With soft water, more Lubecorp Antifoam can be added at a ratio of 4,000:1 (Sump : AntiFoam) to the GreenCut premix as required. (With high pressure through-tool cooling AntiFoam can be added directly to the sump outlet at the work piece as required.)

I trust this GreenCut® Cutting/Misting Fluid Installation and Operational Overview meets your needs.

Benjamin Vroon,
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