GreenCut® Plasma Arc Water-Table Fluid

Data Sheet

GreenCut Plasma is a SAFE cutting fluid specifically designed for Plasma Arc Cutting Tables.
- Contains anti-rust, anti-foam, and anti-bacterial chemistry.
- Does not thermally degrade. No change-outs required.
- Protects hands, faces, lungs, and the environment.

Use GreenCut at 20 : 1 mix ratio
(Control with pH strips (between 9—10)

NOTE: Be sure to have the GreenCut Plasma fluid in direct contact (no air gap) with the metal being cut to improve Plasma torch cutting finish.

GreenCut Plasma Fluid needs to circulate in the table while operating to prevent hot spotting, to provide rust protection, and for biodegrading oils and wastes with the GreenCut Plasma Fluid at the molecular level.

GreenCut Plasma Fluid will biodegrade the ‘tramp-oils’ that wash into the water table from the Plasma cut metal sheet on contact: eliminating all ‘stink’, anaerobic bacterial formation, and fungal growth.

Plasma Arc Cutting removes metal by using a constricted arc to melt a localized workpiece, and removing the molten material with a high-velocity jet of ionized gas from the orifice. Plasma Arcs operate at 10,000°C -14,000°C (18,000°F-25,000°F).
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GreenCut Plasma Fluid rarely needs change-out. Based on over 13 years experience with Plasma Arc Water-Tables, when utilising proper pH maintenance and pump circulation of the fluid, including filtration as required; GreenCut Plasma Fluid results in significant operational savings.

Metal cuttings and burn-off material (slag) will sink to the bottom of the tables and will need cleaning out periodically. GreenCut Plasma Fluid can be saved, filtered and re-used when properly maintained.

As the table starts to run low, (checked by removing all air from the table bladder) add GreenCut Plasma Fluid to the table at full strength to obtain correct pH reading (done while pumping the table fluid-mix nonstop).

Reason:
More GreenCut Plasma Fluid than water leaves during operation due to GreenCut’s polar attraction to all metals (Prevents rust).

Check pH of the Table using pH test paper strips for color match. pH must be between 9 and 10 for max. performance.

If the fluid is not up to the correct pH reading add straight GreenCut Plasma Fluid and blend into the tank by pumping until the table pH is between 9 and 10.

‘Standard’ Coolant color sample test:
Mix water and GreenCut Plasma in a clear bottle at 20:1 ratio. Use this color sample to visually measure the mix ratio in the bath.

Bi-weekly Coolant Maintenance

‘Standard’ Coolant color sample test:
Mix water and GreenCut Plasma in a clear bottle at 20:1 ratio. Use this color sample to visually measure the mix ratio in the bath.

Checklist for Rust or Foaming:
If Rust appears, follow maintenance procedure to correct the pH and/or the color of the Table.

If Foaming occurs it is due to soft water or high-pressure pump (500 psi+). Check pH. Add LubeCorp Anti-Foam at 1 : 4000 ratio to Table (5 ml per 20 liters) 5 ml = 1 teaspoon.

Environment Canada
under the Environmental Choice Program

Originally Approved by:

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