PROTOCOL® SC-101

APPLICATION GUIDELINES

Btuh = gpm x 500 x TD

Operating Conditions

Mechanical circulation or agitation of the cleaner is recommended, but not required. However, excessive circulation rates should be avoided. If circulation rates are too high, the cleaning solution may cause erosion corrosion and attack metallic components in the system. To avoid this erosion effect, we recommend continuous circulation rates corresponding to linear velocities of less than 10 feet per second for ferrous metals and less than 6 feet per second for non-ferrous metals through the narrowest passage.

PROTOCOL SC-101 cleaner is relatively corrosive to metallic zinc, which is commonly used to coat (galvanize) sheet or tubular products. This product should not be used in galvanized systems unless etching of the galvanized steel is acceptable.

Materials Compatibility

PROTOCOL SC-101 has no significant effect of commonly used elastomer, polyolefins, and nonmetallic films.

- Buna N
- Neoprene
- Butyl Rubber
- Polypropylene
- L.D. Polyethylene
- PVC
- Zinc chromate primer
- Epoxy
- Polyurethane
- Tygofilm

Types of Scales Removed

	Scale	Classification	Effectiveness
1.	Rust	corrosion	excellent
2.	Lime	mineral	excellent
3.	Mag Hydroxide	mineral	excellent
4.	Cupric Oxide	corrosion	excellent
5.	Solder Bloom	corrosion	excellent
6.	Black Rust	corrosion	excellent
7.	Cuprous Oxide	corrosion	excellent
8.	Aluminum Oxide	corrosion	very good
9.	Ferric Hydroxide	corrosion	good
10.	Ferrous Hydroxide	corrosion	good to fair
11.	Zinc phosphate	corrosion	good to fair
12.	Aluminum Phosphate	corrosion	fair
13.	Calcium phosphate	mineral	fair
14.	Calcium sulfates	mineral	fair

With scales containing two or more of the minerals mentioned above, the cleaner will tend to dissolve preferentially according to their placement in the table.

Manufactured by:

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