

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008  
DateRun: 10/07/2008  
Experimenters: Heidi Wilcox  
ClientType: Tool Manufacturer  
ProjectNumber: Project #1  
Substrates: Steel  
PartType: Part  
Contaminants: Metal fines  
Cleaning Methods: Ultrasonics  
Analytical Methods: Visual

**Purpose:** To evaluate the two aqueous products from the previous trial in ultrasonics to see if there was any difference in cleanliness. Products were tested on customer supplied parts using ultrasonic cleaning at room temp.

**Experimental Procedure:** Two products from the previous trial were selected and were diluted to 5% using DI water in 600 ml glass beakers. Solutions were used at room temperature, 68 F, and cleaned by ultrasonics for 5 minutes and dried using air blow off for 30 seconds at room temperature.

**Results:** Both products removed some of the metal shot from the parts and could be seen at the bottom of the beakers. The parts dried well when compressed air was used at room temperature to blow off any excess cleaner from them. The parts dried spotty without any visible residue seen on them.

| Cleaner              | Observation                                                                                                                                                              |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Polyspray Jet 790 XS | Iron shot on bottom of beaker. Parts dried well but were spotty. No visual residue on the parts. Tops were light in color like before they were cleaned.                 |
| Daraclean 282 GF     | Iron shot on bottom of beaker. Parts dried well but were spotty. No visual residue on the parts. Tops were light in color like before they were cleaned. Cleaner foamed. |

**Summary:**

|                         |                      |               |                    |                                     |                      |
|-------------------------|----------------------|---------------|--------------------|-------------------------------------|----------------------|
| <b>Substrates:</b>      | Steel                |               |                    |                                     |                      |
| <b>Contaminants:</b>    | Metal fines          |               |                    |                                     |                      |
| <b>Company Name:</b>    | <b>Product Name:</b> | <b>Conc.:</b> | <b>Efficiency:</b> | <b>Effective:</b>                   | <b>Observations:</b> |
| US Polychem Corporation | Polyspray Jet 790 XS | 5             |                    | <input checked="" type="checkbox"/> |                      |
| Magnaflux               | Daraclean 282 GF     | 5             |                    | <input checked="" type="checkbox"/> |                      |

**Conclusion:** The two products removed iron shot from the parts. They parts will be sent or brought to the customer to have them copper sulfated.