

# CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2004  
DateRun: 05/13/2004  
Experimenters: Jason Marshall  
ClientType: Tool Manufacturer  
ProjectNumber: Project #1  
Substrates: Steel  
PartType: Part  
Contaminants: Paints, Oil  
Cleaning Methods: Vapor Degreasing  
Analytical Methods: Visual

Purpose: To evaluate products on supplied parts

Experimental Procedure: Three products were selected based on results from previous trials. All products were used heated to 160 F on a hot plate in 250 ml beakers. One product, Solvon PB, cleaned one part with the metal working fluids (Quench Oil, RI 780) for 15 minutes in the vapor degreaser. The other two products cleaned two parts, one with Quench oil and the other with the varnish mix. Each part was cleaned in each solution for 15 minutes in the bench top vapor degreaser.

Results:

| Part       | Observation   |
|------------|---|
| 1          | Some of the oils may have not been cleaned due to the parts were wrapped with a wire (for suspending in vapors) |
| 2<br>Ruler | Varnish was removed within seconds of coming into contact with the vapors.                                      |
| 3<br>Punch | Some of the oils may have not been cleaned due to the parts were wrapped with a wire (for suspending in vapors) |
| 4<br>Ruler | Varnish was removed within seconds of coming into contact with the vapors                                       |
| 5<br>Punch | Some of the oils may have not been cleaned due to the parts were wrapped with a wire (for suspending in vapors) |

Summary:

| <b>Substrates:</b>            |  | Steel               |        |             |                                     |               |
|-------------------------------|--|---------------------|--------|-------------|-------------------------------------|---------------|
| <b>Contaminants:</b>          |  | Paints, Oil         |        |             |                                     |               |
| Company Name:                 |  | Product Name:       | Conc.: | Efficiency: | Effective:                          | Observations: |
| Poly Systems USA Inc          |  | Solvon Kreussler PB | 100    |             | <input checked="" type="checkbox"/> |               |
| Enviro Tech International Inc |  | Ensolv A            | 100    |             | <input checked="" type="checkbox"/> |               |
| Kyzen Corporation             |  | Metalnox M6960      | 100    |             | <input checked="" type="checkbox"/> |               |

Conclusion:

The three cleaners appeared to be very effective in removing the various contaminants from the supplied parts.