

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2008

DateRun: 07/02/2008

Experimenters: Heidi Wilcox

ClientType: Machining Company

ProjectNumber: Project #1

Substrates: Steel

PartType: Part

Contaminants: Cutting/Tapping Fluids, Metal fines

Cleaning Methods: Vapor Degreasing

Analytical Methods:

Purpose: To conduct on-site assistance for replacing TCE and nPB in cleaning operations.

Experimental Procedure: A site visit was conducted by the lab to get a better idea of the companies process and to pick up parts to work on back in the lab. The consensus on the project is that time for completion is not an issue but resources may be.

The cleaning process uses dip buckets to get metal fines off the part or out of holes. The cleaning also takes large amounts of soils off the part before parts go to the next step. The buckets being used for the dip clean applications aren't used at every machine, only at the older machines. Some of the buckets have screens in them and the workers can put the part on those and then push the screen down with something and never really touch the solvent if they wish. However, there were buckets had no screens in them and workers were dunking the parts right in. The buckets were open most of the time; the cover was not flipped back over to stop evaporation resulting in a lot of solvent loss.

Results: The company would want an all or nothing alternative so that there is one cleaner for all cleaning applications, either in an ultrasonic unit or in the vapor degreaser.

Summary:

Conclusion: Parts were collected that will need to be soiled prior to evaluating cleaning alternatives.