

Cleaning/Surface Prep Basics for Metal Fabricators and Finishers

Faculty

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Description

In this half-day, interactive workshop, metal finishers learn the basics of critical cleaning, including process options and recent developments.

Who should attend

This workshop is geared to manufacturers of metal parts, components, and products including

- Engineers
- Operators
- Technicians
- Managers
- Safety/environmental professionals

Workshop Location Options

- Sam Houston State University
- Webinar
- On-site, at manufacturing facility, trade organization, etc.

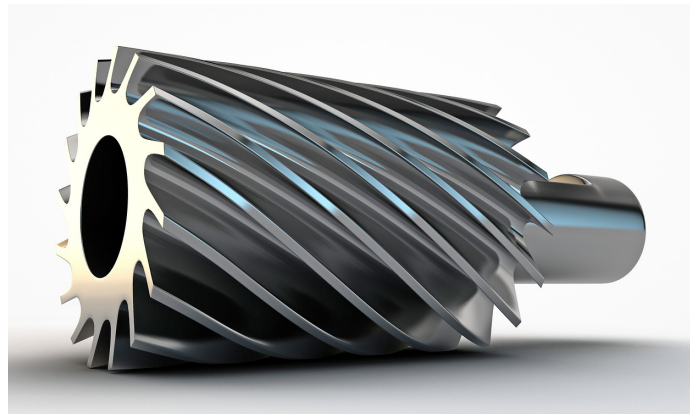
Workshop topics include

What's critical cleaning? Why clean?
How cleaning chemicals work - aqueous, solvent, and non-chemical
How cleaning processes work
Avoid safety and environmental hassles
Demonstrations by prior arrangement

Benefits

Upon completion of this workshop participants will have the tools to

- Understand how your cleaning process works
- Troubleshoot and correct coating problems resulting from inadequate cleaning
- Evaluate vendor claims about cleaning chemicals and cleaning processes
- Use your current cleaning process to best advantage
- Select a new cleaning process
- Assure that cleaning/surface prep is a value-added part of manufacturing



Course Outline

Surface prep

Cleaning/critical cleaning
Why dirt sticks
Cleaning is a process
Is passivation cleaning?
Q & A

Cleaning agents

Painless chemistry and physics
review
Solvents
Water
Aqueous and other blends
“Non-chemical” cleaning
Q & A

Cleaning processes

Cleaning forces
Cleaning equipment
Ultrasonics introduction
Materials compatibility
Q & A

About the instructors

Barbara Kanegsberg, President of BFK Solutions, LLC, is a recognized expert in critical/industrial cleaning and contamination control. She develops critical cleaning processes, conducts validations, and resolves product-related regulatory issues. Barbara is a member of the ASTM medical device Cleanliness Testing Task Force and a US Expert to the ISO/TC 209 WG 12. She has a master degree in biological chemistry, and is co-author of the two-volume CRC Handbook for Critical Cleaning.

Ed Kanegsberg, Vice President of BFK Solutions, is a chemical physicist and engineer who troubleshoots and solves manufacturing production problems in medical device development and in other high-value products. He is a recognized consultant in industrial cleaning process design and process performance with decades of experience helping companies transition from prototype to production. Ed has a Ph.D. in physics and is co-author of the CRC Handbook for Critical Cleaning.

Darren Williams, Professor of Physical Chemistry, Sam Houston State University, has 18 years of experience in cleanliness verification processes. His university research is applied to industrial process issues solvent selection, surface preparation, surface cleanliness, and analytical instrumentation. Darren Williams has a Ph.D. in chemistry and is trained in six sigma process improvement. He has authored over twenty articles, two chapters, and filed two patents related to cleanliness verification.

You can't use that! (or can you?)

Understanding safety/
environmental regulations
Keeping options open
Q & A

Next steps

Practical applications for what
you've just learned
Review quiz
Q & A

