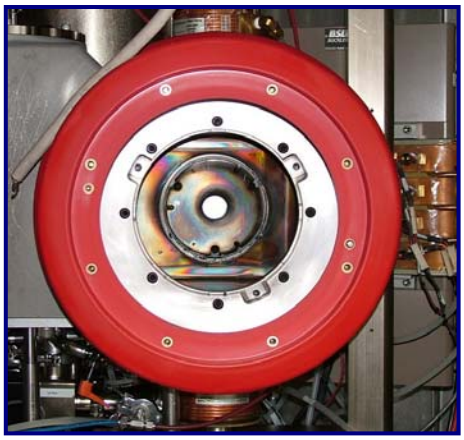
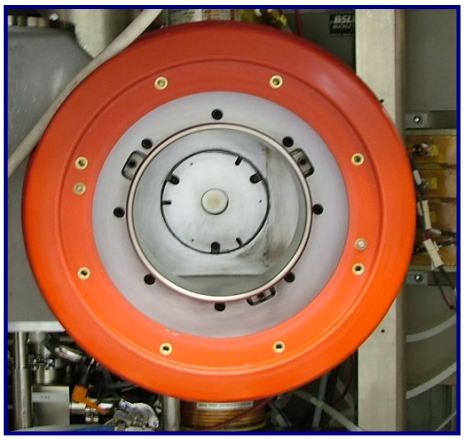


BEFORE

Foamtec International
Wilshire Contamination Control Division
cleaning critical surfaces

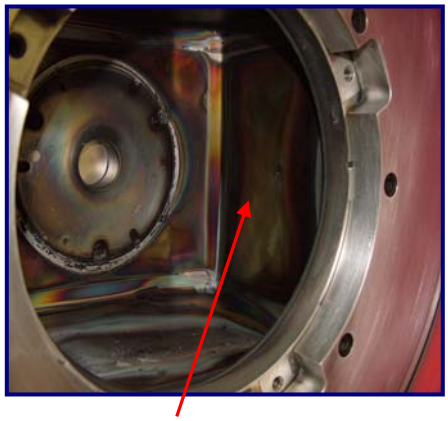


AFTER

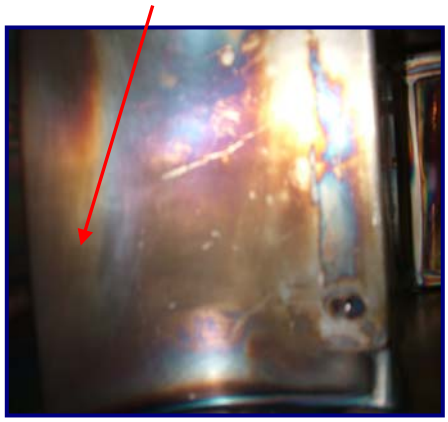
VARIAN VIISTA 810
MEDIUM CURRENT IMPLANTER
SOURCE REGION PM TRAINING GUIDE

THE PROBLEM:

SOURCE REGION



DEPOSITION BUILD UP BEHIND SOURCE LINERS



MONTHLY VIISTA 810 SOURCE PM

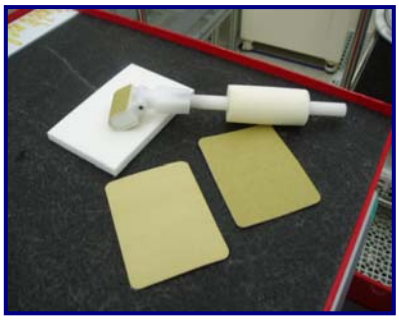
CURRENT CLEANING METHOD:

- REMOVE SOURCE LINERS
- SCRUB SOURCE REGION WITH 3M SCOTCHBRITE AND DI WATER
- WIPE WITH DI WATER
- FINAL WIPE WITH IPA

EQUIPMENT PROBLEMS:

- SHADOWS OF DEPOSITION BUILD UP BEHIND SOURCE LINERS
- NOT ABLE TO CLEAN SOURCE REGION EFFECTIVELY IN A TIMELY MANNER
- USING SCOTCHBRITE CAUSES RISK OF LEAVING SODIUM & METAL CONTAMNINANTS WITHIN CHAMBER
- USING SCOTCHBRITE AND NOT BEING ABLE TO REMOVE PARTICLES LEADS TO EXTENDED OUTGASSING
- NOT BEING ABLE TO REMOVE IPA RESIDUE EFFECTIVELY LEADS TO EXTENDED OUTGASSING
- USING SCOTCHBRITE CAN LEAD TO HIGH VOLTAGE ARCING ISSUES
- NOT ABLE TO EFFECTIVELY WIPE BEAD-BLASTED PARTS

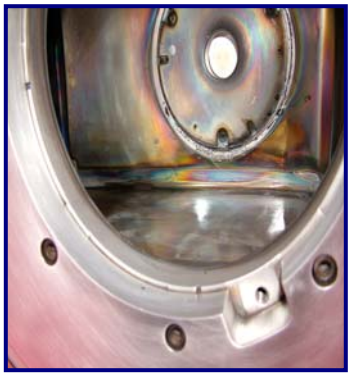
THE PREPARATION:



SET UP:

- STAGE THE NECESSARY FOAMTEC INTERNATIONAL PARTS
  - Diamond Grit ScrubDISK®
  - Diamond Grit ScrubPAD
  - UltraSOLV® Sponge
  - ErgoWRENCH®
  - ErgoSCRUB®
  - ScrubWRIGHT™ PEN
  - MiraWIPES®
  - UltraSOLV® Foam Wipers
  - Small container of DI Water
- PLACE CONTAINER OF DI WATER INSIDE OF PLASTIC BAG FOR PROTECTION FROM SPILLAGE
- DAMPEN UltraSOLV® SPONGE AND DIAMOND ScrubPAD IN CONTAINER OF DI WATER
  - Squeeze as much moisture as possible out of the Sponge and ScrubPAD when ready to use

THE TECHNIQUE:

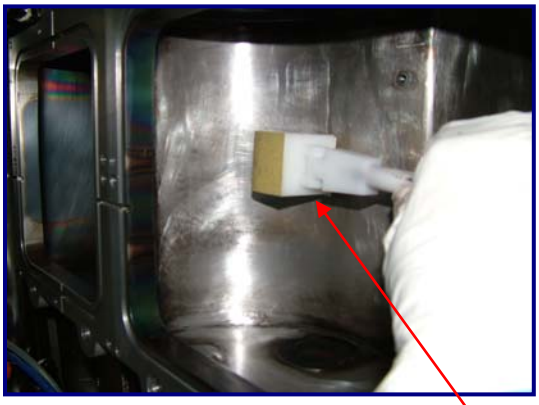


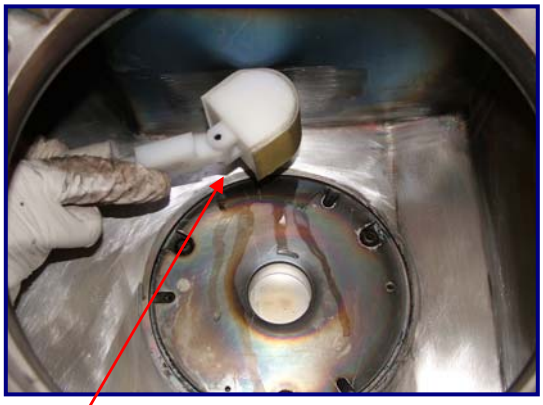
STEP 1:
- Wipe an area of the source with UltraSOLV® Sponge and DI water

STEP 2:
- Scrub small section of source with Diamond ScrubPAD

STEP 3:
- Wipe the scrubbed area with UltraSOLV® Sponge

THE TECHNIQUE (cont'd):



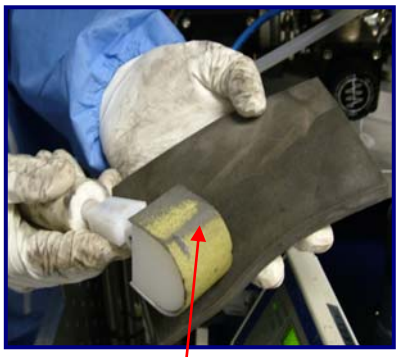


ErgoWRENCH®

STEP 4:

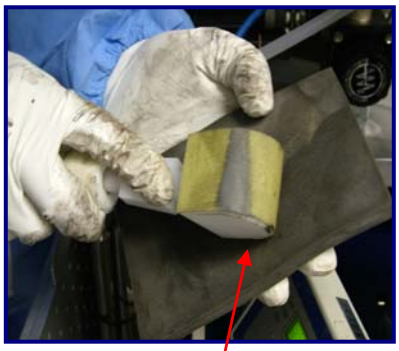
- When appropriate use ergonomic handles
  - ErgoWRENCH® shown here
- Use same technique described above: DAMPEN – SCRUB - WIPE

SCRUBPAD UNLOADING PROCEDURE



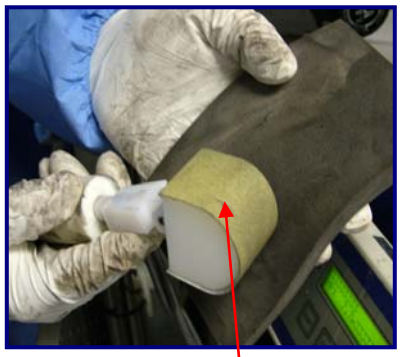
STEP 1:

- ScrubPAD loaded with deposition



STEP 2:

- Pull ScrubPAD across UltraSOLV® Sponge



STEP 3:

- Unloaded ScrubPAD

THE TECHNIQUE (cont'd):

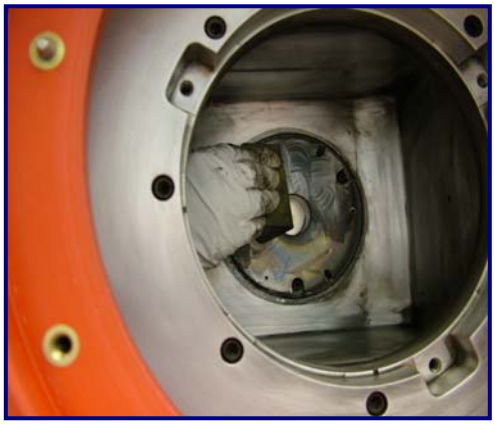
UltraSOLV® SPONGE UNLOADING PROCEDURE

STEP 1:

- Rinse UltraSOLV® Sponge in container of DI water

STEP 2:

- Ring-out UltraSOLV® Sponge of excess DI water

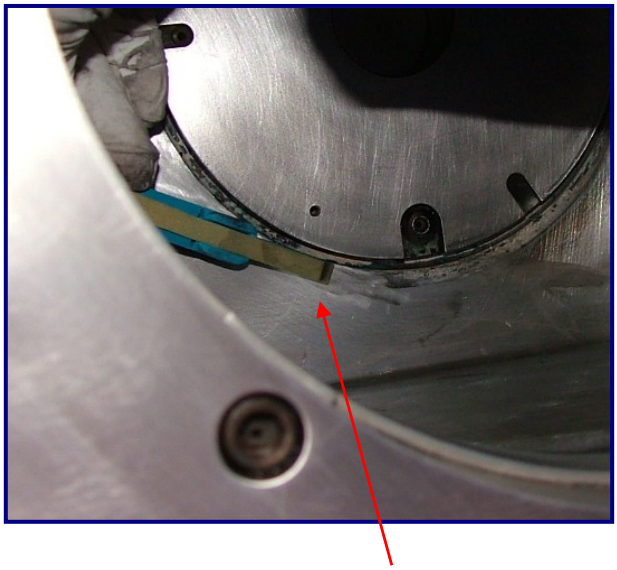


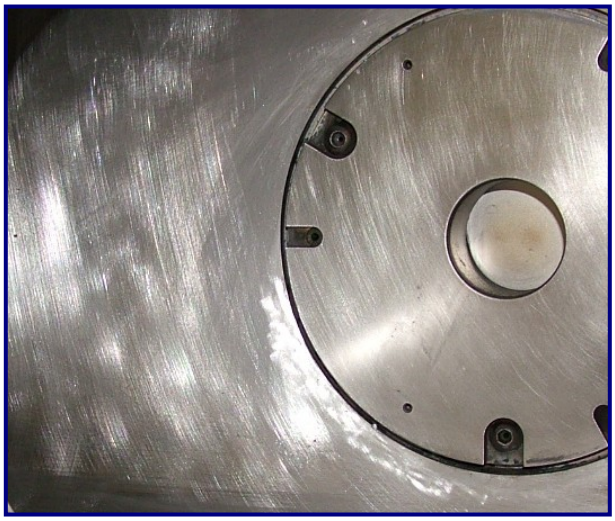
Using same technique described above, continue cleaning all areas throughout VIISta source region

- Continue to unload Diamond ScrubPAD and UltraSOLV® Sponge as necessary

THE TECHNIQUE (cont'd):

ScrubWRIGHT™ PEN APPLICATION





Using the ScrubWRIGHT™ Pen, gently scrub the area around the beam defining aperture

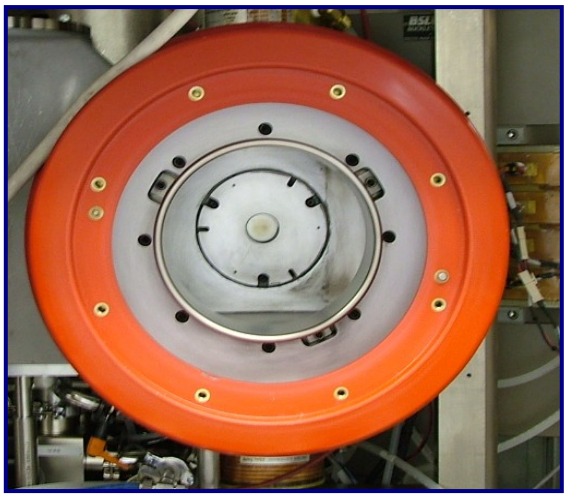
- Unload the Diamond ScrubBELT® on the ScrubWRIGHT™ PEN in the same manner as described above
- As the ScrubBELT® becomes worn, gently rotate ScrubBELT® along ScrubWRIGHT™ to access a new section of Diamond Grit

PERFORM FINAL IPA WIPE

Dampen the Foamtec International MiraWIPE® with IPA and perform a complete final wipe of the VIISTA Source Chamber

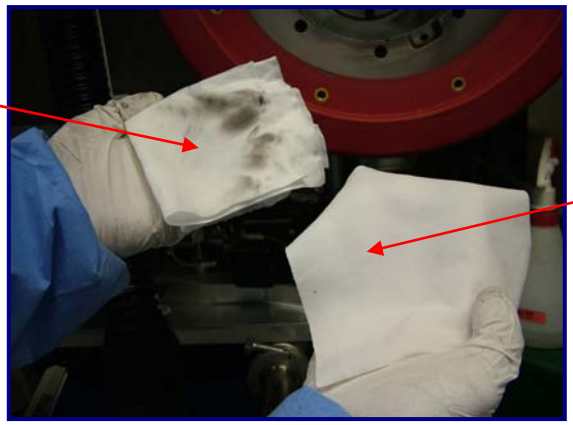
- Ensure to continue wiping until MiraWIPES® are no longer removing deposition

THE SOLUTION:



PM COMPLETED IN 1.5 HOURS

WHAT THE MiraWIPE® PULLED AFTER USING THE LAST FAB WIPER.



WHAT THE LAST FAB WIPER PULLED FROM SOURCE CHAMBER

FOAMTEC INTERNATIONAL PM SOLUTIONS:

- Able to clean Source Region effectively in a timely manner
- Diamond ScrubPADS reduce sodium & metal contaminants within chamber
- Diamond ScrubPADS do not breakdown, eliminating particles/fibers left within chamber
- MiraWIPES® effectively remove deposition and IPA residue from within chambers
- UltraSOLV® foam wipers provide solution to wiping bead blasted parts
  - Step not shown