

Vacuum group meeting 2/3/14
10 AM Garage

Attendees:
Alex, Lucy, Linda, Dave A, James W, Bill D, Ron K

Discussion about discrepancy between who is listed as vacuum group on department website vs who was on email list. Who should be?
Perhaps add Kevin D. and more techs.

Alex - intro:
first meeting in long time.
Plan to try this monthly.
Will try to limit to 1 hour.
Will have agenda - typically one topic.
Send Alex ideas for topics to discuss prior to meeting.
Will be first Monday of month.

Need to discuss in future meeting - to address who is in group. Maybe some rotating members so others in department can be part of it (similar to MSD Engineering Committee)?

Discussed SLAC and ANL vacuum documents. Briefly said we should try to develop our own. Must get management to stand behind it.

New topic:
OLAV workshop - happens every 3 years.
This year April 1-4 2014 in Taiwan.
Main attendance is from large laboratories.
Small group compared to other conferences. Approx 40 people?
All people from large labs, all discuss what we are doing and lessons learned.
Good focus on the type of work we do here, so good use of time.
Very useful from last time - Alex, Lucy, Kevin, and Dave A went.
Can send 2 people this year, maybe 3 if well-justified.
Everyone does a short presentation, then all discuss, then move to next speaker.
For now, it looks like Alex is the only one going.
What should he present?

one possible presentation:
"Producing UHV and low-particulate parts - spec 145". Doc lives on NML-SCRF.bd server.
Also linked under "instruction" on MSD vacuum website.
This lead to discussion about how to make sure all copies of the document are current.
Not all people are TeamCenter trained yet.

Back to spec 145.

Not much low-particulate discussion at last OLAV.

Another possible topic - previous method to do SCRF work with metal valve, now use a flow-control meter. Very complicated.

Alex may present on his own topic - vacuum corrosion. Still not fully understood. May also get some useful feedback. This is happening at other labs as well.

Low-particulate better if someone there to represent it.

OLAV III (2011) technical papers can be found here:
<https://public.ornl.gov/sns/workshop/OLAV2011/GetAbstractSummary.cfm>

Returned discussion to SLAC paper and what we want to do.
Need one central place to go to get answers and guidance.
Details can be appendix with specific procedures.
Example - have a detailed document for quick disconnect flanges, photos of scratches, how to remove scratches, how much force and which materials to use, etc.
If details too buried, depends on tech ambition to look through everything to find the one small topic - perhaps have a "topical index" with links.

Refer also to MDC document which details the proper way to put together flanges.

From ANL document:
water-pumped vs oil-pumped bottled gas.
Does the BIP we use mean it was water-pumped, or does it depend on the filter in the bottle to catch the hydrocarbons?
In the past, we have done RGA scans on BIP and has been acceptable, but still should look into this more.

Action item -
Ron will try to find out how BIP is produced to be sure it is truly acceptable for our systems.

Discussion about different fixtures. Some systems don't require BIP (MI), so KF connection hoses may not be as clean. How to be sure fixtures don't get crossed to other, cleaner systems and contaminate? MI not justified to expense of BIP. Make a single rule for all systems (with added cost)?

Using QD flange with clean o-ring.

Return to SLAC document:
SLAC document - pg 28
gloves may be re-used?
Ron discussed our clean-room practices with multiple layers of gloves - also in spec 145.
Does NOT apply to purple nitrile gloves, so this statement may be confusing.

Also 3.7.2 - new cold cathodes do much better than 10e-7.

We need a starting point for our document.

Action item -
Lucy volunteered to put together outline for our own document. She will start with SLAC document, eliminate what is not applicable to us, and add some sections that are.
Sections will be assigned later to appropriate people to write about, then group will review.

Next meeting 3/3/14 10 AM.

Action Items:
Ron - BIP
Lucy - outline
Dave - will write something about QD flanges.