

Microbiological Corrosion of Super Hyper Duplex and Austenitic Stainless Steels (301)

Date: November 29, 2017

Time: 11:00 AM Eastern Time

Place: GTM call

Agenda: To discuss the draft SPS of project prepared by Katie Day and Pradip Khaladkar

Participants:

Sean Brossia, Koch Industries

Katie Day, Sandvik

Pradip Khaladkar, MTI

Ed Naylor, AkzoNobel

Marcelo Senatore, Sandvik

Steve Springer, Chemours

Notes

- ❖ A 65-minute conference call was held on November 29, 2017 to review the draft SPS (**Attachment A**).
- ❖ The question raised by Chuck Young and supported by Brian Saldanha was discussed first. They had questioned the focus on duplex and austenitic stainless steels to the exclusion of other metals such as Ti. The team felt that it would make the project too large by encouraging others to start adding candidates (Mission Creep) and that the current list of materials might, in fact, be too large. It was felt that additional phases of the project could be created to include other metals.
- ❖ A great deal of discussion took place about the ability to reproduce corrosion in the lab. Failures of previous attempts were cited in support of this concern. This led to the need to create a “pre-project”.

- ❖ Pre-project or Phase I would include a demonstration by the contractor that
 - They can induce corrosion in the untreated water samples supplied by member companies that are known to induce MIC.
 - They can induce similar corrosion in synthetic solutions that are specific to certain MIC environments.
- ❖ This phase will include 316L and 2205 plain and welded coupons in three water samples provided by member companies (TBD) - what about the synthetic solutions?
 - The need to transport the water samples quickly to the lab was emphasized. The sample acquisition and transport protocols for these water samples need to be defined by the contractor. Contaminants of other elements such as Mn was a concern and the contractor has to address it. Submitted water samples need to be characterized as to water quality, pH, contaminants, oxygen level, In contrast, the synthetic samples would also need to be characterized so that the corrosion is purely MIC induced, and not pitting due to another reason.
- ❖ We also talked about identifying the optimum temperature for the test, and would need contractor input for that as well.

Path forward

- ❖ Re-write the SPS as Phase I with a change in scope.
Resp: Katie Day
- ❖ Identify three sources of water samples (Send suggestions to Katie)
Resp: Katie Day

Next conference call: To be held after new draft SPS is ready. Estimated day for the call: Mid-January 2018