

Client: S.W. Cole Engineering, Inc.**Project:** 93 Washington Avenue**SWCE Project #:** 18-0162**Date:** August 21, 2018**Subject:** Inspection of Field Welds and Bolted Connections**Report:** 001

As scheduled, a site visit was made on this date to inspect welded and bolted connections. We were advised that all work was completed.

Welder certifications were provided for Scott Mclean and found acceptable.

Inspection was performed using drawings S1.0 and S1.1 (both rev. 2) as reference. Additionally, a call was placed to the EOR for clarification. Our actions and observations were as follows:

Base to Embed Welds

Welds were visually inspected for conformance to AWS D1.1 visual acceptance criteria and sections A/S1.1 and B/S1.1. Per the EOR 3" of weld attaching base to embed could be considered acceptable.

Welds were found to be acceptable per information provided with the following exceptions:



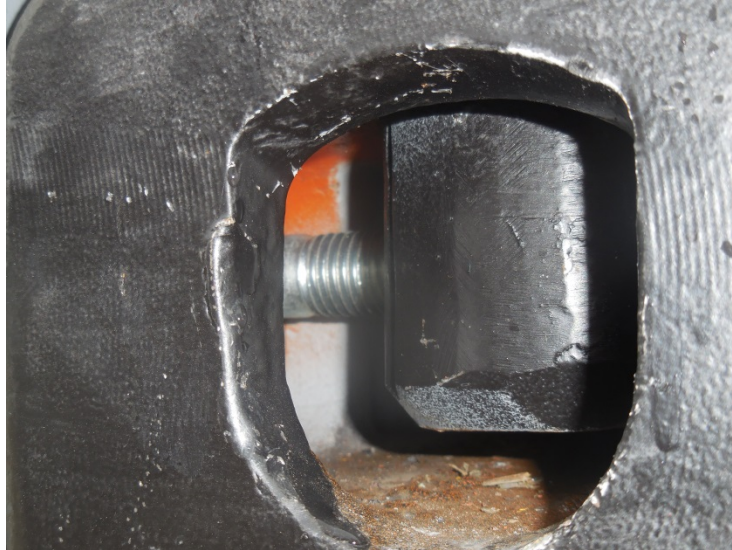
Weld missing on line 4

On line 1 the right support has approximately 2" of sound weld placed in the overhead position

Parapet

Drawing S1.1 “Typical Parapet Detail” was used as reference. It was observed that all connections were bolted rather than welded. The following is noted:

At corner connections on lines A and G it appears that bolts may thread into studs from parapet.



Corner connection for parapet

At the rear connections it appeared that threaded studs were welded to the containers. However the amount of weld used appears inadequate. It appears that nuts were then used as couplers and a section of threaded rod and nut installed anchoring the parapet to threaded rod on the container. Excessively large holes were cut in the parapet base causing the connection to be ineffective. Also, full nut engagement was not always obtained.



Connection at rear of parapet

Bolted Connections

Drawing S1.1 specifies that ½” A325 bolts be used. Bolts used are of a larger diameter and appear to be Grade 5. Per EOR these may be considered acceptable.

Bolted connections appear tight however it was observed that some bolts do not have full nut engagement.



Bolted connection without full nut engagement

Comments

It is recommended that the EOR visit the site and determine what corrective action may be required.

Welding of the parapet to the container may be difficult at some locations as some of the surfaces to be welded are flush.

We have assumed that container base supports consist of a readily weldable material with no special considerations required.

The client was advised of our observations.

Inspector: Neal J White
CWI#86070201
ICC #8014170