

Tempering Air Fan Anchor Bolts Installed on Incorrect Coordinates

MIC Quality Alert

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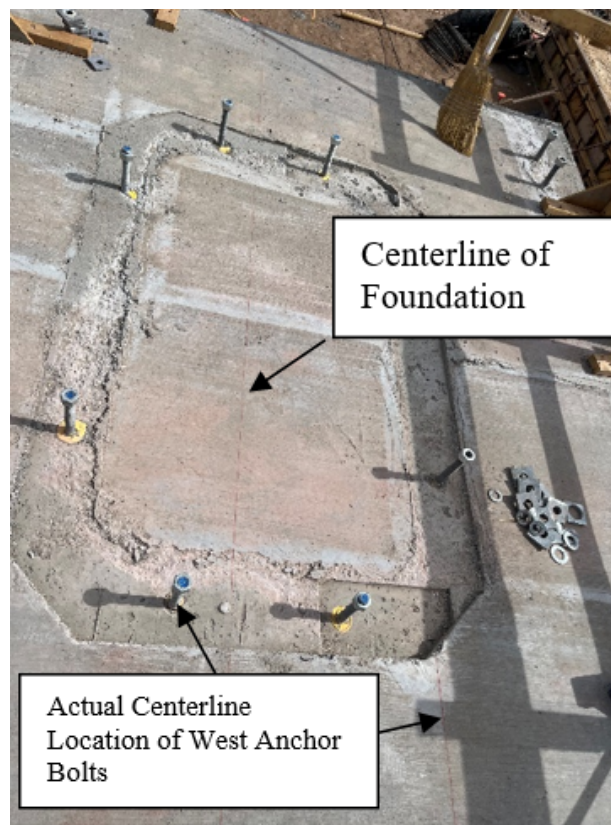
Title of Event:

Tempering Air Fan Anchor Bolts Installed with Incorrect Coordinates

What Happened:

During the layout of the anchor bolts for the Tempering Air Fan, a centerline was provided at the center of the pedestal foundation and used to establish the centerline of the anchor bolt template for the tempering air fan prior to placing the concrete. Once the pedestal was poured, it was identified that the anchor bolt pattern for the equipment needed to shift approximately 18 inches to the East from its current position.

Graphic/File 1:



Findings:

The civil foundation drawings did not detail the placement of the anchor bolts. The civil crew was required to utilize the vendor drawings to determine the location of the anchor bolts and used the incorrect reference point to place the anchor bolt template.

Prior to the placement, the Millwrights and Civil supervisor performed the final verification with a tape measure from the centerline of the pedestal. A verification check was never performed by survey prior to the concrete pour.

During the layout of the anchor bolts, there was a miscommunication of where the anchor bolts would be placed, and the supervisor assigned to the task was not clear on what the actual dimensions would be. During this process, there was no Request for Information (RFI) or communications to document the lack of detail provided by the design drawings or to clarify any confusion over the correct locations of the anchor bolts.

Site Solution / Immediate Solution:

An RFI was submitted once the issue was discovered to request the anchor bolts to be cut from their current location and laid out on the correct coordinates. The anchor bolts will be drilled into the foundation and secured with an epoxy grout to the depth and dimensions specified in the RFI.

Corrective and/or Preventive Action:

Prior to any installation, Work Packages shall be reviewed by the responsible supervisor to determine if any questions are needed to be escalated to the responsible design engineer. During installation, any concerns or questions arising from the provided drawings will require a stop work by the supervisor until the proper communications (i.e., RFI processes) are completed and documented to ensure the installation will meet the design requirements.

For anchor bolt placements on structural foundations, a surveyor is required to verify the coordinates of anchor bolts as part of the pre-placement inspection activities. The MasTec Industrial Concrete SOP in Zavanta currently reflects this hold point and will be required for all projects moving forward.

Mastec Industrial SOPs for anchor bolt placements are being updated to reflect a 24 hour hold point prior to any placement to ensure adequate time for the required inspections to be performed before pouring concrete. Always ensure you have access to the latest revisions of Mastec Industrial SOPs via the Zavanta library.

CE&I Market Sector:

Industrial

Department:

Quality

Business Process:

Quality Alerts

Was a Document Created/Modified in Response to the Alert or Lesson Learned?:

No

Who to contact for additional details?:

- Daniel Earp - Director of Quality

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- Wayne Patton - Sr Field Quality Manager