

Improper Location of Temporary Ground Placement

MIC Quality Alert

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Title of Event:

Improper Grounding

What Happened:

Welding craft personnel were welding to a section of pipe that was connected to the Guild equipment skid. Once the welding arc was produced the electrical current generated from the welding process traveled through the Guild Skid damaging several electrical components on the equipment skid.

Graphic/File 1:



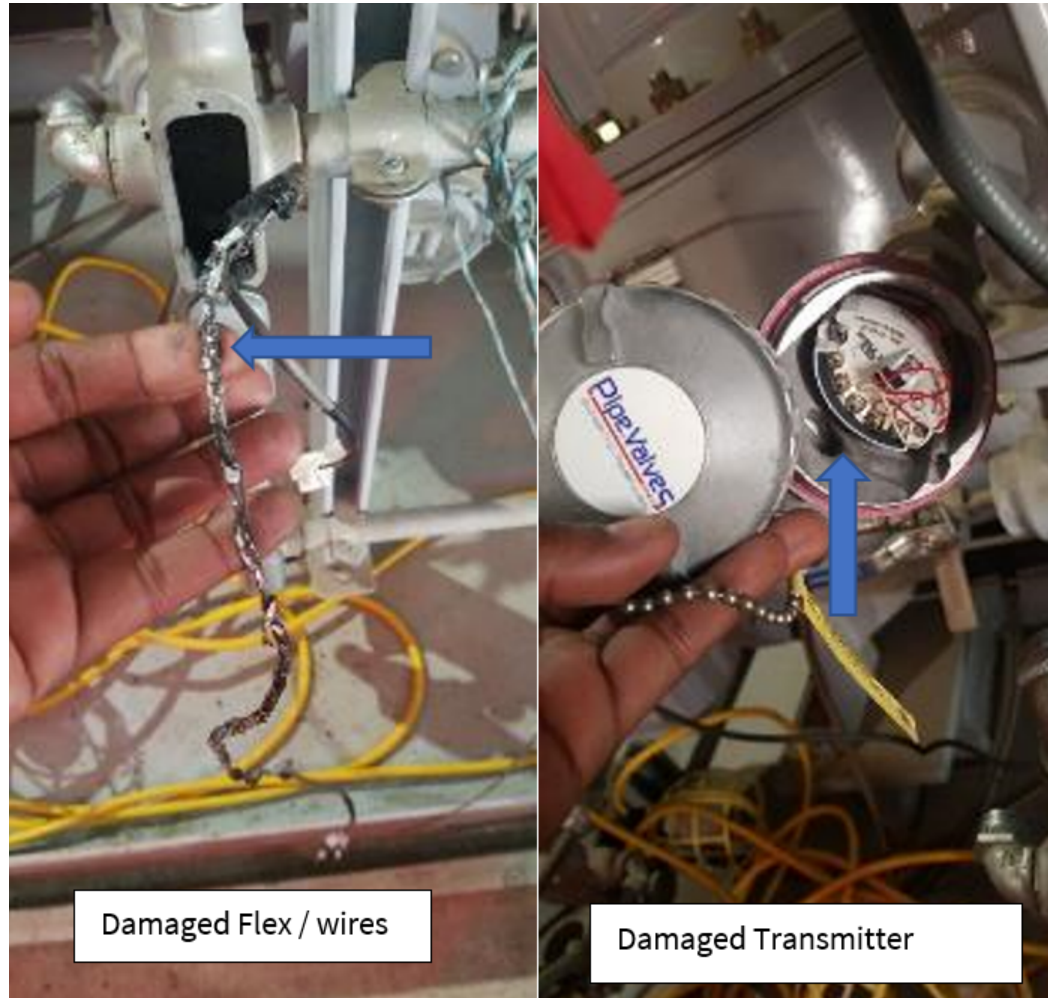
Graphic/File 2:



Graphic/File 3:



Graphic/File 4:



Findings:

During the investigation, the site team was unable to determine a root cause of the damage due to lack of objective evidence of the ground placement.

The following recommendations have been identified to mitigate this type of damage from occurring moving forward:

1. Always place the ground as close as possible to the workpiece. Ensure the area to be grounded is clean and free of debris or any other deleterious material that would interfere with the continuity of the current.
2. Never place grounds to skids or equipment where the current may travel through electrical equipment.
3. Whenever possible, isolate workpiece from skids or electrical equipment by un-bolting, insulating, and/or removing to another location.
4. Ensure the weld lead is clearly identified when using multiple power supplies in the same area to mitigate the risk of attaching the wrong lead to the workpiece.

Site Solution / Immediate Solution:

1. Immediate stand-down and re-training of temporary grounding placement and procedures associated with welding activities.
 2. Color code welding leads and ground leads with each welding machine for identification.
 3. Replace damaged electrical components, re-install and test / calibrate new components.
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CE&I Market Sector:

Industrial

Department:

Quality

Business Process:

Guidelines

Quality Alerts

Tools / Templates

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

No

Who to contact for additional details?:

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