PCI Plant Quality Talk
Quality Enhancement Committee

SERIES 3, ISSUE 9 – STEEL FORMS AND FORM PANELS

Steel forms for manufacturing precast concrete products are one of the most significant investments in any precast concrete manufacturing operation. Poorly maintained forms make poor quality products while forms that are properly maintained and repaired can provide years, and even decades, of useful service.

Forms should be checked regularly for deformed and damaged parts, such as bent or warped sections, cracks, broken welds, rust, loose bolts or fasteners, and broken or inoperable hardware. Deformed formwork can lead to concrete products not meeting quality standards and specifications. Damaged parts can potentially lead to safety issues.

Check for Dimensional Accuracy

- Always measure all forms and forming equipment, including pallets, headers, truing rings, and removeable parts, prior to their initial use and after repairs. Forms and forming equipment should also be routinely measured quarterly or in accordance with an established maintenance policy.
- To ensure all products made by a form stay within allowable tolerances, measurements should not vary from the nominal dimensions of products cast by that form by more than half of the allowable manufacturing tolerances.
- Forms should be leveled and secured on the production floor according to the recommendations of the form manufacturer. It should not be possible to lift forms off the production floor during product removal.
- Forms with gaps in seams greater than ⅛ in. in width should be tagged for maintenance. If a form has gaps greater than ⅜ in., it should be taken out of service until it can be repaired.

Check for Form Operability

- All parts of the form, including hinges, latches, wheels, tracks, fittings, pins, hydraulic arms, and other moving parts, should operate without excessive force. Parts that do not operate correctly should be repaired or replaced before excessive force can cause breakage, or worse, cause personal injury.

Track Progress of Maintenance and Repair of Formwork

- Forms or equipment with major defects or that pose a safety hazard should be marked or tagged as being inoperable until repairs are completed.

Form Maintenance Policy

- Follow the procedures within the plant Quality Systems Manual for ongoing maintenance, cleaning, inspection, lubrication, and repair to ensure that all steel forms in use meet required dimensional tolerances. Such procedures should be followed monthly or quarterly at a minimum.
- Report form maintenance issues to the Quality Control Manager.
- **Under no circumstances should unsafe or nonconforming forms be used.**

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Note: Please complete this form and return it to the Quality Control Manager. All crew members should be observant and report anything out of the ordinary on a project to their supervisor. *See something, say something.*

NOTES	ATTENDEE SIGNATURES
DATE PRESENTER	