



NPCC

Precast ... The Concrete Solution

Protecting Your Investment: Form Care, Maintenance and Repair for Maximum Life Expectancy

Presented by:

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**HANDLE
WITH CARE**



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Forms are Valuable

Forms are one of
your company's
most valuable
pieces of
equipment





Forms can provide 25 or more years of service
with proper maintenance and adjustments



These forms look good and perform well because of the care they receive on a daily basis

Maximize your form life to produce higher quality products more cost effectively



Clean Forms EVERY Day



This form was not cleaned after pouring. Cleaning it now will be extremely time consuming and poses more opportunities for damage to the form.

Cleaning Your Forms

Tools Needed:

Scraper (putty knife)

Wire Brush

Some Type of Grease

Air Hose (when required)

It is important to clean the forms as quickly as possible after they are stripped.



Cleaning Procedure

- Clean the entire form thoroughly
- Remove concrete from the entire form



Cleaning Procedure

- Focus should be on the working surface of the form. The working surface is the portion that comes into contact with the form.
 - Scrape excess concrete off of the core skins and jacket skins
 - Remove all concrete that built up on moving parts such as jacket locks, core collapsing devices, lifting plugs, step pins and blockouts, etc.

Cleaning Procedure

- Pay special attention to the joints, jacket and core seams
 - Make sure to remove concrete from up and down their full length
 - *Concrete may appear to be removed but slurry builds up over time making the form difficult to close*



Concrete build up can misalign,
twist and warp forms. Forms that
are out of shape produce inferior
products

Cleaning Procedure

- Pallets and Headers (Groove and Tongue Rings)
 - Make sure to remove concrete from:
 - the outside and inside diameters
 - flanges around the working surface of the joint, a wire brush works well here

Cleaning Procedure

- Shoveling plates or pour plates should be checked for concrete build up on the parts that sits on the form

Cleaning your forms properly is critical!



Inspecting the Form

Train ALL employees how to correctly inspect forms



Inspect Your Forms

- Inspect DAILY!
 - Look for:
 - Check for dimensionality and for “squareness”
 - Cracked or broken welds
 - Loose or missing nuts and bolts
 - Broken parts

Inspecting Procedure

- A good time to inspect forms is after cleaning is complete
 - Inspect the locks, collapsers, blockouts, pins and plugs
 - Make all adjustments that are needed
 - Tighten loose bolts, replace missing bolts
 - Replace missing parts such as locks and pins

Warning! *Continued use of the form with broken or missing locks and collapse parts will definitely damage the form.*



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Inspecting Procedure

- It is a SMART maintenance policy to have spare parts on YOUR shelf for immediate access.
 - *Your form supplier should have a list of recommended spare parts*

Inspecting Procedure

- Check welds for cracking, and outer skins for dents
 - Follow your plant's procedure to report these findings so they can be repaired.



Adjusting Locks and Collapsers

Maintain proper adjustments

- Over adjusting locks and collapsing devices will cause the form to distort and can cause permanent damage to the form
- Over adjustments can also can cause breaking and bending of the working parts of the locks and collapsers

Use CARE Repairing or Modifying Forms

- When grinding, cutting or welding be aware of how the heat is impacting the form
- Excessive or improperly applied heat can permanently deform forms.

Preparing for the Next Pour

- When oiling or applying a release agent, apply liberally to the core and jacket parts to make clean up easier
- Additionally, apply grease to hinges and gears that may come in contact with concrete to make stripping quicker and more precise



Necessary adjustments need to be made prior to the next pour

Lubricate Fixtures and Hinges

- Apply generously after every pour
 - Filling the void eliminates metal to metal contact which reduces wear
 - Concrete build up can misalign, twist and warp forms
 - Forms that are out of shape produce *inferior products*





Remember:

Well maintained forms
are important to any
successful precast
operation

Routine maintenance
will result in improved
quality and reduced
production costs

Be Proactive, daily
inspections and
maintenance will
eliminate surprises



Remember:

A complete inventory of replacement parts improves productivity

If you are using a cheater bar to operate cores or jackets inspect the form, this is a sign that there is something wrong!







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Q & A

We're glad to answer your questions at this time and should you think of questions in the future we welcome your call/e-mail.

Thank you for participating.



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