

Hook Analysis



A deep look at crane hook condition

The crane hook and bottom block components are stressed during each working cycle. Hooks can fail due to cumulative fatigue and failures often start as a fatigue crack in the hook shank. Heavy process duty, changes in application, operation with short lifts and long travel distances, and the use of below-the-hook lifting attachments can all contribute to premature cumulative fatigue.

The Konecranes Hook Analysis utilizes visual and NDT inspections combined with fatigue calculations of the hook shank and forged body and components of the bottom block.

The remaining fatigue life of the hook can be estimated by reviewing the operating history of the crane and using that in conjunction with the characteristics of the hook itself, the bottom block and the reeving system. Konecranes uses the most current hook standard and analysis methods to estimate hook life.

Recommendations are provided for the continued use of the hook along with a detailed inspection plan.



Benefits of a Hook Analysis

- Provides insights on the current condition and the remaining fatigue life of a crane hook.
- Helps guide hook inspection plan for the continued safe use of the crane.

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