Kobelco International (S) Co., Pte. Ltd

10, Tuas Avenue 5
Singapore 639336

Tel: (65) 6268 1308
Fax: (65) 6268 2490

Machine Assessment Report

Ref: KMISR202507-01

Date: 23 Jul. 2025
Machine model: CKE1800-1F
Serial No: JC04-02232
Engine No: Hino P11CVH1396
Hour Meter: 22680
YOM: 2012
Location: Singapore

Crane Configuration: Standard crane with Auxiliary sheave
Conduct crane inspection finding for following above mention crane model CKE1800-1F, Serial No JC04-02232. The present crane has an equipped with standard crane configuration main boom 33.5m with Aauxiliary sheave, 110t main hook 8-part lines and auxiliary 13.5t ball hook 1-part line.

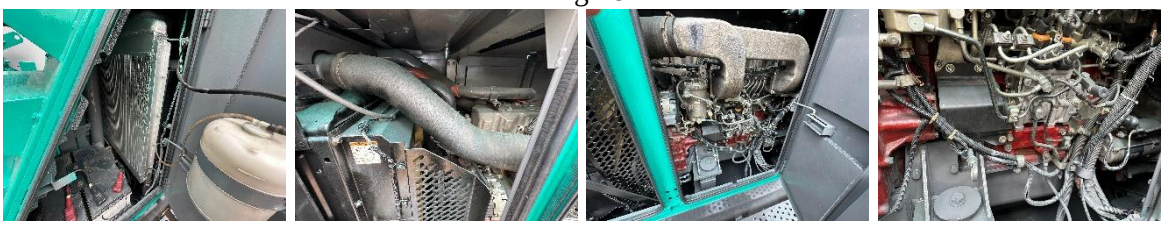
Base Machine



Operator Cabin



Engine



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Hydraulic Components



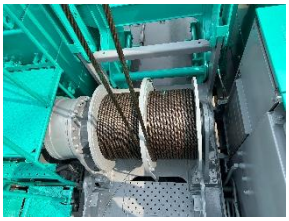



Gantry Sheave & Backstop






Winch Drum



Lower Frame






Crawler Track






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Refurbishment Service Tasks

1. Engine and fuel system Maintenance

- Carefully remove the engine from the equipment.
- Perform thorough cleaning and inspection of engine components.
- Carry out necessary service and maintenance tasks to ensure optimal performance.
- Service and clean all fuel lines to remove contaminants.
- Flush the fuel lines and fuel tank to eliminate residue and prevent blockages.
- Inspect and service the fuel supply pump for reliable fuel delivery.
- Remove the radiator and oil cooler for in-depth cleaning and inspection.
- Flush the radiator and oil cooler to clear out any debris or buildup.
- Replace thermostat and water pump

2. Hydraulic System Refurbishment

- Disassemble and refurbish the hydraulic main pumps to address wear and tear.
- Recalibrate the pumps for precise operation.
- Conduct comprehensive pressure testing to verify performance.
- Replace swivel joint seal kit
- Replace several hyd. Hoses

3. Electrical system Refurbishment

- Replace GITC device with 4G type.
- Replace microphone.
- Replace the LCD panel for safety monitor.
- Replace the harness for fixed jib limit switch
- Replace the antenna

4. Attachment maintenance

- Replace Aux. wire rope with new one.
- Replace boom wire rope with new one.
- Replace counterweight cylinder seal kit
- Replace gantry cylinder seal kit
- Replace the bearing for upper and lower spreader sheave
- Replace the bearing for top boom
- Replace the bearing for idler sheave
- Replace drum lock cables for Main, Aux. and boom winch.

5. Lower machinery maintenance

- Replace Translifter cylinder seal kit
- Replace floating seal for propel reduction unit
- Replace track shoe

6. Painting and Finishing

- Prepare surfaces by cleaning and removing any old paint or rust.
- Apply a fresh coat of paint.
- Replace all filters include air con filter.
- Replace all lubricants

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Conclusion & Comments

The base machine has been thoroughly inspected, cleaned, and maintained, presenting a clean and tidy appearance. Key observations and assessments are as follows:

1. Operator Controls
- The crane operator control levers exhibit smooth and responsive operation.
- Electrical switches and controls function reliably with no issues detected.

2. Safety Devices
- The moment limiter safety device is in excellent working condition, providing reliable protection.

3. Performance of Components
- The winches, including the front drum, rear drum, and boom operation, perform within the manufacturer's specifications.
- Slewing operations and propel travel are functioning normally.
- All drum wire ropes are properly wound and well-lubricated with grease to ensure durability and performance.

4. Electrical Systems
- The electrical cable reel harness is securely connected.
- All sensor detectors are properly installed and operational.

5. Lubrication and Mechanical Components
- Movable components, including the slewing bearing, foot pin, and spreader sheaves, have been lubricated to ensure smooth operation.
- The crawler tracks are tensioned correctly for optimal performance.

6. Engine and General Condition
- The engine is clean and tidy with no oil leaks observed.
- All major components are in good working order, contributing to the overall cleanliness and functionality of the machine.

7. Operational Performance
- Performance testing under operational conditions indicates the machine is functioning satisfactorily.
- No major damage or defects were identified during the inspection.



Reported by So Yamanobe
KISCO service engineer

END