

MARINE CRANE

Daily Inspection Checklist (for six months)

Monthly Inspection Checklist (for one year)

Annual Inspection Checklist (for one year)

Please be sure to conduct the inspections.



Daily Inspection Checklist

(for six months)

- This form consists of two pages. Use one form for every 10 days.
- Inspect daily by following this checklist.



(Inspection for potential accidents or malfunctions)

Okada Aiyon Corporation

Marine Crane Daily Inspection Checklist

(for 10 days)

Crane model	Serial no.	Lifting capacity (kg)	Inspection date						
PC-			Day						
Operator's name			Inspector's name						
Component	Inspection items	○ or ×							
Whole crane	1. No loose, damaged, or missing parts, such as bolts, nuts, pins, cotter pins, retaining rings, or stoppers, in the components.								
	2. No cracks or abnormal deformation in structural members. Pay particular attention to welded parts.								
	3. No abnormal noises.								
	4. No excessively dirty areas.								
	5. Proper hydraulic oil level.								
	6. The components are sufficiently lubricated and greased.								
Boom	1. No cracks, dents, distortions, rusting, damage, or bending in the boom.								
	2. No oil leakage from the luffing cylinder.								
	3. No loose, deformed, or missing locking or retaining bolts in the luffing cylinder mounting pins (rod side and head side).								
	4. Greased (not insufficiently lubricated).								
	5. No oil leakage from inside the boom (telescoping cylinder).								
	6. The boom sections extend or retract in order.								
	7. The guide sheave rotates and functions properly.								
Rotating platform Post	1. No deformation or cracks in the post or rotating platform.								
	2. No loose, deformed, or missing mounting bolts or nuts.								
	3. No oil leakage from the slewing joints.								
	4. The slewing bearing is sufficiently lubricated.								
Piping	1. No loose piping joints and hoses in the components, and no oil leakage from the joints and hoses.								
	2. No dents or deformation in the piping, and no loose or missing support fittings.								
Hook	1. The hook rotates properly. The hook's swivel components are greased.								
	2. The hook's safety latch functions properly.								
Safety devices	1. The battery-powered over-winding alarm functions properly (optional device).								
	2. The load chart diagram, boom-angle indicator, and safe working load indicator are not dirty.								

Component	Inspection items	○ or ×									
Winch/ Slewing mechanism	1. The winch brakes function properly.										
	2. The boom does not move unintentionally during slewing.										
	3. No abnormal noises from the winch.										
	4. No abnormal noises from slewing.										
Wire rope/Drum	1. No wear and damage of the wire rope (10% or more of the strands are not broken or deformed).										
	2. No improper spooling of the wire rope on the drum.										
	3. Both ends of the wire rope are correctly fastened.										
Comments	Notes:										

Monthly Inspection Checklist

(for one year)

- This form consists of four pages. Use one form for every 11 months.



Marine Crane Monthly Self-Inspection Checklist

Keep for three years

(for one year)

Crane model	Serial no.	Lifting capacity	Inspection date	
PC-		kg	Inspection supervisor	
Operator's name			Inspector's name	

Component	Inspection items	○ or ×											
Hydraulic system/Piping	1. The relief valves are correctly set.												
	2. No oil leakage from the control valves, valves, joints, and piping joints.												
	3. No oil leakage from the luffing cylinder.												
	4. No oil leakage from the telescoping cylinder.												
	5. The winch hydraulic motor is not making abnormal noises and is not overheating.												
	6. The slewing hydraulic motor is not making abnormal noises and is not overheating.												
	7. No breakage and oil leakage in the piping joints.												
	8. No dents or deformation in the piping, and no loose, missing, or rusting support fittings.												
	9. No oil leakage from the slewing joint area.												
	10. No damage, bulging, or other abnormalities in the high-pressure hoses.												
	11. The pressure gauge functions properly and is not excessively dirty (optional device).												
Boom	1. No cracks, dents, distortions, rusting, damage, or bending in the boom.												
	2. No loose, deformed, or missing locking or retaining bolts in the luffing cylinder mounting pins (rod side and head side).												
	3. Greased (not insufficiently lubricated/greased).												
	4. No oil leakage from inside the boom (telescoping cylinder).												
	5. The boom sections extend or retract in order.												
	6. The guide sheave rotates, moves, and otherwise functions properly.												
Rotating platform Post	1. No deformation or cracks in the post or rotating platform.												
	2. No loose, deformed, or missing mounting bolts or nuts.												
	3. The slewing bearing is sufficiently lubricated.												
	4. No dents, distortions, or damage in the winch drum gear cover.												
	5. The slewing gear and pinion are not making abnormal noises and are not insufficiently lubricated.												
	6. No loose or missing mounting bolts in the rotating platform cover.												
	7. No dents, distortions, or damage in the rotating platform cover.												
	8. No damage in the drum and cylinder shafts and no loose, deformed, or missing bolts.												
	9. No loose, deformed, or missing mounting bolts in the slewing joint area.												
	10. No loose, deformed, or missing mounting bolts in the crane body.												
	11. No loose, missing, or damaged grease nipples.												
	12. Sufficiently greased.												

Component	Inspection items	○ or ×											
Winch	1. The winch gearbox is not making abnormal noises and is not overheating.												
	2. The winch gearbox brakes function properly.												
	3. The winch gearbox oil is filled to the proper level.												
	4. The winch gearbox oil is not dirty.												
	5. No loose, deformed, or missing mounting bolts in the winch gearbox.												
Slewing	1. The slewing gearbox is not making abnormal noises and is not overheating.												
	2. The boom does not move unintentionally during slewing.												
	3. The slewing gearbox oil is filled to the proper level.												
	4. The slewing gearbox oil is not dirty.												
	5. The slewing bearing is sufficiently greased.												
	6. No abnormalities in the slewing bearing, such as abnormal noises and wear.												
Wire rope Drum	1. The wire rope length and specifications are appropriate.												
	2. No wear, damage, or corrosion of the wire rope.												
	3. No improper spooling of the wire rope.												
	4. Both ends of the wire rope are correctly fastened.												
	5. No rope indentation marks on the drum.												
	6. No cracks or corrosion in the drum.												
Hook	1. The hook rotates properly.												
	2. The hook's safety latch functions properly.												
	3. No cracks, damage, deformation, abnormal wear, or excessive corrosion in the hook.												
	4. Sufficiently greased.												
Sheave	1. No damage, cracks, or abnormal groove wear in the sheave.												
	2. No abnormality in the sheave shaft and no loose, deformed, or missing mounting bolts.												
	3. No damage, rusting, or other abnormalities in the sheave bearing.												
	4. Sufficiently greased.												
Comments	Notes:												

Annual Inspection Checklist

- This form consists of three pages.



Marine Crane Annual Self-Inspection Checklist **Keep for three years**

Crane model	Serial no.	Warranty no.	Inspection date		Y		M		D
PC-			Inspection supervisor						
Operator's name			Inspector's name						

Component	Inspection items	○ or ×	Action taken	Comments
Hydraulic system/Piping	1. The relief valves are correctly set.			
	2. No oil leakage from the control valves, valves, joints, and piping joints.			
	3. No oil leakage from the luffing cylinder.			
	4. No oil leakage from the telescoping cylinder.			
	5. The winch hydraulic motor is not making abnormal noises and is not overheating.			
	6. The slewing hydraulic motor is not making abnormal noises and is not overheating.			
	7. No damage and oil leakage in the piping joints.			
	8. No dents or deformation in the piping, and no loose, missing, or rusting support fittings.			
	9. No oil leakage from the slewing joint area.			
	10. No damage, bulging, or other abnormalities in the high-pressure hoses.			
	11. The pressure gauge functions properly and is not excessively dirty (optional device).			
Boom	1. No cracks, dents, distortions, rusting, damage, or bending in the boom.			
	2. No loose, deformed, or missing locking or retaining bolts in the luffing cylinder mounting pins (rod side and head side).			
	3. Greased (not insufficiently lubricated).			
	4. No oil leakage from inside the boom (telescoping cylinder).			
	5. The boom sections extend or retract in order.			
	6. The guide sheave rotates and functions properly.			
Rotating platform Post	1. No deformation or cracks in the post or rotating platform.			
	2. No loose, deformed, or missing mounting bolts or nuts.			
	3. The slewing bearing is sufficiently greased.			
	4. No dents, distortions, or damage in the winch drum gear cover.			
	5. The slewing gear and pinion are not making abnormal noises and are not insufficiently lubricated.			
	6. No loose or missing mounting bolts in the rotating platform cover.			
	7. No dents, distortions, or damage in the rotating platform cover.			

Component	Inspection items	○ or ×	Action taken	Comments
Rotating platform Post	8. No abnormality in the drum and cylinder shafts and no loose, deformed, or missing bolts.			
	9. No loose, deformed, or missing mounting bolts in the slewing joint area.			
	10. No loose, deformed, or missing mounting bolts in the crane body.			
	11. No loose, missing, or damaged grease nipples.			
	12. Sufficiently greased.			
Winch	1. The winch gearbox is not making abnormal noises and is not overheating.			
	2. The winch gearbox brakes function properly.			
	3. The winch gearbox oil is filled to the proper level.			
	4. The winch gearbox oil is not dirty.			
	5. No loose, deformed, or missing mounting bolts in the winch gearbox.			
Slewing	1. The slewing gearbox is not making abnormal noises and is not overheating.			
	2. The boom does not move unintentionally during slewing.			
	3. The slewing gearbox oil is filled to the proper level.			
	4. The slewing gearbox oil is not dirty.			
	5. The slewing bearing is sufficiently greased.			
	6. No abnormal noises from the slewing bearing.			
Wire rope Drum	1. The wire rope length and specifications are appropriate.			
	2. No wear, damage, or corrosion of the wire rope.			
	3. No improper spooling of the wire rope.			
	4. Both ends of the wire rope are correctly fastened.			
	5. No rope indentation marks on the drum.			
	6. No cracks or corrosion in the drum.			
Hook	1. The hook rotates properly.			
	2. The hook's safety latch functions properly.			
	3. No cracks, damage, deformation, abnormal wear, or excessive corrosion in the hook.			
	4. Sufficiently greased.			
Sheave	1. No damage, cracks, or abnormal groove wear in the sheave.			
	2. No abnormality in the sheave shaft and no loose, deformed, or missing mounting bolts.			
	3. No damage, rusting, or other abnormalities in the sheave bearing.			
	4. Sufficiently greased.			
Performance inspection	1. The boom luffs properly at the rated load and speed.			
	2. The boom telescopes properly at the rated load and speed.			
	3. The winch hoists properly at the rated load and speed.			
	4. The crane slews properly at the rated load and speed.			
	5. The cylinder does not drift down under load.			

<p>(Inspection result)</p> <p>○: OK</p> <p>×: Hazard</p>	<p>(Action taken)</p> <p>G: Adjustment/maintenance completed</p>		
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Remarks