

PERIODICAL INSPECTION

To lengthen a service life of the hoisting system, carefully maintain according to Inspection Standard Table. To also prevent the crane accident in advance, ensure to perform the periodical inspection by using the inspection scaffold, its elevating facility, falling-prevention device, etc.

YEARLY INSPECTION	The enterpriser shall periodically inspect the hoisting system once a year by disassembling the hoist to check the structure part, mechanical part, wire rope, hoisting fixtures, etc., are adequate.
MONTHLY INSPECTION	The enterpriser shall periodically inspect the hoisting system once a month. Thus, an inspector shall repair the failed parts, etc., by directly touching the hoist. It is desirable to determine the inspection period of each parts by considering safety degree, hardness of maintenance, hoisting frequency, and that they are consumables or not.
PRECAUTION OF PERIODICAL INSPECTION	<ol style="list-style-type: none"> 1. Be sure to turn off the power of hoist before inspecting. 2. Indicate that the inspection is performed before inspecting. 3. Be sure to lower the hoist on the ground before disassembling. 4. Replace parts with company-specified parts if required.
INSPECTION BEFORE STARTING WORK	Worker shall inspect that the hoist is adequate without disassembling before a daily work start. However, when some workers operate the hoist, the responsible person in charge of the hoist shall inspect it. Operate the hoist with no-load by pushing the button switches according to the daily inspection
INSPECTION AFTER STRONG WIND, ETC.	The enterpriser shall inspect the crane installed outdoors in advance when working after the maximum instantaneous wind speed of 30m/sec., or the earthquake of seismic intensity of 4 or more.

DAILY INSPECTION TABLE

Daily inspection item	Description
Take care for special obstruction in operator's walk space.	Check safety of walk.
Check hoisting system is adequate, overlooking the cross travel rail from floor.	Check stopper too.
Check hoist is smoothly operated in accordance with indications of push buttons.	If reversely operated, brake is not limited.
Check brake is adequately applied.	When movement distance of hook block is 20~50mm after releasing finger from push button, system is correct. If starting time is 1 second or more, or operation is not smooth, system malfunctions.
Limit SW is securely operated.	
Check there is no noise, smell or vibration which differs from usual condition.	
Check sheave of hook block is smoothly rotated, hook is easily turned, hook nut is securely tightened and wire rope is not removed from	Load falling is prevented.
Check wire rope is correctly wound on drum.	It will cause reduction of life and wire cut.
Check slinging fixtures are adequate.	

PERIODICAL INSPECTION

<Classification • Classified Standard>

<Period>

A Important inspection items for safety
 B Important inspection items and consumables for machine maintenance

Inspected once a month
 Inspected once a 3-month

C Parts of less wear and break

Inspected once a 6-month

Note: Inspect important parts and frequently used parts by shortening the inspection interval.

Inspected component	Inspection item	Class	1	2	3	4	5	6
Winding motor	Check motor-mounted bolts are not loosened and motor appearance is not damaged.	A						
	Check motor insulation situation.	C						
Electromagnetic brake	Check electromagnetic brake-mounted bolts are not loosened and gap is adequately adjusted.	A						
	Check worn situation of electromagnetic brake	B						
	Check iron core of electromagnetic brake.	C						
Over-winding protector	Check each mounting bolt of over-winding protector and lever situation.	A						
	Check contact-worn situation of over-winding protector.	B						
Electromagnetic contactor	Check operation of electromagnetic contactor.	A						
	Check worn situation of electromagnetic contactor contact.	C						
	Check appearance damage of electromagnetic contactor and wiring tightening screws.	B						
Oiling	Check lubrication oil condition to gear case.	B						
Wire drum	Check drum wear, damage and crack.	B						
Equalizer sheave	Check equalizer wear, damage and crack.	A						
Wire rope	Check wire cut of rope and wear of wire.	A						
	Check wire kink, shape deformation, corrosion.	A						
	Check mounting situation of wire rope end.	B						
	Check contact part of wire rope equalizer	C						
	Check wire rope oil condition.	A						
Hook block	Check hook block deformation and rotary	A						
	Check hook block nut and split pin.	A						
	Check hook block cover deformation and break.	A						
	Check hook block sheave damage, wear and rotary condition.	A						
	Check rated load of hook block is indicated.	A						
Push button switch	Check appearance of push button SW and damage of operation cable.	A						
	Check interlock of push button SW.	A						
	Check contact wear of push button SW and loosening of wiring tightening screws.	C						
Cross travel motor	Check motor-mounted bolts and appearance	A						
	Check motor insulation.	C						
Cross travel motor brake	Check appearance damage of motor brake and mounting bolts.	A						
	Check gap adjustment of motor brake.	C						
	check wear of motor brake lining.	C						
	Check surface of wheels, flange, gear wear condition.	B						

Cross travel wheel	Check appearance damage of wheels, key plate deformation, wheel loosening.	A							
	Check bearings of cross travel wheels, wheel shaft condition.	C							
Cross travel rail	Check there is obstruction in cross travel space.	A							
	Check mounting and bending of cross travel rail.	B							
	Check wear, damage and crack of cross travel	C							
Cross travel stopper	Check deformation and falling of stopper.	B							
Grease	Check greasing of motor gear.	B							
Travelling motor	Check motor-mounting bolts and motor appearance damage.	A							
	Check motor insulation.	C							
Travelling motor brake	Check brake appearance damage of motor brake and brake-mounting bolts.	A							
	Check gap adjustment of motor brake gap.	C							
	Check wear of motor brake lining.	C							
Trolley wheel	Check wear of trolley wheels, flange and gear.	B							
	Check damage of trolley appearance,	A							
	Check trolley bearings and shafts.	C							
Travelling rail	Check there is obstruction area of travelling rail.	A							
	Check mounting and bending of travelling rail.	B							
	Check wear, damage and crack of travelling rail.	C							
Travelling stopper	Check deformation and falling of stopper.	B							
Greasing	Check greasing condition to motor gear.	B							
Saddle buffer	Check loosening of saddle buffer mounting bolts and appearance damage.	B							
Girder	Check crack and corrosion on girder-welded	C							
	Check indications of rated load of girder and operational directions.	A							
Saddle	Check saddle mounting bolts to girder and crack on welded part.	C							
Run-away protector	Check run-away protector mounting bolts are not loosened and welded part is not cracked.	B							
Inspection equipment	Check protector mounting bolts and crack on welded part.	C							
Cabtyre cable	Check hangers for cable.	B							
	Check appearance damage and deterioration.	B							
	Check messenger wire of cabtyre cable.	B							
Trolley wire, duct, etc.	Check supporting part condition and deflection of trolley wire, duct, etc.	B							
	Check collision of trolley wire, duct, etc.	C							
Collector	Check collector mounting and wear	C							
	Check collector wheel rotation.	B							
Winding/unwinding	Check operation, noise and vibration while winding/unwinding.	A							
	Check winding protector condition while winding/unwinding.	A							
	Check brake applying condition wheel winding/unwinding.	A							
Long travel	Check operation, noise and vibration while long travelling.	A							
Cross travel	Check operation, noise and vibration while cross travelling.	A							