

Inspection Check List for: Electrical Overhead Crane (EOT)

Risk assessment	
Frequency of the In-service inspection done by the user/owner	Yes
operation manual & Maintenance Record available upon request write either(• both available , • operation manual only)	N/a
Labels and decals for operation on the lift write either(• available • owner provided)	Yes
Previous 3rd party certificate if any write either(•New equipment (first inspection) • present and valid • present and invalid • Not available)	Yes
Operator training proof write either (• training certificate available• brief training provided by inspector• Experiences proof)	Yes
Operator training proof write either (• training certificate available• brief training provided by inspector• Experiences proof)	Yes
Appropriate PPE for the operator write either(• helmet • shoes , • harness, • safety reflection jacket)	Yes
Is the environmental contain any hazardous conditions such as, extreme humidity, dust,sand, salt air,etc. write either (• air conditioning• periodic break• water present• supervision • safety goggles)	No
Is the location is next foot walks or traffic workstation or public areas write either (• present , • site condition not required)	No
Isolate all area, and put sign board for inspection progress write either (• present • site condition not required)	No
Manufacture documents matching the lift installed write either (• yes matching • verification with the manufacture after inspection)	Periodic
Ensure the foundation/test area floor is adequate and leveled write either (• leveled , leveled with ease of facility/equipment)	Yes
Housekeeping , where applicable write either (• clear • clear after rectification)	Yes
Wind speed within the limits (12.5 m/s) write either (• within the limit , • waiting to be reduced)	Yes
Hazards from electrical lines write either (• obstruction provided • safe distance)	No
Approval from structure engineer/authority for the foundation write either(• approval available • inspector verification on the foundation (torque test for bolts & visual inspection))	Periodic
Adequate lighting	Yes
Preform tools box meeting	N/A
Falling form height hazard write either (• safety harness worn • barrication provided)	No
Is there any Mechanical hazards, Generated by machine parts or work pieces such : shape, inadequacy of mechanical strength, Crushing, impact, contact of person with machine.	No
Overhead Crane-Electrical System	
No damage to panel enclosure	Safe
Phase sequences	Safe
Availability of Overload relay and it's operation	Safe
Condition of the wires and distribution board	Safe
Missing parts or components not in service , foundation and elements rigidity	Safe
No leakage b/w PE – N shall be 0-50 v	Safe
No continuity b/w the phase and the ground	Safe
Continuity test acceptable value (5-10) ohm	0.5 oh!
Loop impedance test (earthing) acceptable values ;with RCD (0-200) ohm ,without (0-0.5)ohm	0.3 ohm
Insulation resistance test greater than 1 mega ohm	NA
Overhead Crane-Supports	
Any signs for weld cracks , loose bolts , pitting , deformation	Safe
NDT report if available	NA
Overhead Crane-Run way beams	
Condition of web , flanges	Safe
Condition of the bolts and secure nut and the connection joints	Safe
Deflection of the runway between two support Max (L/600) ; (L/320) depending on the standards	Safe
Overhead Crane-Sheave and Drum	
No signs for deformation and within the manufacture limits	Safe
Check the sheave groove for its Acceptance dimensions (-5% to +15% of d)	Safe
Sheave groove depth ; at least 1.5 of d	Safe
Sheave pitch diameter D? t x h x d ; t,h mentioned in the procedure tables	Safe
Overhead Crane-Top Section	
Safe access to the top section	Safe
Condition of the walkway , no gabs , fixing bolts with hand rail	Safe
Condition of Grinders for any weld cracks , loose bolts , corrosion	Safe
Overhead Crane-Hoist motor , crab , trolley	
Smooth function of motor, gearing, transmission machinery, bearing, brakes, couplings and wheels	Safe
Condition of Wire rope drum , cracks , loose fixing , rope guides , grooves	Safe

Condition of bolts and fastening of all hoist mechanism	Safe
Overhead Crane-Wedge socket termination	
Condition of the wedge socket , no cracks , deformation , rigidity , swing	Safe
Correct installation , anchoring , outer portion	Safe
Overhead Crane-Wire rope	
Smooth operation for the running wire	Safe
General appearance , no abrasion , correction	Safe
Wire rope terminations , check for cuts , looseness , increase in diameter , rigidity	Safe
Any strand cuts , small cuts , decrease/ increase in diameter	Safe
Deformation ; waviness , bends , bird caging	Safe
Overhead Crane-Cross travel – long travel	
Condition of motor, couplings, brake, gear box, bearing, collectors and transmission	Safe
machinery for any damage, crack, distortion, loose bolts	Safe
Condition casing and guards	Safe
Long travel and cross travel rails for damage, cracks, loose bolts and misalignments	Safe
Condition of long travel and cross travel wheels and wheel guiders for wear, damages and proper functions	Safe
Condition of the end carriages, buffers (bushes), end stoppers for damages and distortions	Safe
Overhead Crane-Safety switches	
Hoist up / down limiter	Safe
Cross travel left / right limiter	Safe
Long travel inner / outer limiter	Safe
Rated capacity indicator	Safe
Overload limit (if available)	Safe
Overload relay RCL	Safe
Anti collision device (if required)	NA
Overhead Crane-Tests	
Visual test overall	Safe
Operation / functional test overall	Safe
Load test at rated capacity overall	Safe
Overload / proof load test overall	Safe
Overhead Crane-Hook Block	
Any signs for wear , cracks , deformation , fretting	Safe
The distance b/w marked datum points (in case of increscent, maximum value allowed is 10%)	Safe
Safety latch	Safe
Overhead Crane-Pendant Control Box (REMONT CONTROL)	
The festoon travel for smooth motion	Safe
Control directions available and visible to the operator	Safe
No damages to the cable, buttons , and emergency stop working sufficiently	Safe
Overhead Crane-Description	
Manufacturer	Kerun
Model / Type	MDG20-32A3
Identification Number	M201803
Identification number(User)	HWDBHSY-MCY-72
Manufacturing date	2018
Girders type	Single
Span length	32 m
Runway length	120 m
Allowable deflection	42.66 mm
Measured deflection	32 mm
Wire rope diameter	20 mm
Nos of wire rope falls	4
Operating Height	9 m
Safe Working Load	20 ton
Load test applied	20 ton
Inspection equipments	MT-35, LDM-35, DC-36 LC-01, VT-01, ANM-01, SL-03
Environment conditions	Good
Any major repair if found / detail	N/a
Sub-contract Parts	N/a
Previous inspection date	04.12.2019(Bsafe)
Additional comments	Gantry type. Preventive maintenance to be done weekly.

NDT test (report number) if any	N/a
Accredited Standard	BS 7121-2-1 : 2012 , BS 7121-2-7 :2012+A1:2015
Overhead Crane-checklist summery	
Support condition	Safe
Runways condition	Safe
Electrical system	Safe
Cross travel motion	Safe
Crab	Safe
Hoist motor & Break	Safe
Cross / long travel motors and breaks	Safe
Screws, nuts and locks	Safe
End carriage	Safe
Walkways	Safe
Safety access	Safe
mechanical stopper	Safe
Motion limits	Safe
Overload limit switch and indicator	Safe
Wire rope	Safe
Casing & covers	Safe
Long travel motion	Safe
Defects	
defect description	N/a

Inspector Name:

Inspector Signature:

Date: