

Inspection Check List for: Cradle

| Risk assessment | |
|---|-----------|
| Frequency of the In-service inspection done by the user/owner | User |
| operation manual & Maintenance Record available upon request write either(• both available , • operation manual only) | Available |
| Labels and decals for operation on the lift write either(• available • owner provided) | Available |
| Previous 3rd party certificate if any write either(•New equipment (first inspection) • present and valid • present and invalid • Not available) | Na |
| Operator training proof write either (• training certificate available• brief training provided by inspector• Experiences proof) | Available |
| Operator training proof write either (• training certificate available• brief training provided by inspector• Experiences proof) | Available |
| Appropriate PPE for the operator write either(• helmet • shoes , • harness, • safety reflection jacket) | Available |
| 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) | Safe |
| Is the location is next foot walks or traffic workstation or public areas write either (• present , • site condition not required) | Safe |
| Isolate all area, and put sign board for inspection progress write either (• present • site condition not required) | Safe |
| Manufacture documents matching the lift installed write either (• yes matching • verification with the manufacture after inspection) | Available |
| Ensure the foundation/test area floor is adequate and leveled write either (• leveled , leveled with ease of facility/equipment) | Safe |
| Housekeeping , where applicable write either (• clear • clear after rectification) | Safe |
| Wind speed within the limits (12.5 m/s) write either (• within the limit , • waiting to be reduced) | Safe |
| Hazards from electrical lines write either (• obstruction provided • safe distance) | Safe |
| Approval from structure engineer/authority for the foundation write either(• approval available • inspector verification on the foundation (torque test for bolts & visual inspection)) | Na |
| Adequate lighting | Safe |
| Preform tools box meeting | Done |
| Falling form height hazard write either (• safety harness worn • barrication provided) | Safe |
| 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. | Na |
| Cradle-Electrical Test | |
| No damage to panel enclosure | Safe |
| Condition of the wires and distribution board | Safe |
| No damage, cracks to the cables | Safe |
| Availability of RCD (30 mA) | Safe |
| No leakage b/w PE – N shall be 0-50 v | Safe |
| No continuity b/w the phase and the PE | Safe |
| Phase monitoring device | Safe |
| Damage to the main contactors , fuses | Safe |
| Continuity test acceptable value (0-5) ohm | Safe |
| Insulation resistance test report by the maintenance company | Safe |
| Cradle-Suspension Rigs (Davits) | |
| Check Davit base | Safe |
| Check turning bracket (rotating davits) | Safe |
| Typical spacing between the two davits if its complying with the platform length | Safe |
| All bolts and nuts should be checked for integrity , with a torque wrench or hammer | Safe |
| Cradle-Suspension Rigs (Monorail System) | |
| Check monorail track | Safe |
| Check supporting bracket | Safe |
| End stoppers | Safe |
| Check traversing trolley for smooth | Safe |
| Operation (motor condition - rope driven – manual) | Safe |
| Spacing between the brackets , and typical overhang | Safe |
| Clearance of W 0.5 m , H 1.8 m against trapping | Safe |
| All bolts and nuts should be checked for integrity , with a torque winch or hammer | Safe |
| check for spacing between monorail joint and availability for splices or welded joints. | Safe |

Cradle-Suspension Rigs (Roof Trolley System)

| | |
|---|------|
| Integrity of counterweight | Safe |
| Caster condition and brakes | Safe |
| Hydraulic jibs | Safe |
| Hoisting mechanism | Safe |
| Cross bar / spreader bar | Safe |
| Mortised frame | Safe |
| Integrity of counterweight | Safe |
| Caster condition and brakes | Safe |
| Protection bars available with a distance not exceeding 20 m | Safe |
| Guide rollers / flanged wheels | Safe |
| Guards for all of the moving part , electrical panels and machinery | Safe |
| Traversing speed shall not exceeds 0.3 m/sec | Safe |
| Limit switches for motions | Safe |

Cradle-Suspension Rigs (Track System)

| | |
|---|------|
| Base plates | Safe |
| Bolts & nuts | Safe |
| Beams elevation specially on articulated sections | Safe |
| Damage for wheels surface, cracks, wear. | Safe |
| Broken teeth , pinion engagement (in case of rack- pinion system) | Safe |

Cradle-Suspension Rigs (Suspension Beams)

| | |
|---|------|
| Base section | Safe |
| Securing bolts and tension in ropes using proper clamps | Safe |
| Counterweight integrity with security | Safe |
| Sheaves and rope pulley comply with the requirement of rope diameter | Safe |
| Rope clamps | Safe |
| Separated suspension point | Safe |
| Spacing between the two suspension beams complies with length of the platform | Safe |

Cradle-Suspension Rigs (Parapet Clamps)

| | |
|--|------|
| Check integrity of the supporting structure , it shall be capable to withstand 4 times the load imposed by the parapet (concrete most of the times) | Safe |
| Design of the manufacture | Safe |
| Capacity of the parapet complies with the safe working load of the cradle taking into consideration the safety factor | Safe |
| No damage on the screw jack , pads , threads | Safe |
| Spacing between the two suspension beams complies with length of the platform | Safe |

Cradle-Suspension Point

| | |
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| wire rope termination on each suspension point signs for damage or deformation for accessories | Safe |
| separated suspension for both wires (suspension and secondary) | Safe |

Cradle-Suspended Platform

| | |
|---|------|
| Guardrails, intermediate rails and toe boards shall be free for deformation or distortion or missing | Safe |
| Wall rollers , caster wheels | Safe |
| The minimum internal width of the platform should be not less than 500 mm. | Safe |
| Sound , slip resistance , drainage holes , maximum opening 15 mm diameter | Safe |
| The height to the top of the guardrail shall be not less than 1,0 | Safe |
| Vertical distance between the intermediate rails and either guardrails or toe boards shall not exceed 500 mm. | Safe |
| Toe boards shall be not less than 150 mm above the surface of the platform decking. (TSP) | Safe |
| Roof or other means of protection | Safe |
| Availability of restrain system (if required) | Safe |
| Wire winders (BMU) | Safe |

Cradle-Hoisting System

| | |
|---|------|
| Service brake activated, no displace found under normal working conditions. | Safe |
| No power descent , maximum angle is 14deg | Safe |
| Tensioning device for wire rope | Safe |
| Minimum pitch diameter for hoisting pulley shall be 20.d for power hoist ,18.d for manual hoist | Safe |
| Operating speed shall exceeds 0.3 m/s | Safe |
| Wire rope guides available and secured in position | Safe |
| Overload device (1.25 RL ,1.25 WLL) | Safe |

| | |
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| Roof mounted hoist , device install for stopping lowering the platform with no load condition | Safe |
| Cradle-Limit Switches | |
| Anti-tilt device | Safe |
| Lifting limit switch | Safe |
| All of trolley motions (traversing, slewing, and telescoping) shall be provided with limit switch. | Safe |
| Ultimate limit switch | Safe |
| Lowering limit switch (BMU only) | Safe |
| Cradle-Hoist Drum | |
| No damage , deformation , wire coils operation | Safe |
| Secondary wire rope | Safe |
| Wire rope run and laid evenly on the drum | Safe |
| Drum flanges present without damage with 1.5d | Safe |
| Cradle-Secondary Devices | |
| Secondary wire rope | Safe |
| Fall arrest device (tilt 14o , over speed 0.5 m/s) | Safe |
| Cradle-Pulleys | |
| Groove diameter 0,52 to 0,65 d | Safe |
| Opening angle 30°- 55°. | Safe |
| Depth shall be 1.4 d at least | Safe |
| Cradle-Wire Rope | |
| No sign for damage , bird caging , deformation and strand cut | Safe |
| Allowed 10 cuts of 30.d | Safe |
| Cradle-General Requirements | |
| Labeling for SWL , and WLL on the hoist | Safe |
| Serial numbers of hoists , secondary devices and control box | Safe |
| Electrical wiring diagram for the control box | Safe |
| Warning signs inside the platform | Safe |
| Cradle-Description | |
| Manufacture | HOIST |
| Model | LTD50 |
| Serial number(Platform) | CRADLE -52 |
| S. No motors | 0807267, 0703472 |
| S. No safety devices | 070511, 1310014 |
| Span | 6+1m |
| Operation height | 27th Floor up to roof |
| Safe working load (SWL) | 250 kg |
| Proof load applied | 312.5 kg |
| Elevation | West |
| Support description | Supported on top roof by two upstanding beams tied to floor by 8 bolts + tie back with wire rope connected to floor by two bolts |
| Location | 27th floor |
| Grindlines(if provided) | 01/ KJH |
| Accredited Standard and Procedure | BS EN 1808:2015 , BSS-INPR-002 |
| NDT (If required) | NA |
| Instruments used in inspection | MT06,DC,AM01 |
| Subcontract Parts | NA |
| Environment Conditions during inspection | GOOD |
| Last Inspection Date | NA |
| Additional comments (If any) | NA |
| Any major repair if found / detail | NA |
| Cradle-Documents required | |
| Manufacture catalog / certificate /manual | Safe |
| Manufacture catalog / certificate /manual | Safe |
| Calculation for suspension Rig | Safe |
| Wire rope certificate / manufacture information for wire rope | Safe |
| Structure ,stability and mechanical calculation and electrical drawing | Safe |
| Tighten torque report for bolts if used | Safe |
| Maintenance log sheet | Safe |
| Previous inspection report | Safe |
| Defects | |

Inspector Name:

Inspector Signature:

Date: