

## CHECKLIST CRANE INSPECTION

MV. Keoyang Noble

Date:

Crane No.1/2/3

| S/N                                    | Items   | Yes | No | Remarks |
|--|---|-----|----|---------|
| <b>A. Tower Crane Approved For Use</b> |   |     |    |         |
| 1                                      | Crane is approved by MOM.   | Yes | No |         |
| 2                                      | Crane has a valid Lifting Machine (LM) certificate (issued less than 12 months ago).                                    | Yes | No |         |
| <b>B. General Requirements</b>         |   |     |    |         |
| 3                                      | Crane is provided with markings of the Safe Working Load, serial number and LM number.                                  | Yes | No |         |
| 4                                      | Safe access and egress are provided to the crane operator.  | Yes | No |         |
| 5                                      | A load capacity chart is displayed in the operator cabin.   | Yes | No |         |
| 6                                      | Operator crane cabin is provided with a locking mechanism so as to prevent unauthorised entry.                          | Yes | No |         |
| 7                                      | A safety bar is fitted across the operator's cabin window where there is likelihood of the operator falling through it. | Yes | No |         |
| 8                                      | Fire extinguisher is fit for use and provided in the operator cabin.  | Yes | No |         |
| 9                                      | An updated Operation and Maintenance log book is available in the operator cabin.                                       | Yes | No |         |
| 10                                     | Manufacturer Operating Manual and Maintenance Manual are made available.  | Yes | No |         |
| 11                                     | Crane is adequately grounded or protected against lightning.  | Yes | No |         |
| <b>C. Other visual checks</b>          |   |     |    |         |
| 11                                     | Load charts and other symbols are available and visible.  | Yes | No |         |
| 12                                     | Hydraulic fluid level is sufficient.  | Yes | No |         |
| 13                                     | Slewing oil level is sufficient.  | Yes | No |         |
| 14                                     | All mounting bolts are in good condition.   | Yes | No |         |
| 15                                     | Hydraulic system is free of leaks.  | Yes | No |         |
| 16                                     | Boom sections are free of cracks or dents.  | Yes | No |         |

|  |   |     |    |  |
|--|---|-----|----|--|
| 17                                       | Main and auxiliary wire ropes are well lubricated and that there are no visible defects such as broken wires, kinks, excess wear, crushing etc.         | Yes | No |  |
| 18                                       | Winches, pulleys and wire ropes are in good working condition.  | Yes | No |  |
| 19                                       | Crane hook is provided with a safety catch to prevent displacement of the sling or load from the hook.  | Yes | No |  |
| <b>D. Safety and Operational Devices</b> |   |     |    |  |
| 20                                       | Load radius indicator with warning alarm is installed.  | Yes | No |  |
| 21                                       | Jib angle indicator is provided (For Luffing JibCrane).   | Yes | No |  |
| 22                                       | Emergency stop button, which will terminate the operation of the crane engine, is installed in the operator cabin and correctly identified.             | Yes | No |  |
| 23                                       | Effective braking mechanisms for the following is maintained:   | Yes | No |  |
|  | (a) Hoisting  | Yes | No |  |
|  | (b) Derricking  | Yes | No |  |
|  | (c) Slewing   | Yes | No |  |
|  | (d) Trolley Travelling  | Yes | No |  |
| 24                                       | Hoisting Limiter to prevent over-hoisting of the hook block is functional.  | Yes | No |  |
| 25                                       | Trolley Travelling limiter to prevent over-travelling of trolley is functional.   | Yes | No |  |
| 26                                       | Limit switches to prevent over-derricking and over-lowering of jib (For Luffing Jib Tower Crane) is functional.   | Yes | No |  |
| 27                                       | Slewing limiter to restrict slewing of crane is functional.   | Yes | No |  |
| 28                                       | Overload Limiter to prevent overloading of crane is functional.   | Yes | No |  |
| 29                                       | Load Moment Limiter to prevent over-turning moment is functional.   | Yes | No |  |
| 30                                       | Anti-collision devices are tested to stop the crane's operation such that the crane-to-crane interference must be maintained at not less than 3 metres. | Yes | No |  |
| 31                                       | Wind anemometer is installed and is in good working condition.  | Yes | No |  |
| 32                                       | Adequate aircraft warning lights and/or chequered white and   | Yes | No |  |

|                       |   |     |    |
|-----------------------|---|-----|----|
|                       | red flags are provided.   |     |    |
| 33                    | Controller in good condition  | Yes | No |
| 34                    | Break Unit in good condition  | Yes | No |
| <b>E. Maintenance</b> |   |     |    |
| 35                    | Data logger for recording key operating parameters of the crane is functional.                      | Yes | No |
| 36                    | Crane has a regular maintenance programme that is in accordance with manufacturer's specifications. | Yes | No |
| 37                    | Maintenance work on the Crane is carried out by Competent Persons.                                  | Yes | No |

