

SAMPLE CHECKLIST FOR TOWER CRANE

This checklist provides the basic requirements for safe operations of a tower crane. Tower crane users should consult manufacturers, suppliers and owners on operations and safety requirements and address any concerns before using the equipment. This checklist is non-exhaustive and users are recommended to make the necessary customisation to suit your work processes and conditions at the workplace.

S/N	Items		Remarks
A. Tower Crane Approved For Use			
1	Tower Crane is approved by MOM.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Tower Crane has a valid Lifting Machine (LM) certificate (issued less than 12 months ago).	<input type="checkbox"/> Yes <input type="checkbox"/> No	
B. General Requirements			
3	Tower Crane is provided with markings of the Safe Working Load, serial number and LM number.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Safe access and egress are provided to the crane operator.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	A load capacity chart is displayed in the operator cabin.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Operator crane cabin is provided with a locking mechanism so as to prevent unauthorised entry.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	A safety bar is fitted across the operator's cabin window where there is likelihood of the operator falling through it.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	Fire extinguisher is fit for use and provided in the operator cabin.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	An updated Operation and Maintenance log book is available in the operator cabin.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Manufacturer Operating Manual and Maintenance Manual are made available.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	Tower crane is adequately grounded or protected against lightning.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
C. Other visual checks			
11	Load charts and other symbols are available and visible.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	Hydraulic fluid level is sufficient.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	Slewing oil level is sufficient.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	All mounting bolts are in good condition.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	Hydraulic system is free of leaks.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16	Boom sections are free of cracks or dents.	<input type="checkbox"/> Yes <input type="checkbox"/> 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.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18	Winches, pulleys and wire ropes are in good working condition.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19	Crane hook is provided with a safety catch to prevent displacement of the sling or load from the hook.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
D. Safety and Operational Devices			
20	Load radius indicator with warning alarm is installed.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
21	Jib angle indicator is provided (For Luffing Jib Tower Crane).	<input type="checkbox"/> Yes <input type="checkbox"/> No	
22	Emergency stop button, which will terminate the operation of the crane engine, is installed in the operator cabin and correctly identified.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
23	Effective braking mechanisms for the following is maintained:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	(a) Hoisting	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	(b) Derricking	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	(c) Slewing	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	(d) Trolley Travelling	<input type="checkbox"/> Yes <input type="checkbox"/> No	
24	Hoisting Limiter to prevent over-hoisting of the hook block is functional.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
25	Trolley Travelling limiter to prevent over-travelling of trolley is functional.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
26	Limit switches to prevent over-derricking and over-lowering of jib (For Luffing Jib Tower Crane) is functional.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
27	Slewing limiter to restrict slewing of crane is functional.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
28	Overload Limiter to prevent overloading of crane is functional.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
29	Load Moment Limiter to prevent over-turning moment is functional.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
30	Anti-collision devices are tested to stop the tower crane's operation such that the crane-to-crane interference must be maintained at not less than 3 metres.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
31	Wind anemometer is installed and is in good working condition.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
32	Adequate aircraft warning lights and/or chequered white and	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	red flags are provided.		
E. Maintenance			
32	Data logger for recording key operating parameters of the crane is functional.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
33	Tower Crane has a regular maintenance programme that is in accordance with manufacturer's specifications.	<input type="checkbox"/> Yes <input type="checkbox"/> No	
34	Maintenance work on the Tower Crane is carried out by Competent Persons.	<input type="checkbox"/> Yes <input type="checkbox"/> No	