

Tower crane jib assembly and dismantling - JSA - C

en-SG · Supervision, records, handover · v1.0 · 2026-10-14 · Sources: article section 9

Site: | Item ID: | Work area:

Approval	Work supervisor	Technical reviewer	Release / handover authority

1. Job details and team signatures

Date / time	Location / area		Assessor		Supervisor	
Team signatures						

2. Conditions and hold points

Stage	Time	Location / area	Environment / readings	Item / condition	Controls	Plant / tools	Approval / signature
HP-0 Start							
HP-1 Set assist crane							
HP-2 Lift and connect							
HP-3 Transfer support							
HP-4 Dismantle safely							

Complete after actual checks. Recheck after changes, defects or shift handover.

3. JSA risk assessment

Job stage	Hazards and effects	Failure factors	Technical and procedural controls	Site verification	P	S	R	A
1. Contractor and sequence	1. Wrong crane sequence 2. Jib collapse 3. Unqualified direction	1. Brand scope not checked 2. Attachment omitted 3. Manual mismatched	1. Verify contractor and erector scope 2. Match actual configuration 3. Brief manufacturer stages	1. Approval and model scope 2. Manual and component list 3. Stage and ballast schedule				
2. Assist-crane release	1. Crane overturn 2. Load overload 3. Boom collision	1. Radius changed 2. Bearing unverified 3. Swept path overlooked	1. Check actual chart and load 2. Verify reactions and support 3. Coordinate lifting team	1. Assist configuration and radius 2. Bearing and mat evidence 3. Signals and exclusion zone				
3. Connection transfer	1. Jib rotation 2. Pin release injury 3. Worker fall	1. Support path incomplete 2. Retainer absent 3. Access unprotected	1. Verify full connection state 2. Fit specified locks 3. Control access and transfer	1. Support and joint evidence 2. Retainer and release checks 3. Fall prevention and rescue				
4. Ballast and weather	1. Rearward collapse 2. Block drops 3. Uncontrolled slew	1. Final state assumed 2. Block retention missed 3. Wrong securing instruction	1. Follow exact stage schedule 2. Inspect seating and retention 3. Apply stage weather controls	1. Block identity and stage 2. Retention inspection 3. Wind and slew-state record				
5. Dismantling acceptance	1. Unsupported section 2. Bound pin ejection 3. Landing collapse	1. Rope tension used as proof 2. Extraction forced 3. Stands unsuitable	1. Verify removal support 2. Hold unresolved pin resistance 3. Prepare stable landing	1. Removal and support sequence 2. Residual-load disposition 3. Landing and restraint checks				
6. Inspection and transfer	1. Uninspected crane use 2. Damaged part reused 3. Unsafe shift restart	1. Worksheet called certification 2. Defect omitted 3. Stopped stage unclear	1. Arrange applicable AE tests 2. Quarantine damaged components 3. Transfer configuration and limits	1. Inspection and test scope 2. Defects and use restrictions 3. Stage and receiving authority				

P/S/R/A: Complete only after actual site assessment using the site risk method.

4. Pre-work checklist

☐ Approval and model scope	☐ Assist configuration and radius	☐ Support and joint evidence
☐ Block identity and stage	☐ Removal and support sequence	☐ Inspection and test scope
☐ Stage and ballast schedule	☐ Wind and slew-state record	☐ Stage and receiving authority