

INDUSTRIAL HEAVY-DUTY EQUIPMENT

Rev 2.4 - 2026 Series

PILLAR MOUNTED SLEWING JIB CRANE

MODEL SERIES: INDUCT-PILLAR-JIB-CRANE | DOCUMENT: TECHNICAL DATASHEET

3D ISOMETRIC ENGINEERING SCHEMATIC



Engineered & Manufactured in India by Induct Crane System Pvt. Ltd. | Standard: IS 3177 / IS 807 / FEM 2m

CAPACITY RANGE

500 kg - 5 Tons

WORKING RADIUS

2m - 10m

UNDER-BOOM HEIGHT

3m - 6m

SLEWING ANGLE

180 / 270 / 360 deg

EXECUTIVE OVERVIEW

Induct Crane Free-Standing Pillar Jib Cranes are designed for ergonomic, high-efficiency material handling at individual workstations. Featuring 180 deg, 270 deg, or full 360 deg continuous slewing rotation, they relieve main overhead cranes of localized lifting tasks and significantly boost machining and assembly throughput.

1. PRODUCT OVERVIEW & DESIGN CHARACTERISTICS

Induct Crane Free-Standing Pillar Jib Cranes are designed for ergonomic, high-efficiency material handling at individual workstations. Featuring 180 deg, 270 deg, or full 360 deg continuous slewing rotation, they relieve main overhead cranes of localized lifting tasks and significantly boost machining and assembly throughput.

TYPICAL APPLICATION & PURPOSE

Dedicated workstation lifting, CNC machine loading, die casting cells, assembly benches, and maintenance toolrooms.

OPERATING ENVIRONMENT

Indoor manufacturing facilities, fabrication workshops, and loading docks.

2. STRUCTURAL CONFIGURATIONS & ENGINEERING VARIANTS

MANUAL SLEWING JIB CRANE

Manual rotation with precision slewing bearing for effortless push-pull movement. Ideal for fast, light tool handling.

Capacity: 500 kg to 3 Tons | Arm Reach: 2m to 6m | Under-Boom Height: 3m to 6m

MOTORISED SLEWING JIB CRANE

Motorized slewing gear drive with soft-start VFD for heavy loads and precise angular positioning.

Capacity: 1 Ton to 5 Tons | Arm Reach: 3m to 10m | Under-Boom Height: 3m to 6m

3. CODIFIED DESIGN STANDARDS & COMPLIANCE

IS 3177: 1999	Code of Practice for Electric Overhead Travelling Cranes and Gantry Cranes
IS 807: 2006	Design, Manufacture, Erection and Testing of Cranes and Hoists
FEM 9.511 / 2m	Federation Europeenne de la Manutention Rules for the Design of Hoisting Appliances
ISO 4301 / M5-M6	Cranes and Lifting Appliances Classification of Duty Cycles and Mechanisms

4. COMPREHENSIVE TECHNICAL SPECIFICATIONS

Engineering Parameter	Manufacturing Specification / Value Range
Lifting Capacity Range	500 kg - 5 Tons
Arm Reach / Radius (m)	2m - 10m (Customized to Workstation Coverage)
Lifting Height (m)	3m - 6m (Under-Boom Clearance)
Slewing / Rotation Angle	180 deg / 270 deg / 360 deg Continuous Rotation
Structural Configuration	Free-Standing Heavy-Duty Pillar Mast
Duty Classification	FEM 2m ISO M5 IS 3177 Class II
Hoisting Speed	4 - 8 m/min (Electric Chain / Wire Rope Hoist)
Trolley Travel Speed	5 - 15 m/min (Manual Push-Pull or Motorised)
Slewing Speed	0.5 - 1.0 RPM (Motorized Slewing Option)
Power Supply Voltage	415V +-10%, 50Hz, 3-Phase AC
Control System	Push-Button Pendant & Wireless Radio Remote Control
Foundation Mounting	Heavy Base Flange with High-Tensile Anchor Fasteners
Hook Block Assembly	Forged Alloy Steel Hook with Safety Latch (360 deg Swivel)
Slewing Bearing Type	High-Precision Double-Row Slewing Ring with Internal Gearing

5. MAJOR ENGINEERING COMPONENTS & NUMBERED BREAKDOWN

01 HEAVY-DUTY PILLAR COLUMN Structural steel pipe column with heavily reinforced bottom mounting flange	02 SLEWING BEARING ASSEMBLY High-load slewing bearing with precision spherical roller bearings for effort
03 HORIZONTAL JIB BOOM High-strength I-beam boom designed with minimal deflection for smooth trolley	04 HOIST & TROLLEY High-performance electric chain hoist or compact wire rope hoist with dual-speed
05 SLEWING DRIVE MOTOR Geared slewing motor with soft-start brake for smooth 360-degree motorized rotation	06 FOUNDATION BASE FLANGE Thick precision-drilled steel base plate secured with high-tensile anchor bolts
07 LOAD HOOK ASSEMBLY Forged alloy steel hook with safety latch and 360 deg swivel rotation.	

6. APPLICATIONS & INDUSTRIES SERVED	7. SAFETY & PROTECTION SYSTEMS
- CNC Machine Tool Loading - Workstation Assembly Cells - Welding & Fabrication Bays - Maintenance Toolrooms - Warehouse Loading Docks	[+] Adjustable Mechanical Slewing Rotation Stops [+] Electronic Overload Slip Clutch / Limiter [+] Upper/Lower Hoist Limit Switches [+] Trolley End Bumpers [+] Emergency Stop Push Button

8. ENGINEERING & PROJECT CUSTOMIZATION
- [*] Pillar Height & Outreach: Custom column height and boom reach engineered to plant ceiling clearance.

[*] Wall / Column Bracket Mounting: Bracket-mounted variation attached directly to building steel/concrete columns.

[*] Outdoor Weatherproof Execution: Hot-dip galvanized or epoxy coating with motor rain jackets for outdoor bays.

9. TECHNICAL & SITE INSTALLATION NOTES
- Foundation depth and anchor bolt templates must comply with manufacturer foundation load calculations.

- Chemical anchor studs or deep J-bolt foundation cages can be provided based on soil and slab conditions.

REQUEST A TECHNICAL QUOTATION & GA DRAWING

Contact our application engineering team for site-specific general arrangement (GA) drawings and quotations:

RAJKOT HEAD OFFICE & MANUFACTURING

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Contact our engineering team for project-specific technical requirements.