



Buyer's Guide

MECHANICAL TURNTABLE

1. OUR PRODUCTS

Our mechanical turntables are engineered for high precision, offering table edge accuracy up to 0.04", and built to handle heavy-duty applications with load capacities up to 150,000 lbs. We offer a wide range of mechanical turntables, all customizable to meet specific client requirements and adapt seamlessly to various environments and facility layouts.



MECHANICAL TURNTABLE

This mechanically driven indexing turntable rotates 360° in both directions with precise positioning via a motor encoder and external sensors, and offers customizable features for client-specific needs.



MECHANICAL TURNTABLE WITH SECONDARY LIFT

This model features turntable functionality with a compact slew drive and motor assembly for smooth rotation, along with an integrated lift assembly and a stable, wheel-free structural frame.



22FT MECHANICAL TURNTABLE WITH STABILITY WHEELS

This model provides turntable functionality with a compact slew drive and motor assembly for smooth, reliable operation. Support wheels along the inner platform enhance stability and distribute the load.



PIT MOUNTED MECHANICAL TURNTABLE

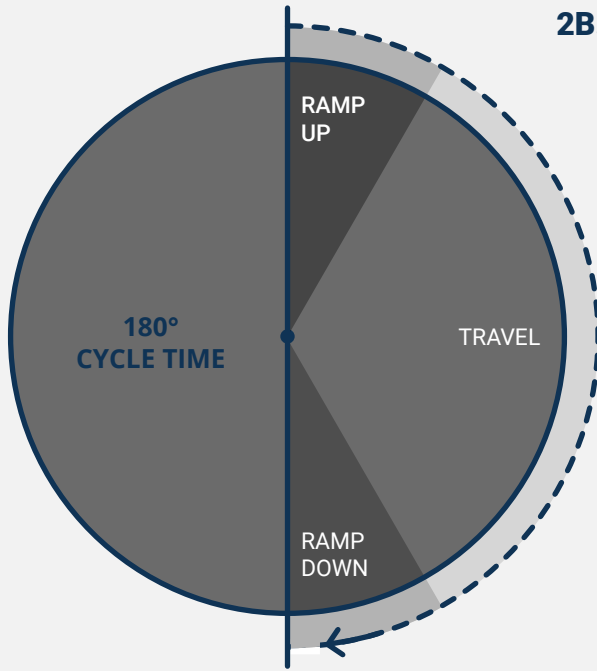
This type of mechanical turntable features a structural frame designed for in-ground or flush-to-floor installation. This configuration maximizes available floor space while enhancing operational accessibility and ergonomics for the end user.



HIGH PRECISION MECHANICAL TURNTABLE

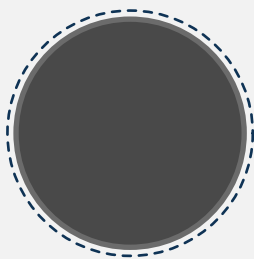
Heavy-duty steel rotary table for stable, repeatable rotation. Compact slew drive and motor assembly ensure precise positioning with accuracy, while support wheels add stability and distribute the load.

2B. TURNTABLE CYCLE TIME

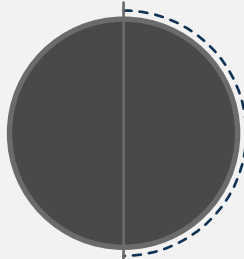


The time it takes for our turntables to complete a 360° rotation includes the drive's ramp-up and ramp-down, and the table coming to rest. Turntable cycle times can vary due to several factors, including table size, loading conditions, motor type, and more.

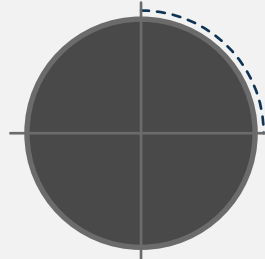
Our Mechanical Turntables have a Indexing or Rotation Time which is the time for the table to rotate from position to the end (90°, 180°, 360°). Mechanical systems need ramp-up and ramp-down to avoid shock loads. Additions of sensors, clamps, lifts, or other work operations can add index or rotation time



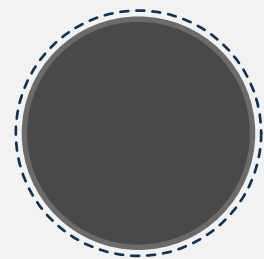
INFINITE
POSITIONS



180°
2 POSITIONS

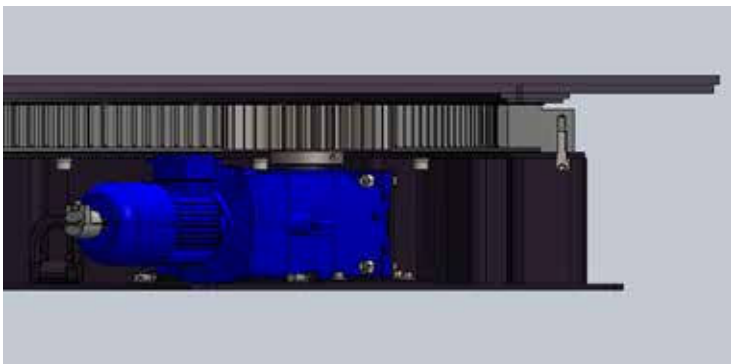


45° or 90°
4 - 8 POSITIONS



CUSTOM
POSITIONS

2B. TURNTABLE HEIGHT



Our mechanical turntable is significantly larger and heavier than the air-caster turntable because fixed height components, such as the internal gear system. It increases its overall size and weight

CONTACT SUPPORT

For spare parts, visit the Align Store or contact us at support@alignprod.com for support or any other inquiries.

support@alignprod.com

www.alignprod.store



3A. TURNTABLE RISER BASE

Our riser base comes in various shapes and sizes. Depending on your industrial demands, this adjustments can bring the table into a more ergonomic and efficient position, reducing operator strain and increasing the efficiency of robots and forklift.

While there is much excitement about the low-profile design, we also provide riser bases that allow a turntable to be set at any height. Our riser bases come in various shapes and sizes. The riser base can include integrated load guides, like the one shown in the picture.



3B. POPULAR TURNTABLE OPTIONS

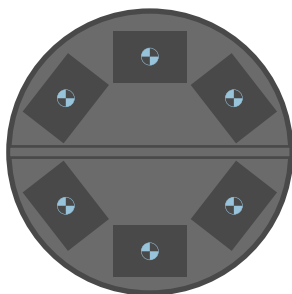


CORNER ANGLES



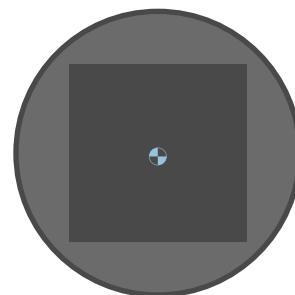
CONICAL LOCATORS

3C. LOAD PLACEMENT



BALANCED LOADING

Loading both sides of the turntable ensures even weight distribution, creating a more stable condition for our turntables.



CENTER LOADED

Placing the load in the center of the turntable ensures the most stable condition, with the weight evenly distributed in the center.

4A. MAINTENANCE

Regular maintenance of the mechanical turntable is important to keep it running safely and efficiently.
Use the checklist below to inspect key parts and make sure everything is working properly.

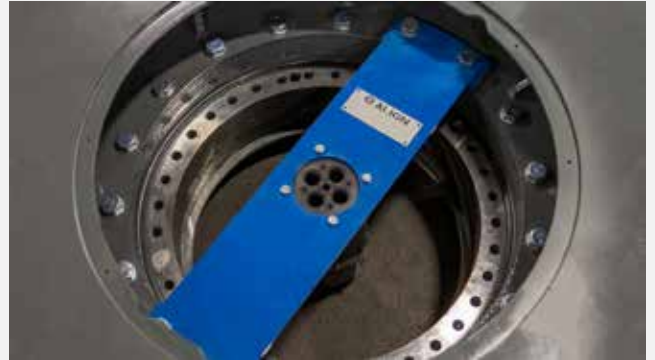
INSPECT THE FOLLOWING MONTHLY:

Inspect turntable structure for cracks

Inspect center pivot frame assembly structure for cracks

check bolts and concrete lags for tightness.
Tighten if loose.

Inspect oil level of gear motor, if applicable.



INSPECT THE FOLLOWING EVERY 6 MONTHS:

Grease Slew bearing

4B. SAFETY FEATURES



EMERGENCY STOP BUTTON

Each mechanical turntable has emergency stop buttons for quick shutdown during emergencies.



INDICATOR LIGHTS

Flashing lights turn on when the turntable is operating, alerting nearby personnel and helping prevent accidents.



AUDIBLE ALARM

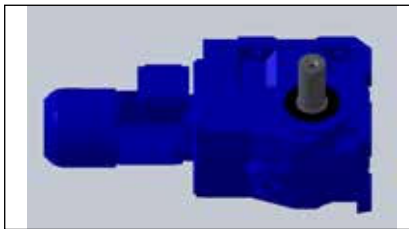
A loud horn activates when the turntable is in operation, providing an additional layer of audible warning.

4C. COMPONENTS



CONTROL STAND

The control stand serves as the primary operator interface for the turntable system. It houses the control component.



ELECTRIC & GEAR MOTOR

An electric motor converts electrical energy into mechanical energy, whereas a gear motor integrates an electric motor with a gearbox.



INTERNAL GEAR AND PINION

Drives the turntable rotation, ensuring precise angular positioning and efficient handling of heavy loads.



APPLICATION FORM
MECHANICAL TURNTABLE
www.alignprod.com



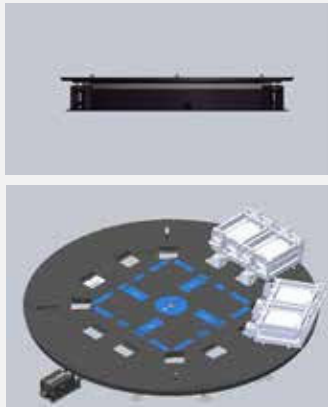
www.alignprod.com/request-a-quote/

THIS SHEET IS OPTIONAL, BUT OUR TEAM WILL ASK THESE AND OTHER QUESTIONS TO BETTER UNDERSTAND YOUR PROJECT.
PLEASE ANSWER TO THE BEST OF YOUR ABILITY, AS SOME RESPONSES MAY AFFECT OTHERS. OUR TEAM WILL HELP YOU WORK THROUGH IT.

PRIMARY CONTACT INFORMATION:

Name: _____
Company: _____
Address: _____
Phone: _____
Email: _____

PROJECT DESCRIPTION:



Project Description:

Refer to the rest of the document for guidance in answering the questions. This step is optional, and our team will assist you later on if needed.

Load Weight: _____ **# of Containers:** _____

Load Dimensions: _____ W x _____ L x _____ H

Centered: _____ **Off - Centered:** _____

Top Style: Round / Square

Rotation Speed: Low / Medium / High

Controls: Hand / Foot / Robotic Interface

Rotation Direction: CW / CCW / Bi-Directional

Robotic Application: Yes / No

Cycle Time: _____

Positions: Infinite / 180 (2) / Custom: _____

Riser Base : Yes / No **Riser Height:** _____

Corner Angle Locators: Yes / No **Other Locators:** _____ **Paint Spec:** _____

Customer Spec: _____ **Safety Features:** _____

Rotary Union / Slip Ring For Equipment on top?: _____ **Electrical Voltage:** _____