

**HIWIN<sup>®</sup>**

Linear Technology



## Positioning Systems

**Rotary tables**

# HIWIN rotary tables

## 1. Application examples

### 1.1 HIWIN rotary tables optimize transport sequences



#### Requirements

- Fast positioning during the transport of the workpieces between the linked plant parts on a vertical circular track = special requirements on acceleration and braking power due to short travelling distances
- Flexible solution that allows things to be changed or added, even during commissioning
- The tables can be stopped in any position for parts inspection.

#### Our implementation

- The swivel drive minimizes the cycle times = time and costs saved
- Centrifugal forces are minimized = components can be transported to the next station quickly and gently using the gripping arm
- Precision bearing and optical distance measuring system = highest repeatability
- Hollow shaft design = simply feed through cables or mechanical components
- Direct drive = no more gear play and mechanical gear components subject to wear

### 1.2 HIWIN rotary table in wafer handling



#### Requirements

- Lay-up station, in which the finished strings can be suctioned with special vacuum box after soldering, then swivelled, and alternatively deposited in string boxes or on glass plates
- The current seat of the Z axis of the cross beam driven by toothed belt and servo motor should be replaced because the solution takes up too much space and is too heavy
- In the case of the compact version, a high torque is required due to the long swivel arm and high intrinsic weight of the arm
- High speeds required due to short, necessary cycle times

#### Our implementation

- Design as rotary switching tables = high torque with compact shape = high throughput and space and cost savings
- Hollow shaft design = feed-through of pneumatic hoses and cables possible
- Direct drive = no more gear play and mechanical gear components subject to wear
- Adaptation to the existing control system

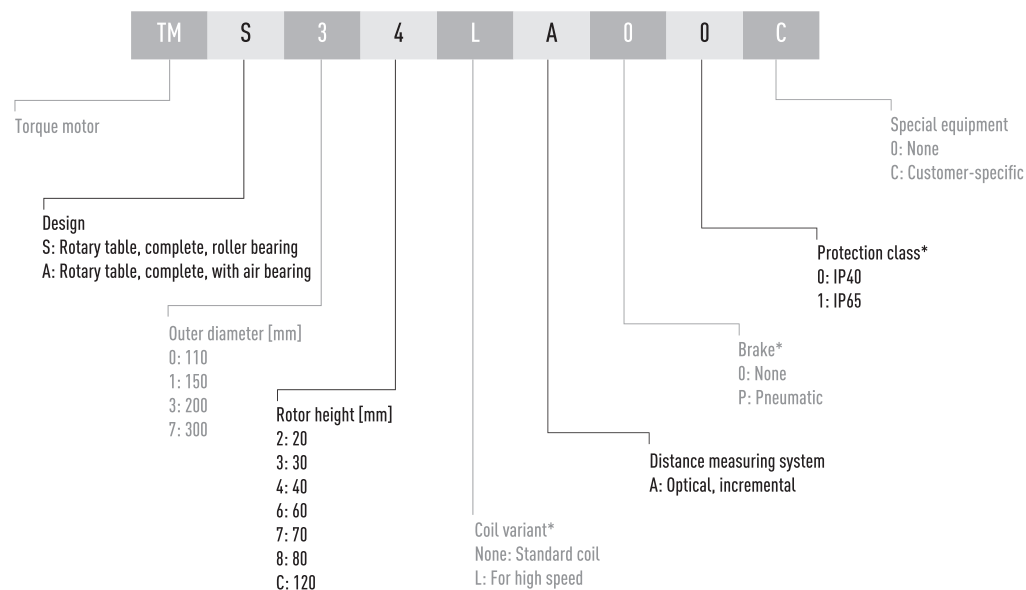
## 2. Properties of the HIWIN rotary tables

HIWIN rotary tables are directly driven rotary tables and thus do not need gearing. The extremely rigid connection between motor and load coupled with a high-quality servo drive control provides for excellent acceleration capability and a good uniformity of movement. HIWIN rotary tables are particularly suited for automation tasks due to the hollow shaft design. The feed-through of media, cable systems, or mechanical components is possible without a problem.

- Drive free from backlash
- High-torque
- Extremely dynamic
- Integrated encoder
- Freely selectable amplifier
- UL-certified (TMS3 and TMS7)
- Housing made of anodized aluminium
- Optional, type of protection IP65 (TMS3 and TMS7)
- Optional with pneumatic clamp (TMS3 and TMS7)
- Brushless drive



## 3. Order codes of the TMS and TMA HIWIN rotary tables



\* Options depend on the series; see technical data