

# TSUDAKOMA Original Next-Generation Drive mechanism

## 『BallDrive®』

The perfect drive system 'BallDrive®' realizes the highest accuracy level and no-backlash.

No-clamp machining at a light load with no-backlash, high speed and high rigidity.

Shorten cycle time to improve your productivity by zeroizing of clamp/unclamp time and more than double indexing speed ※

### **No backlash**

High accuracy machining without backlash

### **High rigidity**

Stable positioning using a powerful clamp

### **Maintenance free**

Extremely small aged deterioration  
Original precision is maintained

### **Cycle time reduction**

Twice as fast as the current model  
Clampless machining

### **Power saving**

High transfer efficiency with a ball rolling system

※In-house comparison

RBS

TBS

RWE/RWA  
RNRWA-B  
RNCV-B

RNCM

RWB

RWB-K  
RNCKRCH  
RNC

RCV

Multi-Spindle  
RWM

TWA/TN

TWB  
TTNC

THNC

Multi-Spindle  
TWM

RDS

RTV  
RTT

RCB

NC Controllers

Accessories

Options

Technical  
Information

# HIGH-LEVEL PERFORMANCE PROVEN IN MACHINING FIELDS

## BallDrive NC Rotary Tables

Basic model

**RBS-series**

**High-performance model with the  
drive system uniquely developed**



### No backlash

Ideally meshing rolling of steel balls with cam shaft achieves no backlash, 'play' at drive parts. It realizes the highest accuracy level for both indexing accuracy and repeatability.

### High Speed

It enables smaller speed reduction ratio comparing with other drive system and more than twice as fast as worm gear. ※

### High rigidity

High rigidity of BallDrive enables strong clamp and no-clamp machining at a light load.

## BallDrive NC Tilting Rotary Tables

Basic model

**TBS-series**

**High-end Next-Generation model  
pursuing productivity improvement**



### No backlash

Ideally meshing rolling of steel balls with cam shaft achieves no backlash, 'play' at drive parts. Machining accuracy and wear resistance is excellent in simultaneous 5-axis machining.

### High Speed

It enables smaller speed reduction ratio comparing with other drive system and more than twice as fast as worm gear at both rotary and tilt axis. ※

### High rigidity

High rigidity of BallDrive enables strong clamp and no-clamp machining at a light load. ※

※In-house comparison