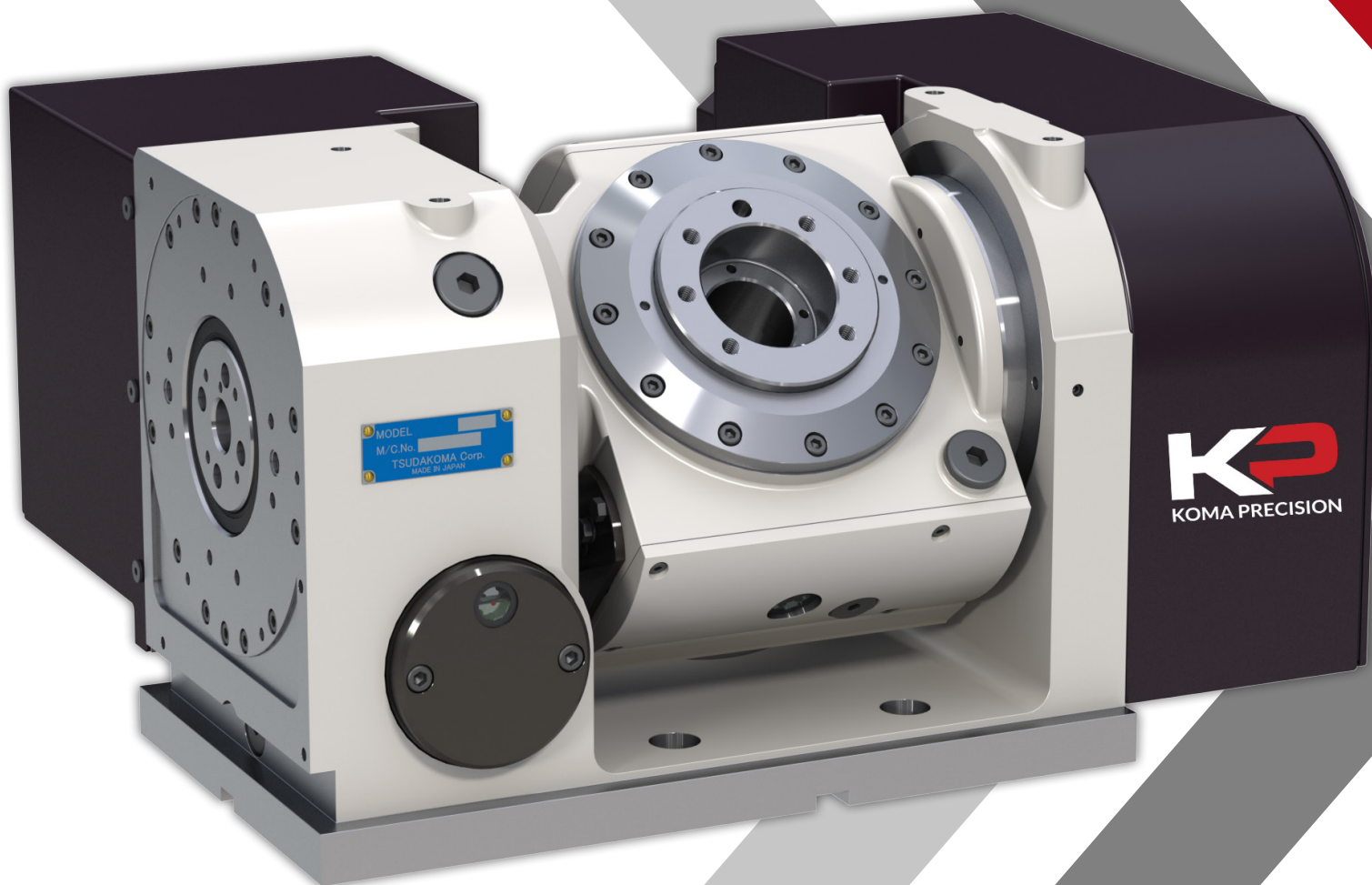




# TSUDAKOMA

## Rotary Table

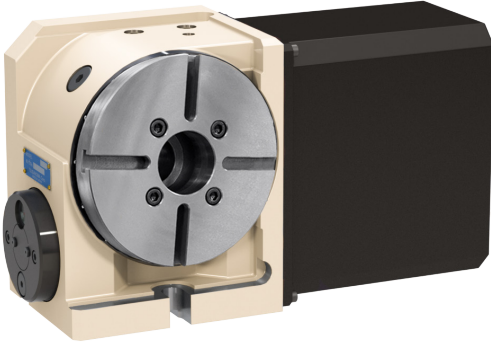
### Selection Guide

## KOMA PRECISION

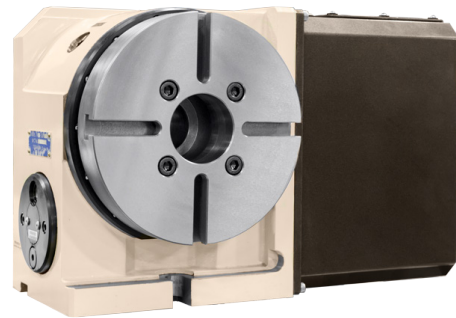
For over thirty-five years Koma Precision has been the foremost source for the finest the world has to offer in machine tool Productivity Innovation.

With over 30,000 rotary table installations, Koma is the largest distributor of Tsudakoma NC rotary tables and indexers in the world. With over 12,000 angle heads and live tools installed, Koma is the world's largest supplier for Alberti - the originator and the foremost innovator of productivity tooling.





RWE SERIES



RWA SERIES

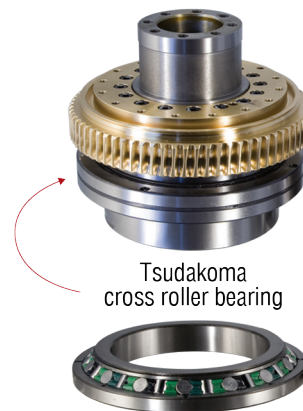
## TSUDAKOMA WORM DRIVE SYSTEM

Tsudakoma utilizes full tooth depth engagement along with a larger gear module. The results are a larger surface contact area yielding a substantially stronger worm gear system. The Tsudakoma worm wheel uses an oversize diameter pitch circle resulting in reduced pressure on the contact surface compared to a conventional gearing system. These properties, as well as ultra precision cross over roller bearings, all work to enhance system rigidity and longevity.



### TORQUE TRANSFER EFFICIENCY

The Tsudakoma dual lead gearing system features the largest tooth engagement of any rotary table manufacturer. This system generates up to 85% torque transfer efficiency. Tsudakoma's dual lead gearing system features exceptionally smooth cutting due to the inherent lubricating properties of the gear materials.



Tsudakoma  
cross roller bearing

### CROSS ROLLER BEARINGS

Ultra precision cross roller bearings support radial, axial, and moment loads providing four times the level of stiffness as angular contact bearings. Cross roller bearings are constructed with a sequence of cylindrical rollers arranged at right angles to each other within a sealed 90° V-groove. All Tsudakoma rotary tables and indexers use ultra precision cross roller bearings.

| Series    | Machine | Table Size (mm) | RWE-160R                 | RWE-200R                 | RWA-250R                 | RWA-320R                 |
|-----------|---------|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|
| AF Series | AF-610  | 700 x 450       | <input type="checkbox"/> | <input type="checkbox"/> |                          |                          |
|           | AF-650  | 750 x 510       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AF-860  | 1000 x 600      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AF-1000 | 1200 x 550      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AF-1060 | 1200 x 600      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AF-1250 | 1350 x 620      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AF-1460 | 1500 x 620      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AF-1400 | 1500 x 800      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AF-1600 | 1700 x 800      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| AV Series | AV-610  | 610 x 450       | <input type="checkbox"/> | <input type="checkbox"/> |                          |                          |
|           | AV-650  | 610 x 510       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          |
|           | AV-860  | 860 x 600       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AV-1000 | 1020 x 550      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AV-1060 | 1060 x 600      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AV-1250 | 1250 x 620      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | AV-1460 | 1400 x 620      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| BM Series | BM 850  | 1050 x 600      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          |
|           | BM 1020 | 1200 x 600      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | BM 1200 | 1300 x 600      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | BM 1460 | 1500 x 650      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | BM 1400 | 1500 x 800      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|           | BM 1600 | 1700 x 800      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



**AF Series**  
High Performance



**AV Series**  
High Efficiency

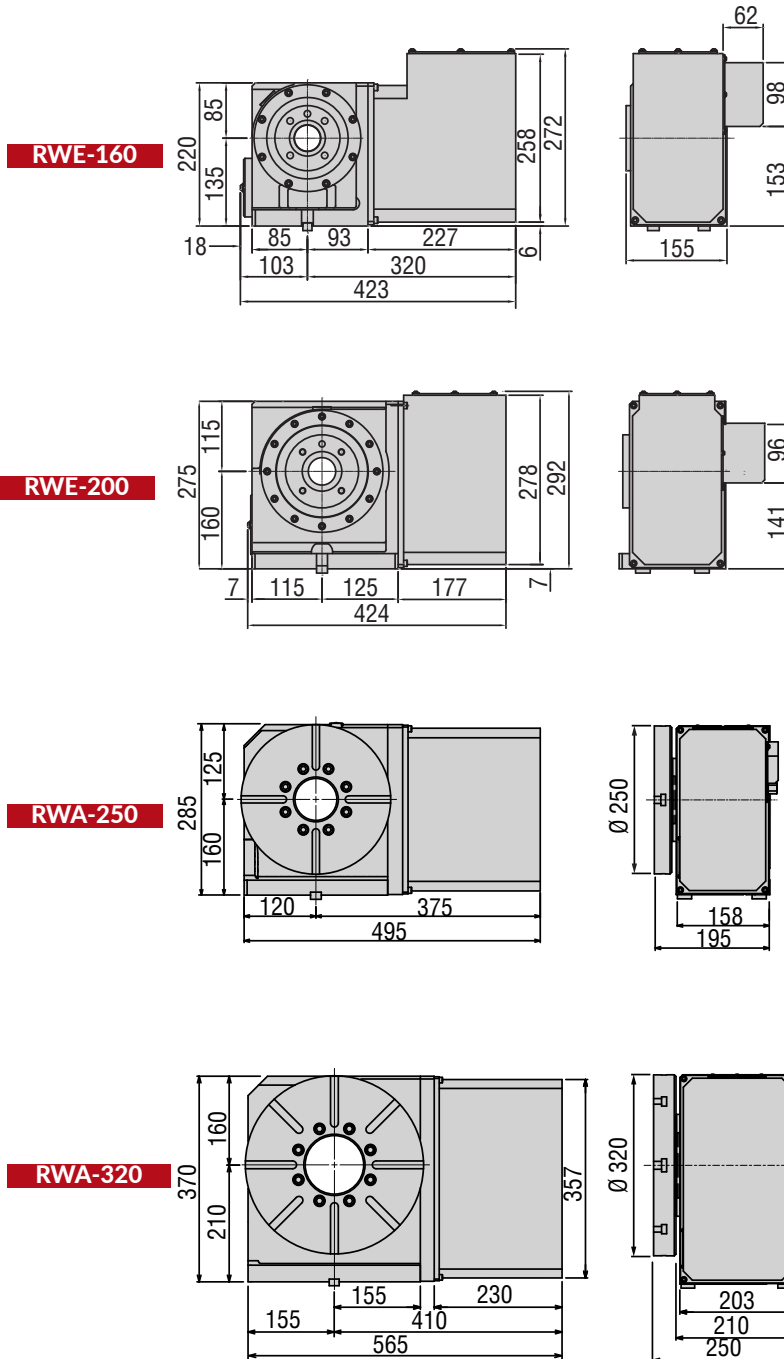


**BM Series**  
Maximum Performance



## RWE & RWA-Series ROTARY TABLES

(Drawings Not To Scale)



Please contact Koma Precision to confirm Ganesh / Tsudakoma Rotary Table working envelope.

## Specifications

| Table Model                            |                                                                                                   | RWE-160                  | RWE-200                  |
|----------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| Versions available                     |                                                                                                   | R, L                     | R, L                     |
| Spindle outer diameter                 |                                                                                                   | 100h7                    | 120h7                    |
| Table diameter (optional)              |                                                                                                   | (160, 200)               | (200, 250)               |
| Center height                          |                                                                                                   | 135                      | 160                      |
| Center bore                            | Nose Diameter                                                                                     | 55H7                     | 65H7                     |
|                                        | Thru Diameter                                                                                     | 40                       | 45                       |
| Table T-slot width (with faceplate)    |                                                                                                   | (12H8)                   | (12H8)                   |
| Guide block width                      |                                                                                                   | 14h7                     | 18h7                     |
| Servo motor*                           |                                                                                                   | Alpha 2i                 | Alpha 4i                 |
| Maximum motor speed                    | rpm                                                                                               | 5,000                    | 5,000                    |
| Speed reduction ratio                  |                                                                                                   | 1/72                     | 1/72                     |
| Maximum table speed                    | rpm                                                                                               | 69.4                     | 69.4                     |
| Inertia converted into motor shaft     | $\times 10^{-3} \text{kg}\cdot\text{m}^2$                                                         | .09                      | .17                      |
| Clamp system                           |                                                                                                   | Pneumatic Disc Clamp     | Pneumatic Disc Clamp     |
| Clamp torque @72psi                    | Nm (ft. lbs.)                                                                                     | 250 (180)                | 400 (295)                |
| Indexing accuracy                      | arc sec.                                                                                          | $\pm 12.5$               | $\pm 10$                 |
| Net Weight                             | kg (lbs.)                                                                                         | 40 (88)                  | 61(135)                  |
| Allowable wheel torque                 | Nm (ft. lbs.)                                                                                     | 206 (152)                | 288 (212)                |
| Allowable work inertia                 | $\text{kg}\cdot\text{m}^2$                                                                        | .64                      | 1.25                     |
| Allowable work weight [with tailstock] |  kg (lbs)      | 100 (220)<br>[200 (441)] | 125 (275)<br>[250 (551)] |
| Allowable load when table clamped      |  Nm (ft. lbs.) | 10,800<br>(7,960)        | 14,400<br>(10,613)       |
|                                        |  Nm (ft. lbs.) | 500<br>(369)             | 800<br>(590)             |
|                                        |  Nm (ft. lbs.) | 780<br>(575)             | 1,900<br>(1,400)         |

\*Other motors & rpm available • Dimensions = mm  
Specifications subject to change without notice

## Options & Accessories

Additional Accessories Available



T-Slotted Faceplates



3-Jaw Scroll Chucks



Manual Tailstock w/ MT2 Center



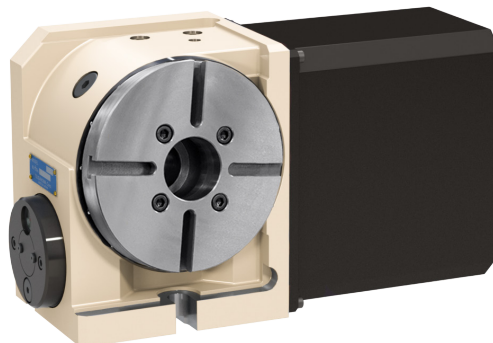
Support Spindle



Support Spindle w/ Pneumatic Clamp



Pneumatic 5C Collet Chuck



# RWA-SERIES SPECIFICATIONS



## Specifications

| Table Model                             |                                                                                                                              | RWA-250 (S)              | RWA-320 (S)              |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
| Versions available                      |                                                                                                                              | R, L                     | R, L                     |
| Spindle outer diameter                  |                                                                                                                              | 140h7                    | 180h7                    |
| Table diameter (optional)               |                                                                                                                              | 250                      | 320                      |
| Center height                           |                                                                                                                              | 160                      | 210                      |
| Center bore                             | Nose Diameter                                                                                                                | 80H7                     | 115H7                    |
|                                         | Thru Diameter                                                                                                                | 50                       | 85                       |
| Table T-slot width (with faceplate)     |                                                                                                                              | 12H8                     | 14H7                     |
| Guide block width                       |                                                                                                                              | 18h7                     | 18h7                     |
| Servo motor*                            |                                                                                                                              | Alpha 8i (8is)           | Alpha 8i (22is)          |
| Maximum motor speed                     | rpm                                                                                                                          | 4,000 (4,000)            | 4,000 (3,000)            |
| Speed reduction ratio                   |                                                                                                                              | 1/90 (1/45)              | 1/120 (1/45)             |
| Maximum table speed                     | rpm                                                                                                                          | 33.3 (88.9)              | 33.3 (66.6)              |
| Inertia converted into motor shaft      | $\times 10^{-3}\text{kg}\cdot\text{m}^2$                                                                                     | .41 (.44)                | .52 (1.66)               |
| Clamp system                            |                                                                                                                              | Pneumatic Dual Taper     |                          |
| Clamp torque @72psi                     | Nm (ft. lbs.)                                                                                                                | 1,000 (737)              | 1,500 (1,106)            |
| Indexing accuracy                       | arc sec.                                                                                                                     | $\pm 10$                 | $\pm 10$                 |
| Net Weight                              | kg (lbs.)                                                                                                                    | 80 (176)                 | 145 (319)                |
| Allowable wheel torque                  | Nm (ft. lbs.)                                                                                                                | 596 (439)                | 939 (692)                |
| Allowable work inertia                  | kg·m <sup>2</sup>                                                                                                            | 1.95                     | 4.48                     |
| Allowable work weight [with tail-stock] |  <b>kg (lbs)</b><br><b>[w/ tailstock]</b> | 125 (275)<br>[250 (550)] | 175 (385)<br>[375 (825)] |
|                                         |  <b>kg (lbs)</b>                          | 250 (550)                | 350 (770)                |
| Allowable load when table clamped       |  <b>N (lbf)</b>                           | 14,400 (3,226)           | 24,800 (5,555)           |
|                                         |  <b>Nm (ft. lbs.)</b>                     | 1,000 (737)              | 1,500 (1,106)            |
|                                         |  <b>Nm (ft. lbs.)</b>                     | 1,900 (1,400)            | 4,700 (3,464)            |

\*Other motors & rpm available • Dimensions = mm  
Specifications subject to change without notice

## Options & Accessories

Additional Accessories Available



Manual Tailstock w/ MT2 Center



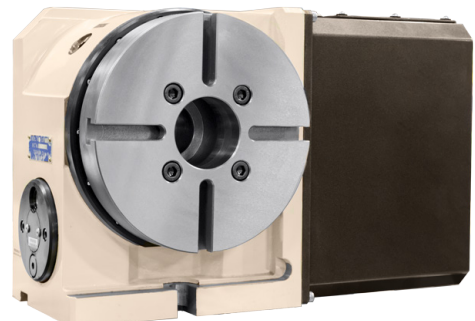
3-Jaw Scroll Chucks



Support Spindle w/ Pneumatic Clamp



Support Spindle





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