

TR Series

Headstock / Tailstock
Flexible Positioning System



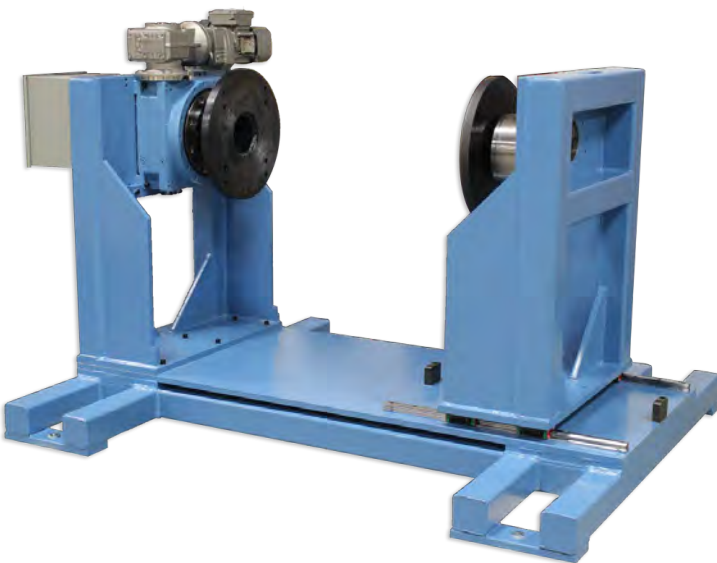


MOTION INDEX DRIVES

An alternative to the extremely high precision and zero backlash TMF and RT series trunnion indexing systems, the TR Series offers a lower cost alternative to applications that require such high standards. Offered in complete head and tail stock standard sets, you have the option to purchase a complete trunnion solution from Motion Index Drives that includes heavy duty constructed base frame, HS/TS riser bases, and fixture backbones.

The TR series is ideal for rollover applications in the aerospace, automotive, defense, construction and mining equipment, alternative energy and railroad transportation manufacturing environments. The TR Series was manufactured to be suited for laser, spot, mig and tig welding applications.

Incorporating the TR series into to your weld cells can be relatively easy by indicating what robot manufacturer you are implementing and the TR Trunnion can be adapted to accept virtually every robot brand.



TR Series

Motion Index Drives' TR series headstock / tailstock trunnion sets utilize a high precision (less than 1 arc minute) planetary gear system mounted in a vertical position complete with mounting plates. TR series Trunnion Index Drives are ideal for moving large masses with smaller units and minimizing your equipment's footprint on the floor. All TR series trunnion units can be ordered with standard or custom frames fully equipped with head and tailstock supports and one piece base weldments.

Technical benefits for end users

- Long service lives.
- Large thru hole on tailstock for running utilities to fixtures.
- Requires less power than leading competitors.
- Oversized bearings on tailstock for support.
- Directly mount to gear head system mounting plate which eliminates the need for additional pillow blocks.

Options Available

- Special hole patterns in mounting plates on headstock and tailstock.
- Clockwise, counter-clockwise and oscillating index modes of operation.
- Can be ordered as complete assembly with headstock, tailstock and base frame.
- Various gear ratios.
- Variety of encoder or positioning devices.

TRUNNIONS

Assembly Number	Headstock	Tailstock	Ratio	Fanuc Motor	Kuka Motor
TRxxx-xxx-xxxxx	250mm	250mm	171mm	Alpha IF08/3000	MG180
TRxxx-xxx-xxxxx	250mm	250mm	171mm	Alpha IS08/4000	MG110
TRxxx-xxx-xxxxx	300mm	300mm	185mm	Alpha IF12/3000	MG180
TRxxx-xxx-xxxxx	300mm	300mm	185mm	Alpha	MG180
TRxxx-xxx-xxxxx	365mm	365mm	192mm	Alpha IF22/3000	MG360
TRxxx-xxx-xxxxx	365mm	365mm	192mm	Alpha IF30/3000	MG180
TRxxx-xxx-xxxxx	900mm	900mm	250mm	Alpha IF30/3000	MG480

TRXXX-XXX-XXX-XXXX
<p>Table Class</p> <p>Headstock Class</p> <p>Tailstock Class</p> <p>Trunnion Ratio Motor</p>



MID HEADSTOCK/TAILSTOCK SPECIFICATIONS W/FANUC MOTOR

Class	Model #	Amplifier	180° Index Time (sec)	Payload (Kg)	Peak RPM	Accel/Decel (sec)	Max CG Off-Set (mm)	Max Envelope Diameter	Max Moment of Inertia (kgm)
250	TR250-171-a8iF	aiSV-40	3	110	17.54	1.3	101	2250	538
	TR250-171-a8iS	aiSV-80	2	1000	23.39	0.72	101	1500	237
300	TR300-185-a12iF	aiSV-80	3	1900	16.22	1.15	101	2700	1302
	TR300-185-a12iS	aiSV-80	2	1900	21.62	0.61	101	1800	620
365	TR365-192-a22iF	aiSV-80	3	2500	15.63	1.08	101	2400	1377
	TR365-192-a30iF	aiSV-160	3	5000	15.63	1.08	101	2500	2969
900	TR900-250-a30iF	aiSV-160	3.5	6700	11.98	1	101	3150	6132
	TR300-250-a30iS	aiSV-160	3	5500	15.98	1.12	101	2800	4043
	TR900-250-a30iF	aiSV-160	5	6700	11.98	2.5	101	3700	8321

MID HEADSTOCK/TAILSTOCK SPECIFICATIONS W/KUKA MOTOR

Class	Model #	Amplifier	180° Index Time (sec)	Payload (Kg)	Peak RPM	Accel/Decel (sec)	Max CG Off-Set (mm)	Max Envelope Diameter	Max Moment of Inertia (kgm)
250	TR250-171-MG180	KSD32	2	1000	23.39	0.72	101	1500	284
	TR250-171-MG110	KSD16	3	1100	17.54	1.3	101	2250	587
300	TR300-185-MG180	KSD48	2.25	1900	18.51	0.6	101	1800	620
	TR300-185-MG180	KSD32	3	1900	16.22	1.15	101	2700	1302
365	TR365-192-MG360	KSD64	3.25	5000	13.02	0.95	101	2500	2969
	TR365-192-MG180	KSD32	3	2500	15.63	1.08	101	2400	1377
900	TR900-250-MG360	KSD64	4	6700	9.99	1	101	3150	6132
	TR300-250-MG480	KSD64	5	6700	8.79	1.59	101	3700	8321





MOTION
INDEX DRIVES

1204 East Maple Troy MI 48083
P: 248-743-9999 F: 248-743-0749
info@mid.us.com
www.motionindexdrives.com