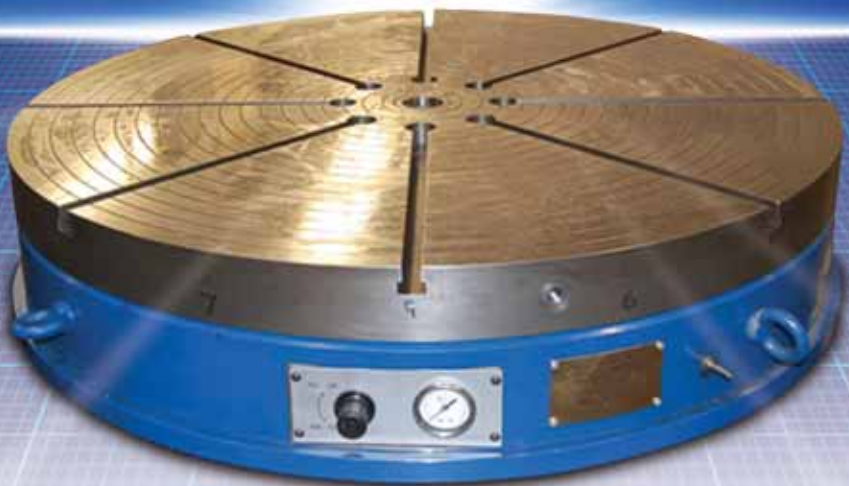
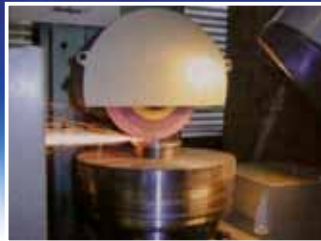


# Precision Rotary Tables



# MRT230 Motorised Rotary Table

## General Specification

The MRT230 has an alloy base casting for lightness and may be bolted to a machine bed via two bolt lugs on the table centreline.

The table is driven by the pancake segmented motor via a gearbox and a toothed belt.

The table bearings are ABEC7 Angular Contact.

Recommended loading is 30Kg centred / 20Kg at 100mm radius.

Spindle face plate is 230mm diameter with a central locating spigot 40mm diameter x 10mm high. These dimensions can be modified, if required, on ordering.

A magnetic chuck, 230mm diameter (see illustrated below) is normally supplied.

A variety of 3 jaw chucks and tee slotted face plates may be supplied on request.

The basic casting carries an on/off switch which is wired to the main control box.

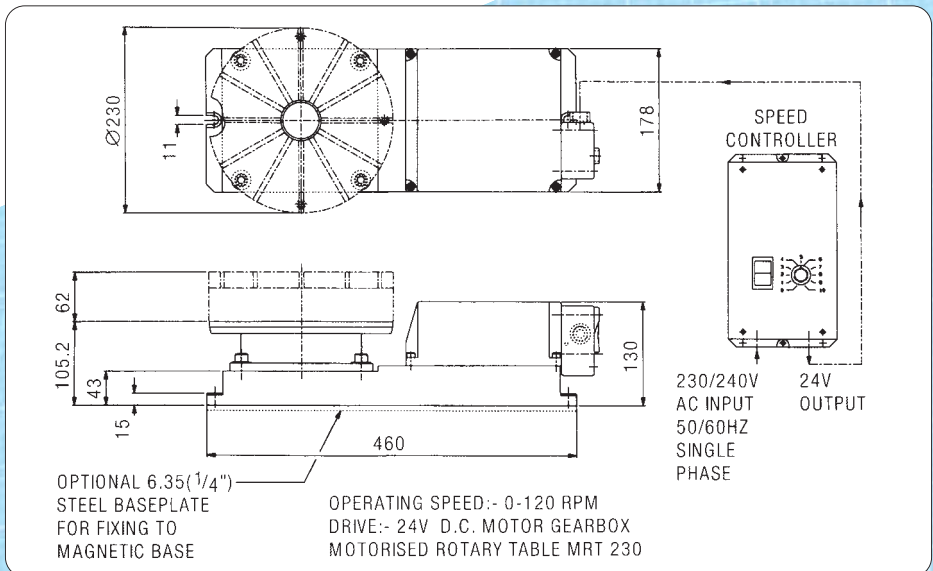
The main control box is at the end of a 2M armoured cable and carries a variable speed control and on/off switch.

The control box may be plugged into a machine supply (one phase) and thus controlled by the machine emergency stop circuit.

In the the unlikely event that a belt change is required, the interior can be accessed by the removal of the base plate.

All apertures are labyrinth or otherwise sealed against dirt and coolant ingress.

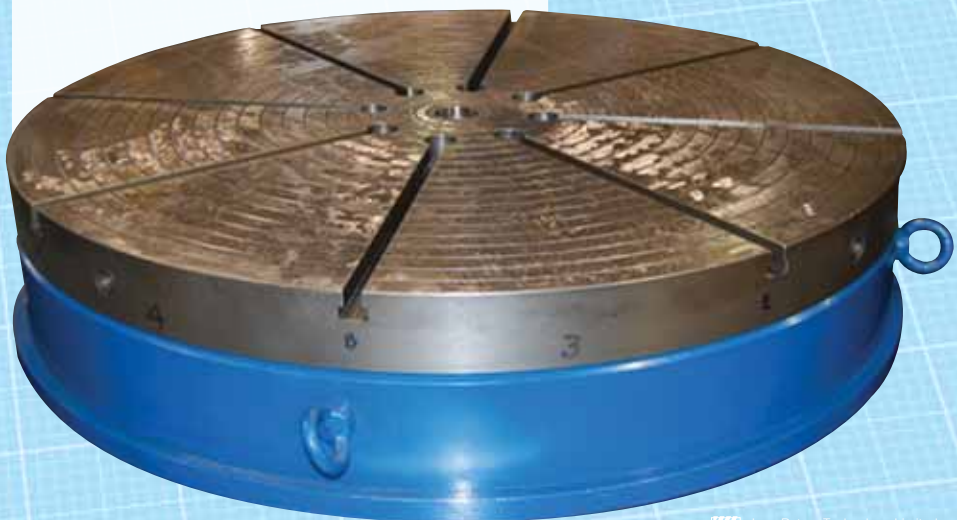
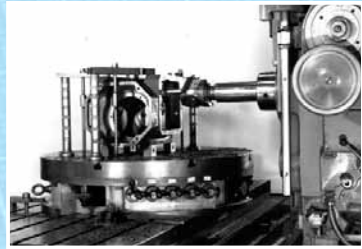
<b>Speed Range</b>	0 to 120 rpm infinitely variable
<b>Electrical</b>	230/240V AC input 50/60Hz Single Phase 24V DC Output
<b>Weight</b>	42Kg without magnetic chuck 57 Kg with magnetic chuck



# ABRT Series Air Bearing Rotary Table






## General Specification

- Air bearing rotary table, allows large sizes and heavy loads to be rotated with minimal effort.
- Heavyweight cast iron base for rigidity and stability.
  - Designed with recessed location points for clamping to existing machine T-slotted tables.
- All mating faces are ground then scraped to a fine tolerance for accurate measuring and positioning.
- Minimum size envelope, 1m diameter table just 230mm thick.
- All units are based on the same shell. With various options, hydraulic clamping, encoder readout and full CNC automation, allowing later retrofitting if required.
- Option direct drive driven motor with encoder for fine positional feedback and full PID control.
  - Dynamic brake via motor (measuring application).
  - Secondary hydraulic brake for high loading (machining application).
- CNC control supplied with Bosch industrial computer or intergrated into leading brand CNC control systems.



# ABRT Series Air Bearing Rotary Table

Technical Detail									
			Manual Operations			CNC Controlled			
Product Code	Table Diameter	Maximum RPM	Manual Indexing	Optional Encoder Resolution	Hydraulic Clamping Force	Motor Torque Peak	Resolution	Repeatability	Accuracy
ABRT500	500mm	80	5°	0.2 arc seconds	4000Nm <sup>+</sup>	127Nm	0.2 arc seconds	±0.2 arc seconds	±0.4 arc seconds
ABRT600	600mm	80	5° or 5°	0.2 arc seconds	4000Nm <sup>+</sup>	127Nm	0.2 arc seconds	±0.2 arc seconds	±0.4 arc seconds
ABRT700	700mm	60	1° or 5°	0.2 arc seconds	4000Nm <sup>+</sup>	306Nm	0.2 arc seconds	±0.2 arc seconds	±0.4 arc seconds
ABRT900	900mm	40	1° or 5°	0.2 arc seconds	6000Nm <sup>+</sup>	306Nm	0.2 arc seconds	±0.2 arc seconds	±0.4 arc seconds
ABRT1000	1000mm	40	1° or 5°	0.2 arc seconds	6000Nm <sup>+</sup>	306Nm	0.2 arc seconds	±0.2 arc seconds	±0.4 arc seconds
ABRT1250	1250mm	20	1° or 5°	0.2 arc seconds	8000Nm <sup>+</sup>	445Nm	0.2 arc seconds	±0.2 arc seconds	±0.4 arc seconds
ABRT1600	1600mm	10	1° or 5°	0.2 arc seconds	8000Nm <sup>+</sup>	445Nm	0.2 arc seconds	±0.2 arc seconds	±0.4 arc seconds
ABRT2000	2000mm	5	1° or 5°	0.2 arc seconds	8000Nm <sup>+</sup>	672Nm	0.2 arc seconds	±0.2 arc seconds	±0.4 arc seconds

Geometric Sizes and Tolerances								
Product Code	ABRT500	ABRT600	ABRT700	ABRT900	ABRT1000	ABRT1250	ABRT1600	ABRT2000
Diameter	500	600	700	900	1000	1250	1600	2000
Height	160	190	220	220	230	230	280	350
T-Slots	3	3	6	6	8	8	8	8
 Flatness	4µm	4µm	4µm	5µm	5µm	6µm	7µm	12µm
 Rotation	2.5µm	2.5µm	2.5µm	2.5µm	2.5µm	2.5µm	2.5µm	2.5µm
 Parallelism	4µm	4µm	6µm	6µm	8µm	8µm	10µm	15µm
 Truth of Axis	0.1µm	0.1µm	0.1µm	0.2µm	0.2µm	0.3µm	0.4µm	0.5µm
 Max Load	450Kg	570Kg	900Kg	1350Kg	1500Kg	2700Kg	5000Kg	10000Kg

Larger tables, higher loading and tighter tolerances can be accommodated on request.



Jena Rotary Technology Limited

Unit C2, Willow Drive, Sherwood Drive, Annesley, Nottingham NG15 0DP, United Kingdom.  
 Tel: +44 (0) 1623 726010 Fax: +44 (0) 1623 726018  
 Web: www.jena-tec.co.uk Email: sales@jena-tec.co.uk