

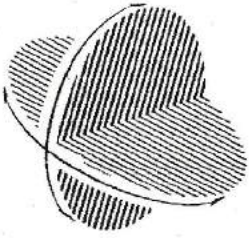
AIRMATIC ENGINEERING (UK) LTD

EIMELDINGEN (UK) LTD

The Maltings Industrial Estate
Brassmill Lane, Bath, BA1 3JL

Telephone: Bath (01225) 426206

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COMPANY PROFILE

Airmatic Engineering (UK) Ltd, was established in 1972 with a commitment to achieving a higher standard of excellence in the field where precision and accuracy are of paramount importance.

The Company soon established a high reputation in the design and manufacture of Precision Rotary Tables technology with a growing market, and a need to expand, Airmatic acquired the Rotary Table Division of the Horstmann Group in 1986 and 1988 the equally respected OMT name became part of Airmatic.

The coming together of these three experts in the field, Airmatic Engineering, offer an exceptional product range and service to all market sectors.

Airmatic Engineering is a member of Hallmark Industries, which acquired Maschinenfabrik Eimeldingen, Germany and Eimeldingen Corporation of USA and both Companies manufacture Machine Tool Type Rotary Tables and Pallet Changers.

Early in 1998 the company name was changed, from Airmatic Engineering (UK) Ltd to Eimeldingen (UK) Ltd, to unify the extensive product range offered throughout the world. We are able to offer sales and aftersales support for the following equipment:

**Airmatic / Horstmann / OMT / Eimeldingen
Rotary Tables, Instruments & Pallet Changers**

Manufacturers of OMT and HORSTMANN Rotary Table Products

Registered Office: 10/11 The Maltings, Brassmill Lane, Bath, BA1 3JL

Reg. No. 1043810

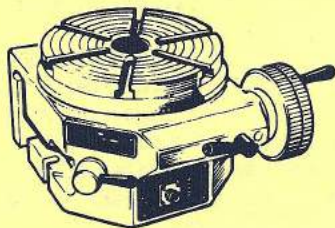
A wholly owned subsidiary of Hallmark Industries Ltd

VAT No. 704 0387 04

Airmatic Engineering (U.K.) Ltd.

High Precision Rotary and Inclinable Tables.

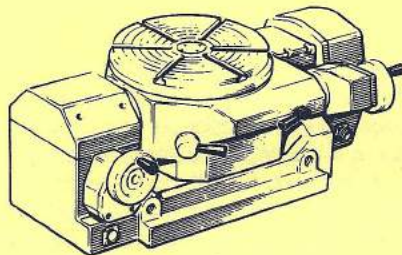
A family incorporating the Horstmann and OMT ranges specifically designed for the demanding applications of the machine shop, tool and standards room.



DUAL PURPOSE (DP SERIES)

A compact, economic design, allowing the rotary tables (200mm to 500mm diameter) to be used either horizontally or vertically. Specially hand-scraped pads on the base casting provide datum faces for either position, giving great versatility at moderate cost. Standard accuracy ± 3 arc seconds.

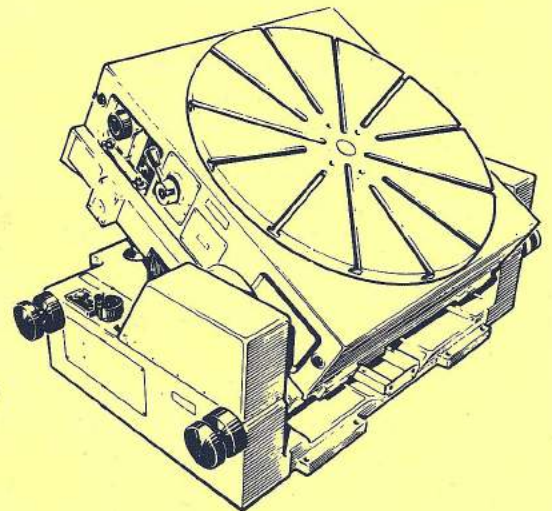
Type	Table diameter	Base dimensions	Overall Height	Weight
DP200DR	200	215 x 245	155	38kg
DP300DR	300	405 x 380	197	115kg
DP400DR	400	405 x 380	197	126kg
DP500DR	500	515 x 580	225	252kg



UNIVERSAL (RU SERIES)

A unique 200mm diameter table combining rotary and inclining actions with digital readout displays on each axis. Designed to meet all tool room requirements, the Universal offers flexibility and high accuracy in a remarkably compact design.

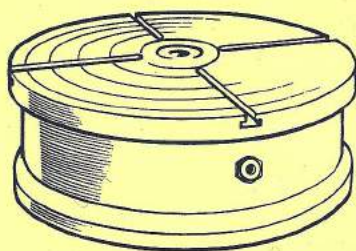
Type	Table diameter	Base dimensions	Table height at zero	Weight
RU200DR	200	394 x 220	210	110kg



INCLINABLE (IB SERIES)

The inclinable base is made in three sizes to accept a full range of tables, from 300mm to 1200mm diameter. Inclinable bases can be used independently or with a rotary table, and are fitted with a digital readout system to give an overall accuracy on incline of ± 5 arc seconds.

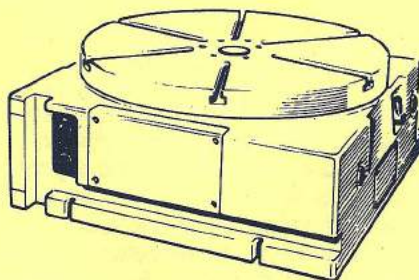
Type	To complement table types		Base dimensions	Overall weight
IB300DR	DP300DR	DP400DR	720 x 477	210kg
IB500DR	DP500DR	R700DR	920 x 600	340kg
IB1000DR	R1000DR	R1200DR	1450 x 1096	1337kg



SPIN-AIR BEARING (AB SERIES)

Ultra precision is the feature of this range of rotary tables, the truth of axis of rotation at table level being within $0.05\mu\text{m}$ T.I.R. The rotary table top is supported on an air bearing designed to give high radial and axial stiffness, together with minimal drag, vibration and noise. For very high load carrying capacities, similar tables can be provided having oil lubricated hydrostatic bearings.

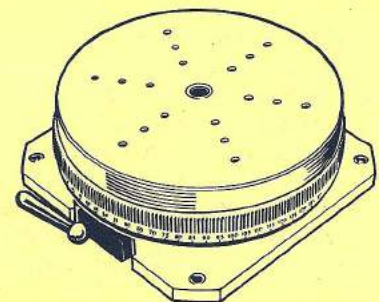
Type	Table diameter	Base diameter	Overall height	Max. load kg
AB200	200	225	116	130
AB250	250	225	116	130
AB300	300	340	145	320
AB400	400	340	145	320
AB500	500	420	165	450
AB600	600	420	165	450



PRECISION ROTARY (R SERIES)

This series of rotary tables is considered to be the ideal table for high accuracy application such as machine tool, inspection and advanced co-ordinate measuring machines. The bearing arrangement ensures a low profile with rigidity and stability. Rotary tables, from 700mm to 2000 diameter, are standard with accuracies from ± 3 to ± 1 arc second.

Type	Table diameter	Base dimensions	Overall Height	Weight
R700DR	700	515 x 580	255	340kg
R1000DR	1000	1060 x 1020	320	945kg
R1200DR	1200	1060 x 1020	325	1080kg
R1500DR	1500	1060 x 1020	375	1536kg
R1600DR	1600	1520 x 1520	456.5	3520kg
R1800DR	1800	1520 x 1520	456.5	3975kg
R2000DR	2000	1520 x 1520	470	4695kg



INDEXER-MANUAL (X SERIES)

Extreme accuracy and repeatability are featured in these manually operated rotary indexing tables, which find their main applications in tool-rooms and standard rooms, or on small co-ordinate measuring machines. Various index positions are available and the angular position can be read against a scale on the periphery of the table. Digital read-out can also be fitted optionally.

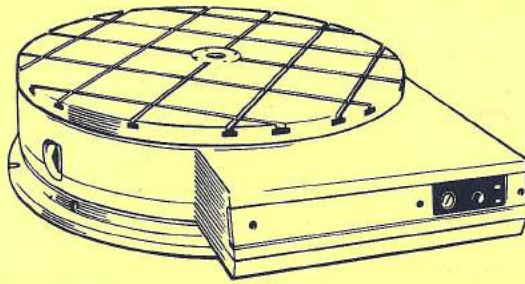
Type	Table diameter	Base dimensions	Overall height	Max. load kg
X150	150	160 x 160	70	75
X200	200	205 x 205	70	100



SPIN-ROLLING BEARING (W SERIES)

Specifically designed for use on marking out machines and robust work transfer applications, these precision rotary tables can carry large, off-centre loads. This results from the use of a large diameter rolling element bearing. The top has a number of centring grooves, and a scale of 0-360° which is read against a vernier scale to give readings in the order of ±1 min. In addition, a 4 position (90°) indexing mechanism is fitted with manual clamping.

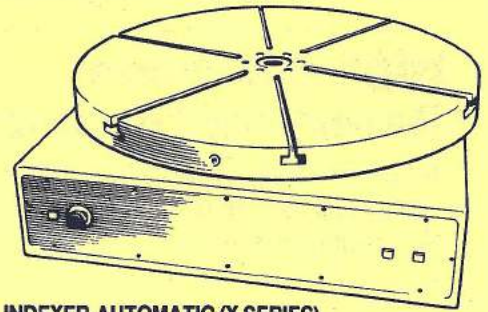
Type	Table diameter	Base diameter	Overall height	Max. load kg
W300	300	300	90	1000
W400	400	400	90	1300
W600	600	600	100	2000
W800	800	800	140	2500
W1000	1000	1000	195	3000
W1200	1200	1200	215	3500



ROTARY-AIR THRUST (V SERIES)

Widely used in the aerospace industry for high accuracy inspection including use on co-ordinate measuring machines and are offered with motor drive and controls to match the host machines. Accuracy is maintained by the use of air bearings to minimise wear on the bearing surfaces. Spin and power-driven versions are available, with choice of stepper or DC motors. Other options include customised tops, D.R.O. and a fully programmable CNC system.

Type	Table diameter	Base dimensions	Overall height	Max. load kg
P500V	500	825 x 650	260	450
P685V	685	843 x 685	260	450
P1000V	1000	1255 x 1060	253	900
P1200V	1200	1325 x 1200	253	900



INDEXER-AUTOMATIC (X SERIES)

A range of precision indexing tables for use on advanced machine tools, FMS and co-ordinate measuring machines. Angular location is by engagement of high precision face-toothed rings (Hirth coupling) which ensures extremely accurate repeatability. For rotation, the table top is raised pneumatically and when in position the top is clamped. Rotary drive is derived from either a pneumatic or an electric motor. A wide choice of index positions is available.

Type	Table diameter	Base dimensions	Overall height	Max. load kg
X400/400	400	615 x 560	225	800
X600/400	600	615 x 560	225	800
X600/600	600	750 x 600	250	1500
X800/600	800	750 x 600	250	1500
X800/800	800	940 x 800	290	3000
X1000/800	1000	940 x 800	290	3000
X1000/1000	1000	1020 x 960	310	3000
X1200/1000	1200	1020 x 960	310	3000

DIGITAL READOUT

A standard range of encoded and digital display units is available, with flexible cable connection allowing the display units to be conveniently positioned. Features include resolutions up to 1 arc second/0.0005 degree, push button zeroing and absolute reference datum location; also RS232C outputs for external interfacing.

DRIVE AND CONTROL SYSTEMS

A choice of several drive and control systems is available. Inclining bases fitted with tables over 1000mm diameter incorporate power drives for rough setting as standard. Similar facilities can be fitted to other tables as optional extras. A closed loop control system designed specifically to match the fine resolution and high accuracy of Airmatic Engineering products is available providing a fully

programmable CNC system. Enhancements via this system can be provided to give an overall accuracy of better than ±1 arc second.

SERVICE AND SPARES SUPPORT

As experts in the field, Airmatic Engineering (U.K.) Ltd. guarantee high quality and this is ensured by the standard 12 month warranty and calibration certificate issued with each table, and an excellent contract service scheme. Other facilities include: Complete technical support from the factory – Comprehensive operator handbooks – Product training on site or at the factory – Reconditioning and up-dating service – Full spares support – Continual research and development – Technical sales specialist advice.

TABLE ENHANCEMENTS

To enable the user to obtain the maximum benefits from the table the following enhancements are available.

Accuracies of ±2 secs and ±1 sec

Tailstock

Air Bearing (Special Applications)

Motor drives

Automatic clamping

CNC operation

Coolant disposal tray

0.0001 degree or 0.36 arc sec resolution

Print-out facility

3 & 4 jaw and permanent magnetic chucks

Centres

Surface plates

Range of clamping accessories

Customised table tops and 'T' slots

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Represented by