

# ABT Series

## Air/Ball Bearing Spin Tables

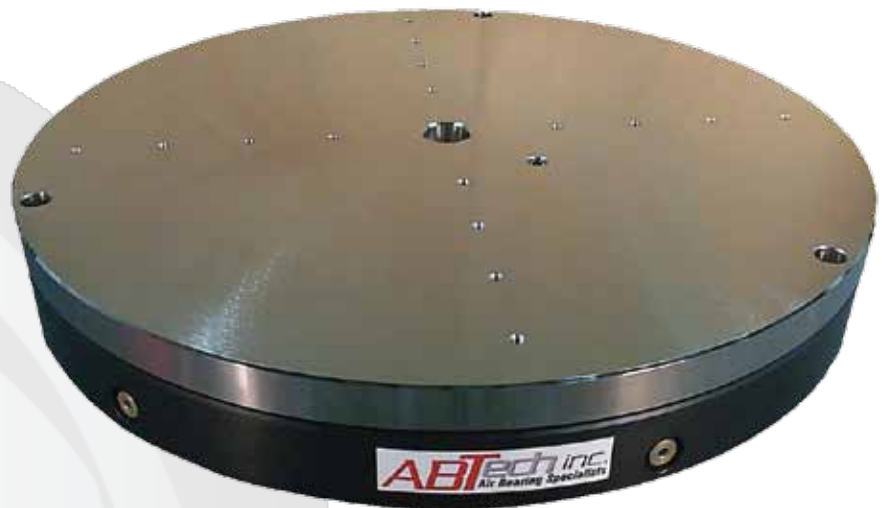
### Low Profile Precision Rotary Motion

ABTech inc. offers a full range of low profile ABT series air/ball bearing rotary tables combining pre-loaded angular contact bearings in the radial axis and ultra-precision air bearing surfaces for axial lift. Clear apertures through the bearing provide cable or hose access to the worktable surface or chose a stationary threaded center to attach a gage post for ID measurements.

These rotary combination air/ball tables provide an accurate reference axis for production floor work piece inspection. Ideal for staging large diameter parts for T.I.R. inspection and build up such as jet engine turbine and compressor components.

Standard worktable sizes are available from 14" to 30" diameters and large load capacities up to 4500 pounds. Mount on granite surface plates and welded steel base frames, and add ABTech robust gage stands to make a turnkey production floor platform.

With ABTech's modular design approach and complete engineering services we can respond quickly to provide a solution to your unique application or O.E.M. requirements.



Phone: 1-603-358-6431  
Fax: 1-603-358-0196  
info@abtechmfg.com  
[www.abtechmfg.com](http://www.abtechmfg.com)

ABTech, Inc.  
P.O. Box 10296  
126 Monadnock Highway  
Swansey, NH 03446

#### Features:

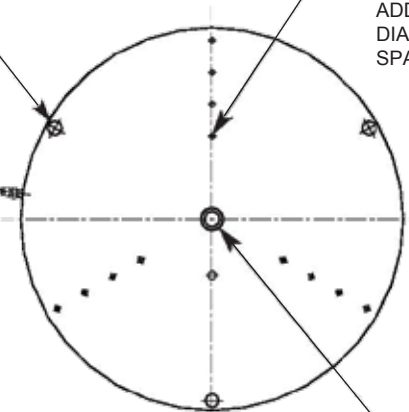
- Compact low profile design
- Near frictionless precision rotary motion
- Air bearing axial thrust and ball bearing radial axis
- High load capacities (up to 4500 lbs)
- Operate on low air pressure
- Clear through holes through worktable and bearing
- Optional fixed threaded centers
- Table sizes from 14" up to 30" diameter
- Custom tooling and fixturing design and manufacturing available
- Made in USA

# ABT Series

## Air/Ball Bearing Combination Tables

BASE MOUNTING ACCESS HOLES IN WORKTABLE

AIR SUPPLY

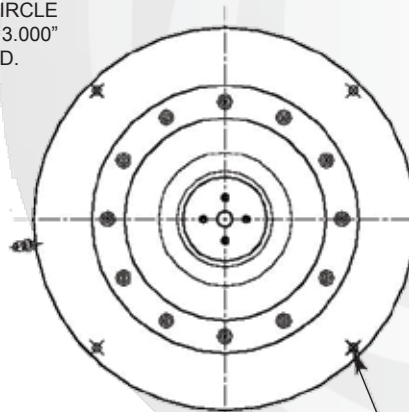


**WORKTABLE VIEW**

Ø.750" THRU. HOLE

5/16-18UNC-2B TAP X .625" DP.  
(3) HOLES EQ. SP. 120° APART

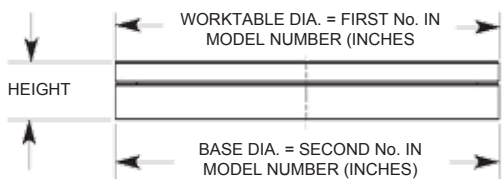
FIRST BOLT CIRCLE = Ø7.750"  
ADDITIONAL BOLT CIRCLE  
DIAMETERS ARE AT 3.000"  
SPACING OUT TO O.D.



**BOTTOM VIEW**

BASE MOUNTING HOLES FOR 3/8" S.H.C.S.  
(4) PLC'S EQ. SP. 90° APART

BOLT CIRCLE DIA. = BASE DIA. MINUS 1.000" TYP.



### Options & Accessories:

- Fixed threaded center for optional gage post
- Motor drives & controls
- Dual element air filter/regulator units
- Granite surface plates & supports
- Gage stands
- Custom tooling

### Accuracy:

<b>Radial</b>	40µ"(1µm) (1.00" above table)
<b>Axial</b>	40µ"(1µm) (at table center)
<b>Angular</b>	4µ"/Inch or better

Model Number:	ABT 350/350	ABT 350/450	ABT 450/450	ABT 450/600	ABT 600/600	ABT 600/750	ABT 750/750
<b>Worktable Dia.</b>	14" (355.6mm)	18" (457.2mm)	18" (457.2mm)	24" (609.6mm)	24" (609.6mm)	30" (762.0mm)	30" (762.0mm)
<b>Worktable Circular Flatness</b>	0.0003" (7.62µm)	0.0003" (7.62µm)	0.0003" (7.62µm)	0.0004" (10.16µm)	0.0004" (10.16µm)	0.0006" (15.24µm)	0.0006" (15.24µm)
<b>Worktable Radial Flatness</b>	0.001" (25.4µm)	0.001" (25.4µm)	0.001" (25.4µm)	0.001" (25.4µm)	0.001" (25.4µm)	0.0015" (38.1µm)	0.0015" (38.1µm)
<b>Base Dia.</b>	14" (355.6mm)	14" (355.6mm)	18" (457.2mm)	18" (457.2mm)	24" (609.6mm)	24" (609.6mm)	30" (762.0mm)
<b>Bearing Height</b>	2.75" (69.85mm)	2.75" (69.85mm)	2.75" (69.85mm)	3" (76.2mm)	3" (76.2mm)	3.25" (82.55mm)	3.25" (82.55mm)
<b>Load Capacity</b>	800 lbs (362.9 kg)	750 lbs (340.2 kg)	1400 lbs (635.0 kg)	1200 Lbs (544.3 kg)	2500 lbs (1134 Kg)	2500 lbs (1134 Kg)	4500 lbs (2041.2 kg)

Load capacities above are centered and balanced loads and are specified at 60psi air supply  
Table operating pressure range is from 30psi to 70psi  
Specifications are subject to change without notification