

# TEST CERTIFICATE: QD12-35-G

Customer:		SO Number:	SO
Order No:		Table Type:	
Customer Ref:		Serial No:	
Date:		Inspector:	

Notation	<b>CONING OF TABLE AXIS</b>		
Method	<p>The Rotary Table on test is placed on a rigid and flat support surface with the rotary axis in the vertical position and a precision sphere / hemi-sphere is placed and centred on the rotary axis. A high-resolution linear indicator is placed on the support surface close to the rotary table so that axial deviation measured at the equator of the sphere can be recorded over a minimum of ten full revolutions of the table (RRa).</p> <p>The process is then repeated with the precision sphere/hemi-sphere placed and centred on the spacer at a known height (h) with the radial deviations measured at the equator of the sphere recorded over a minimum of ten full revolutions of the table (RRb).</p> <p>Measurement data is collected and runout's calculated using AccuScan™ XE200M-RT.</p>		
Illustration of Test			
References	Taylor Hobson Hemi-sphere AccuScan™ XE200M-RT		
Measuring Equipment	One precision glass hemi-sphere PL No: Mobile AccuScan™ XE200M-RT PL No:		
Measured Results	RRa (mm)	mm	$\text{Coning of axis} = 3600 \times \sin^{-1} \left( \frac{RRb-RRa}{2} / h \right)$
	RRb (mm)	mm	
	Displacement h (mm)	mm	
	Coning of axis C (Arc Second)	+/- Arc second	
Notes			

## ROTARY PRECISION INSTRUMENTS UK LTD

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

RPI Rotary Axis  
Inspection Report

Type   
 Part No.   
 Serial No.   
 Insp By

S/O No.   
 Date

Document QD12-69-B

All dimension are in millimetres

Data Table

RRa 1	RRa 2	RRa 3	RRa 4	RRa 5
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
RRb 1	RRb 2	RRb 3	RRb 4	RRb 5
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Axial 1	Axial 2	Axial 3	Axial 4	Axial 5
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Sphere Height Ha	<input type="text"/>	mm	Hemisphere s/n	<input type="text"/>
Sphere Height Hb	<input type="text"/>	mm	Measuring Probe s/n	<input type="text"/>
Table Top Rotation	<input type="text"/>	mm	Accuscan System s/n	<input type="text"/>
Runout of Table Centre Bore	<input type="text"/>	mm	Accuscan Filter	<input type="text" value="50"/> UPR

Results Table

RRa Mean	<input type="text" value="0.000000"/>	mm	Rotation	<input type="text" value="0.00000"/>	mm
RRb Mean	<input type="text" value="0.000000"/>	mm	Runout of Centre Bore	<input type="text" value="0.00000"/>	mm
Radial Runout at table surface	<input type="text" value="#DIV/0!"/>	mm			
Axial Runout	<input type="text" value="0.000000"/>	mm			
Height Difference ( Hb - Ha )	<input type="text" value="0.0"/>	mm			
Axis Coning	+/- <input type="text" value="#DIV/0!"/>	arc seconds			
Axis Runout per metre	<input type="text" value="#DIV/0!"/>	mm			
Axis Runout at 1m high	<input type="text" value="#DIV/0!"/>	mm			