

Typical System Application

The Slip Table caters to horizontal vibration testing even during production line type application. It is ideally suited for a sequential 3-axis test. There are four kinds of slip tables in guidance method of using Mechanical linear bearings (MT), T guide (GT, instead of conventional V guide), hydrostatic journal bearings (BTJ) and hydrostatic T shape bearings (BTT).

Most of the slip tables are configured with Centering Back System (CBS) to cause the table to return to the natural center during vibration.

Features

Integrated and Combo Design

The slip table is integrated to the shaker by "combo" base designs. This feature results in permanent and easy repeating alignment, long term reliability & durability, performance, structural integrity and simple operation.

Convenient Operating

A unique trunnion and guidance bearing assembly provides simple shaker rotation capability and body vibration isolation. The electrodynamic shaker can be rotated to the vertical position for one axis and then to the horizontal position where it is connected to a horizontal slip plate for the other two axes testing.

Mechanical linear bearings Guide Slip Tables - MT Series

Smaller slip tables, up to 400mmX400mm, use mechanical linear bearings instead of oil film to make the system more compact and easy to maintain.



MT Slip Table



T-Guide Oil Film Table - GT



Hydrostatic Bearings Slip Table - BTJ

T-Guide Oil Film Slip Tables - GT Series

T-Guide Oil-Film Slip Tables are designed with precision granite and are combined with a magnesium or high-grade aluminium slip plate to provide the most cost-effective way to perform general horizontal testing. The slip plate is guided by T-Shape Oil-Film guides by one or two more located front and back base to provide high restraint during high moment operations. The conventional V-shape can be replaced by this T-Shape guide directly.

Hydrostatic Journal Bearings Oil Film Slip Tables - BTJ Series

Hydrostatic Journal Bearing Slip Tables are designed for high over-turning moment and cross axial restraint. The design combines magnesium or high grade aluminium slip plate, precision flat granite and hydrostatic journal bearings applied by 17.5 Mpa high pressure oil to provide a very high dynamic moment restraint while preserving the damping characteristics of the oil film. This system allows testing of heavy products with high centers of gravity by reacting moments through the hydrostatic bearings. Multiple bearings can be configured to restrain huge over turning moments.

Hydrostatic T Shape Bearings Oil Film Slip Tables - BTT Series

This slip table applies medium oil pressure of 10 Mpa to T shape hydrostatic bearings. Normally, the T shape bearings are arranged in matrix to anchor and hold the slip plate in matrix points to prevent the deformation in bending. Customized distribution of the T shape bearings can fasten the circle type fixture for standing cylinder object horizontal testing more robustly. This supplying will be discussed case by case.

MT & T-GUIDE OIL FILM SLIP TABLE SPECIFICATIONS

Thickness (mm)	Useable Frequency (hz)	Armature Diameter												
Effective Moving Mass (Nominal) (kg) (Aluminium/Magnesium)		120/150		230/235		335/340		440/445/450		550		650/670		
MT200	25	2000	--	--	--	--	--	--	--	--	--	--	--	
	10 / 8													
MT300	30	2000	--	--	--	--	--	--	--	--	--	--	--	
	16 / 12													
MT400	30	2000	30	2000	--	--	--	--	--	--	--	--	--	
	25 / 18		28 / 21											
GT500	40	2000	40	2000	40	2000	--	--	--	--	--	--	--	
	39 / 26		42 / 29		47 / 34									
GT600	40	2000	40	2000	40	2000	40	2000	--	--	--	--	--	
	54 / 36		57 / 39		62 / 44		67 / 49							
GT700	40	2000	40	2000	40	2000	40	2000	--	--	--	--	--	
	71 / 47		74 / 50		79 / 55		84 / 60							
GT800	--	45	2000	45	2000	45	2000	45	2000	45	2000	45	2000	
		105 / 70		110 / 75		115 / 80		125 / 90		140 / 105				
GT900	--	45	2000	45	2000	45	2000	45	2000	45	2000	45	2000	
		130 / 86		135 / 91		140 / 96		150 / 106		165 / 121				
GT1000	--	45	2000	45	2000	45	2000	45	2000	45	2000	45	2000	
		158 / 104		163 / 109		168 / 114		178 / 124		193 / 139				
GT1100	--	--	45	2000	45	2000	45	2000	45	2000	45	2000	45	2000
			194 / 129		199 / 134		209 / 144		224 / 159					
GT1200	--	--	45	2000	45	2000	45	2000	45	2000	45	2000	45	2000
			227 / 151		232 / 156		242 / 166		257 / 181					
GT1300	--	--	50	2000	50	2000	50	2000	50	2000	50	2000	50	2000
			291 / 192		296 / 197		306 / 207		321 / 222					
GT1400	--	--	50	2000	50	2000	50	2000	50	2000	50	2000	50	2000
			335 / 220		340 / 225		350 / 235		365 / 250					
GT1500	--	--	50	2000	50	2000	50	2000	50	2000	50	2000	50	2000
			381 / 250		386 / 255		396 / 265		411 / 280					

SYSTEM ENVIRONMENTAL REQUIREMENTS

Operating Room Temperature	5 to 40 degrees Celcius
Humidity	0 to 90% non-condensing

NOTE

1. Effective Moving Mass (nominal) includes Slip Plate, Mechanical linear bearings or T-Guide moving element and Drive Bar.
2. GT1000 means the working area of the table is 1000mmX1000mm.
3. There is only one (1) T Guide when the slip table size is equal to or less than 600mmX600mm. MT is exception.
4. There are two (2) T Guides when the slip table size is equal to or bigger than 700mmX700mm.
5. MT200 ~ GT500: 50mmX50mm grid pattern of the inserts. GT600 ~ GT1500: 100mmX100mm grid pattern of the inserts. Armature foot print inserts are configured on the slip table and they are prior to grid pattern if there is any interference between the two kinds of inserts.



HYDROSTATIC JOURNAL OR T SHAPE BEARING SLIP TABLE SPECIFICATIONS

Thickness (mm)	Useable Frequency (hz)	Armature Diameter									
		335/340		440/445/450		550		650/670		820	
Effective Moving Mass (Nominal) (kg) (Aluminium/Magnesium)											
BTJ600 BTT600	40	2000	40	2000		--	--	--	--	--	--
	62 / 44		67 / 49								
BTJ700 BTT700	45	2000	45	2000		--	--	--	--	--	--
	88 / 60		93 / 65								
BTJ800 BTT800	45	2000	45	2000	45	2000	45	2000	45	2000	45
	110 / 75		115 / 80		125 / 90		140 / 105		180 / 145		
BTJ900 BTT900	45	2000	45	2000	45	2000	45	2000	45	2000	45
	135 / 91		140 / 96		150 / 106		165 / 121		205 / 161		
BTJ1000 BTT1000	45	2000	45	2000	45	2000	45	2000	45	2000	45
	163 / 109		168 / 114		178 / 124		193 / 139		233 / 179		
BTJ1100 BTT1100	45	2000	45	2000	45	2000	45	2000	45	2000	45
	194 / 129		199 / 134		209 / 144		224 / 159		264 / 199		
BTJ1200 BTT1200	45	2000	45	2000	45	2000	45	2000	45	2000	45
	227 / 151		232 / 156		242 / 166		257 / 181		297 / 221		
BTJ1300 BTT1300	50	2000	50	2000	50	2000	50	2000	50	2000	50
	291 / 192		296 / 197		306 / 207		321 / 222		361 / 262		
BTJ1400 BTT1400	50	1600	50	1600	50	1600	50	1600	50	1600	50
	335 / 220		340 / 225		350 / 235		365 / 250		405 / 290		
BTJ1500 BTT1500	50	1200	50	1200	50	1200	50	1200	50	1200	50
	381 / 250		386 / 255		396 / 265		411 / 280		451 / 320		
BTJ1600 BTT1600	50	1000	50	1000	50	1000	50	1000	50	1000	50
	430 / 282		435 / 287		445 / 297		460 / 312		500 / 352		
BTJ1700 BTT1700	50	1000	50	1000	50	1000	50	1000	50	1000	50
	483 / 316		488 / 321		498 / 331		513 / 346		553 / 386		
BTJ1800 BTT1800	50	1000	50	1000	50	1000	50	1000	50	1000	50
	539 / 352		544 / 357		554 / 367		569 / 382		609 / 422		
BTJ1900 BTT1900	50	1000	50	1000	50	1000	50	1000	50	1000	50
	597 / 390		602 / 395		612 / 405		627 / 420		667 / 460		
BTJ2000 BTT2000	50	1000	50	1000	50	1000	50	1000	50	1000	50
	659 / 430		664 / 435		674 / 445		689 / 460		729 / 500		

SYSTEM ENVIRONMENTAL REQUIREMENTS

Operating Room Temperature	5 to 40 degrees Celcius
Humidity	0 to 85% non-condensing

NOTE

1. Effective Moving Mass (nominal) includes Slip Plate and Drive Bar.
Bearing Moving Mass is NOT included. The bearing quantity depends on the required overturning moments, then the moving mass of bearings will be added into the total moving mass.
2. BTJ800 or BTT800 means the working area of the table is 800×800mm.
3. Every Journal bearing's effective mass, including damping, is 5 kg. Every T shape bearing's effective mass, including damping, is 5.5 kg.
4. 600x600 ~ 1500x1500 table: 100×100 mm grid pattern of the inserts. Bigger table above: 200×200 mm grid pattern of the inserts.
Armature foot print inserts are configured on the slip table and they are prior to grid pattern if there is any interference between the two kinds of inserts.

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