

Slip Table Series

Typical Applications

Electro-dynamic vibration shaker can be equipped with the slip table to achieve three-dimensional vibration test. The overall load capacity can be improved thanks to the smaller carrier (table) weight of the slip table, to be able to support the load with a larger size and greater weight. The slip table can be divided into the integrated type and split type based on connection way, and into the GT, BT and TBT series based on guiding way respectively, with LT series available for V-shaped guiding way, with BT series for hydrostatic guideway guiding way and with TBT series for medium-pressure rail guiding way.

The vibration system equipping with the slip table can carry out the X, Y and Z-direction vibration tests for parts or entire machine respectively, also matching with the temperature and humidity test chamber to form an integrated environmental testing system.

Area and thickness of sliding plate determine the quality of the active system, and also affect the upper limit of frequency of the table. The following listed table indicators are available for our company's standard products, with special customization allowed. Available standard: JB / T 6869-93.

Integrated Design

Integrated type refers to that the slip table and vibration shaker are designed into a whole and share one base, featuring with good stiffness and easy installation and commissioning. The integrated table has been obtained national patent, no base requirement.



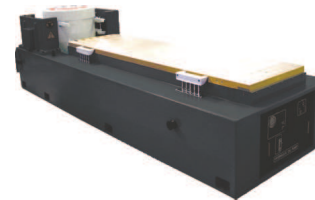
Integrated slip table



Hydrostatic bearing



Medium-pressure bearing



Slender slip table



Dual slip table



Rotary slip table



Rotary slip table

BT Series - Hydrostatic Bearing Guide

The hydrostatic bearing slip table consists of the horizontal table, hydrostatic guideway, connectors, granite slab, slip table base, and independent hydrostatic oil source. Hydrostatic guideway can provide the higher resistance to overturning moment, suitable for testing large-load specimen. The more number of the hydrostatic guideways is, the resistance to overturning moment is greater.

TBT Series - Medium-pressure Bearing Guide

Medium-pressure rail slip table consists of horizontal table, medium-pressure rail, connectors, slip table base and independent medium-pressure oil source. Medium-pressure rail has the excellent dynamic performance and each bearing has its own set of feedback system, featuring with excellent parallel operation performance and simple assembly process, easy to meet the high performance requirements (optional for 800X800 slip table and above).

Easy to Operate

Unique trunnion and guide bearing can make the horizontal and vertical switching easily implemented, for the vibration shaker with above medium thrust, the electric power steering unit is adopted to make the switching easier.

Slip Table Series

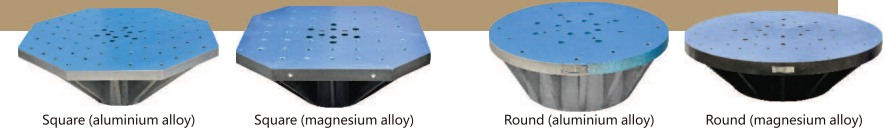
Hydrostatic Bearing Slip Table

Thickness (mm)	Frequency (Hz)	ES-30-370 ES-40-370	ES-40-445 ES-50-445 ES-60-445	ES-100-550	ES-160-590 ES-180-590	ES-200-650	ES-350-870
BT800 (800 X 800)	50	2000	50	2000	50	2000	—
	107/75		112/80		136/100		163/127
BT900 (900 X 900)	50	2000	50	2000	50	2000	—
	132/91		137/96		162/117		189/144
BT1000 (1000 X 1000)	50	2000	50	2000	50	2000	—
	159/109		164/114		190/136		217/163
BT1100 (1100 X 1100)	50	2000	50	2000	50	2000	—
	188/129		193/134		221/157		248/184
BT1200 (1200 X 1200)	50	2000	50	2000	50	2000	—
	221/151		226/156		255/179		282/206
BT1300 (1300 X 1300)	50	2000	50	2000	50	2000	—
	256/174		261/179		291/204		318/231
BT1400 (1400 X 1400)	50	1600	50	1600	50	1600	—
	294/199		299/204		331/230		358/257
BT1500 (1500 X 1500)	50	1200	50	1200	50	1200	50
	334/226		339/231		372/258		399/285
BT2000 (2000 X 2000)	—	—	—	—	60	1000	60
	—		—		773/525		800/552
Work environment	Temperature range 5~35°C, humidity range ≤90% (non condensing)						
Note	① Effective mass includes slip plate, drive bar, swing pole. ② Above effective mass exclude armature and bearing (the effective mass of one BT hydrostatic bearing is 5kg)						

Medium-pressure Bearing Slip Table

Thickness (mm)	Frequency (Hz)	ES-30-370 ES-40-370	ES-40-445 ES-50-445 ES-60-445	ES-100-550	ES-160-590 ES-180-590	ES-200-650	ES-350-870
TBT800 (800 X 800)	50	2000	50	2000	50	2000	—
	107/75		112/80		136/100		163/127
TBT900 (900 X 900)	50	2000	50	2000	50	2000	—
	132/91		137/96		162/117		189/144
TBT1000 (1000 X 1000)	50	2000	50	2000	50	2000	—
	159/109		164/114		190/136		217/163
TBT1100 (1100 X 1100)	50	2000	50	2000	50	2000	—
	188/129		193/134		221/157		248/184
TBT1200 (1200 X 1200)	50	2000	50	2000	50	2000	—
	221/151		226/156		255/179		282/206
TBT1300 (1300 X 1300)	50	2000	50	2000	50	2000	—
	256/174		261/179		291/204		318/231
TBT1400 (1400 X 1400)	50	1600	50	1600	50	1600	—
	294/199		299/204		331/230		358/257
TBT1500 (1500 X 1500)	50	1200	50	1200	50	1200	50
	334/226		339/231		372/258		399/285
TBT2000 (2000 X 2000)	—	—	—	—	60	1000	60
	—		—		773/525		800/552
Work environment	Temperature range 5~35°C, humidity range ≤90% (non condensing)						
Note	① Effective mass includes slip plate, drive bar, swing pole. ② Above effective mass exclude armature and bearing (the effective mass of one TBT medium pressure bearing is 5.5kg)						

Head Expander Series



Square (aluminium alloy) Square (magnesium alloy) Round (aluminium alloy) Round (magnesium alloy)

Many types of standardized head expanders can be supplied and special customization is allowed, to meet the expansion needs of the vibration shaker. In actual vibration test, specimen or fixture is often larger than the electro-dynamic shaker armature table, so the original table shall be extended, with a common method to install an auxiliary table. The more stringent requirement is needed for extending table on the working frequency, table weight, table acceleration, amplitude uniformity and lateral movement. HE series head expander has passed the finite element modal analysis, to ensure the product quality from the structure, materials and manufacturing process etc. aspects.

Technical Characteristics

- All head expanders of Dongling company have passed the finite element analysis, with optimization treatment done for structure.
- High-quality manufacturing process ensures the stable performance and good technical indicators.
- Standard series head expanders are supplied to choose, with shape (round or square) or material (aluminum or magnesium) optional.

Square head expander specification									
Model	Table diameter	-150	-200	-230	-320	-370	-445/480	-550	-590
				-240					
HE300S	7	8	10	—	—	—	Effective mass (kg)		
	2000	2000	2000	Upper limit frequency (Hz)					
HE400S	12	13	21	—	—	—	—	—	—
	2000	2000	2000						
HE500S	20	23	32	32	33	—	—	—	—
	2000	2000	2000	2000	2000				
HE600S	29	37	38	40	40	53	—	—	—
	1200	1300	1300	2000	2000	2000			
HE700S	—	—	43	60	80	80	—	—	—
			1000	2000	2000	2000			
HE800S	—	—	60	70	80	85	125	135	—
			1000	1200	1300	1300	1800	1800	1800
HE900S	—	—	80	95	95	100	120	120	—
			700	800	1000	1000	1000	1000	1000
HE1000S	—	—	73	100	110	185	200	210	—
			400	600	800	1000	1000	1200	1200
HE1100S	—	—	—	—	—	230	245	160	—
					500	700	700	700	—
HE1200S	Effective mass (kg)		—	—	—	250	265	280	—
	Upper limit frequency (Hz)				400	500	500	500	—
HE1500S	—	—	—	—	—	350	400	420	—
					400	400	400	400	—
HE2000S	—	—	—	—	—	900	1000	1000	—
					300	300	300	300	—