

SLIP TABLES PRODUCT GUIDE

- **GT Slip Tables**
- **BT Slip Tables**
- **Uni-base Slip Tables**
- **Standalone Slip Tables**



ETS Slip Table

- ◇ Light weight magnesium slip plate
- ◇ Economical aluminium slip table available
- ◇ Low profile reaction mass with total system isolation (Less than 5 Hz)
- ◇ Stiffened and welded steel body design with high mass to force ratios
- ◇ Designed for combined environment applications
- ◇ Standalone slip table available to interface to any shaker (existing or new)



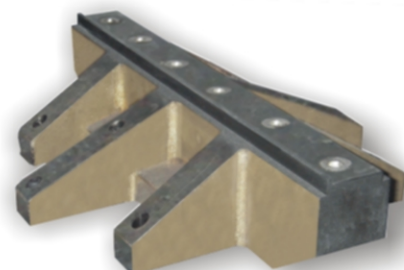
ETS Solutions slip tables are designed to provide the optimum test platform for horizontal testing with any shaker combination. Our unibase concept provides a structural steel body to align the shaker and table on a rigid platform. All the slip tables are designed with precise grinded natural granite slab with a selection of guidance bearings to meet different applications and budgets. The stiffened and welded body provides good reaction mass and damping. The isolation system reduces vibration transmission to the floor and prevents any interference between lab equipments.

Rotation of shaker body to couple the slip tables can be performed quickly and easily by one person using the rotation System. Slip plate alignment with shaker is always ensured with mechanical stops installed. Slip plates can be provided in almost any size from 300 mm square (for small shakers) to 2 m square for large sized specimen test. Different types of restraining bearings are available to meet different application requirements and operating budgets.

Driver Bars

ETS driver bars provide perfect link between shaker and slip table.

- ◇ Magnesium driver bars
- ◇ FEM design
- ◇ Casting single pieces
- ◇ Precision coupling
- ◇ Excellent force transmission



Ordering Information

A A X X X B

Material
M- Magnesium
Al- Aluminium

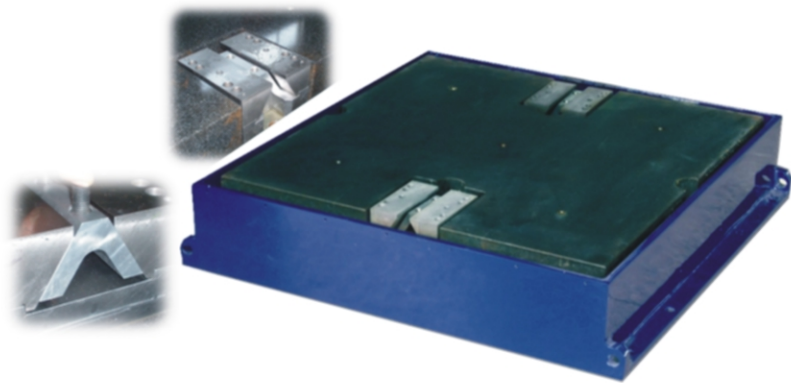
Working Area Dimension
Unit:mm

GT- V-Groove Guide Oil Film
BT- Hydrostatic Bearing

GT Series

GT Series, guided oil film tables are designed with less expensive guided V-Groove bearings, combined with magnesium slip plate. Oil is supplied through the granite slab port holes and is dispersed throughout the underside of the slip plate. The oil film provides a low friction slip surface and a damping medium for restraint of pitch, roll and yaw moments.

- ◇ Magnesium slip plate
- ◇ Low pressure hydraulic pump
- ◇ Self contained oil Reservoir with oil filter
- ◇ Yaw restraint by V-Groove guide bearings combining with the armature guidance system
- ◇ Less expensive technique to perform horizontal testing

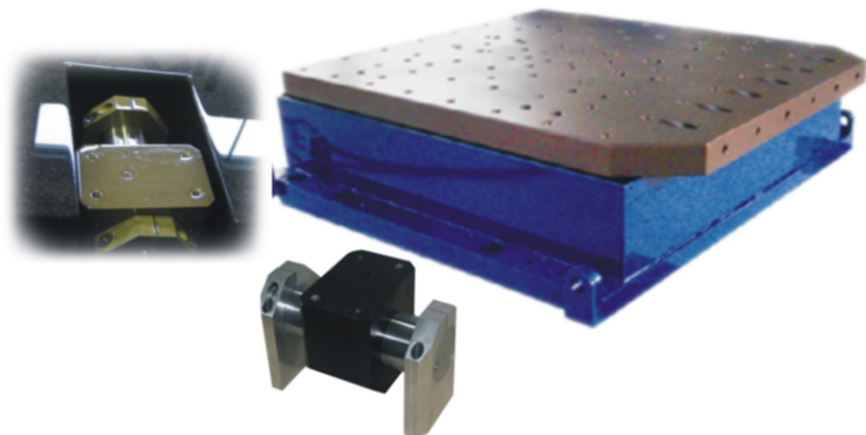


BT Series

The BT Series design provides a high over-turning moment and cross-axial restraint. This concept combines a standard slip table assembly with high pressure 3000 PSI hydrostatic bearings to provide high dynamic moment restraint while preserving the damping characteristics of guide oil film.

This system allows testing of heavy products with high center of gravity by reacting moments through the hydrostatic bearings.

- ◇ Heavy products testing with high centers with restraint moments by hydrostatic bearings
- ◇ High pressure 3000 PSI Hydraulic Power Supply
- ◇ Hydrostatic Journal Bearings to restrain high pitch, roll and yaw moments
- ◇ Pressure Interlocks
- ◇ Reservoir Oil Filter



GT Series Specifications

Sliptable Model	Model	Shaker Sine Force	Working Area	Thickness	Usable Frequency	Slipplate Mass	Max. Payload	Driver bar Weight	Bearing Qty.	Mass per Bearing	Pitch		Roll		Yaw	
											(mm*mm)	(mm)	(Hz)	(Kg)	(Kg)	(Nm)
GT300M	L215M	200	300*300	25	2000	5	300	1.4	1	0.58	1036	9175	1036	9175	203	1800
	L215M	200	300*300	25	2000	5	300	1.4	1	0.58	1036	9175	1036	9175	203	1800
	L315M	300	400*400	25	2000	9	300	2.8	1	0.58	1295	11469	1295	11469	203	1800
GT400M	L323A	300	400*400	25	2000	9	300	2.2	1	0.58	1295	11469	1295	11469	203	1800
	L620M	600	500*500	25	2000	14	400	1.4	1	0.58	2529	22400	2529	22400	203	1800
	L315M	300	500*500	25	2000	14	400	2.2	1	0.58	2529	22400	2529	22400	203	1800
GT500M	L620M	600	500*500	38	2000	21	400	4.6	1	0.58	2529	22400	2529	22400	203	1800
	M124M	1000	500*500	38	2000	21	400	4.6	1	0.58	2529	22400	2529	22400	203	1800
	M232A	1500/2000	600*600	25	2000	19	550	2.2	1	0.58	4370	38707	4370	38707	203	1800
GT600M	L323A	300	600*600	25	2000	19	550	2.2	1	0.58	4370	38707	4370	38707	203	1800
	M124M	1000	600*600	38	2000	30	550	4.6	1	0.58	4370	38707	4370	38707	203	1800
	M337A	3000	600*600	38	2000	30	550	5.8	1	0.58	4370	38707	4370	38707	203	1800
GT700M	M437A	4000	600*600	50	2000	39	550	8.0	1	0.58	4370	38707	4370	38707	203	1800
	M232A	1500/2000	700*700	38	2000	40	800	4.6	2	0.58	8536	75600	8536	75600	203	1800
	M337A	3000	700*700	50	2000	53	800	5.8	2	0.58	8536	75600	8536	75600	203	1800
GT800M	M437A	4000	700*700	50	2000	53	800	8.0	2	0.58	8536	75600	8536	75600	203	1800
	M124M	1000	800*800	50	2000	69	900	4.6	2	0.58	11642	103118	11642	103118	203	1800
	M232A	1500/2000	800*800	50	2000	69	900	5.8	2	0.58	11642	103118	11642	103118	203	1800
GT900M	M337A	3000	900*900	50	2000	87	1100	8.0	2	0.58	14749	130637	14749	130637	203	1800
	M437A	4000	900*900	50	2000	87	1100	19.7	2	0.58	14749	130637	14749	130637	203	1800
	M544A	5000	900*900	50	2000	87	1100	19.7	2	0.58	14749	130637	14749	130637	203	1800
GT1000M	M748A	6000/7000	1000*1000	50	2000	100	1200	8.0	2	0.58	20232	179200	20232	179200	203	1800
	M437A	4000	1000*1000	50	2000	100	1200	19.7	2	0.58	20232	179200	20232	179200	203	1800
	M544A	5000	1000*1000	50	2000	100	1200	19.7	2	0.58	20232	179200	20232	179200	203	1800
GT1100M	M748A	6000/7000	1100*1100	50	2000	124	1200	19.7	2	0.58	27192	240845	27192	240845	203	1800
	M544A	5000	1100*1100	50	2000	124	1200	19.7	2	0.58	27192	240845	27192	240845	203	1800
	M748A	6000/7000	1100*1100	50	2000	124	1200	19.7	2	0.58	27192	240845	27192	240845	203	1800
GT1200M	M544A	5000	1200*1200	50	2000	145	1200	19.7	2	0.58	34961	309658	34961	309658	203	1800
	M748A	6000/7000	1200*1200	50	2000	145	1200	19.7	2	0.58	34961	309658	34961	309658	203	1800
	M748A	6000/7000	1200*1200	50	2000	145	1200	19.7	2	0.58	34961	309658	34961	309658	203	1800

BT Series Specifications

Sliptable Model	Working Area	Thickness	Usable Frequency	Slipplate Mass	Hydraulic Bearing Qty.	Mass Per Hydraulic Bearing	Max. Payload	Pitch	Over Turning Moment	Metric	American	Metric	American	Metric	American
BT700M	700*700	50	2000	53	2	4.8	6500	51246	36851	326400	43184	36851	326400	43184	382500
	800*800	50	2000	69	2	4.8	7000	54260	39019	345600	45725	39019	345600	45725	405000
	900*900	50	2000	87	2	4.8	7500	61490	51329	454637	46741	51329	454637	46741	414000
BT1000M	1000*1000	50	2000	100	2	4.8	8000	73069	60876	539200	52837	60876	539200	52837	468000
	1100*1100	50	2000	124	2	4.8	8500	88446	733409	58730	733409	58730	733409	58730	520200
	1200*1200	50	2000	145	3	4.8	10000	104055	921658	83733	921658	83733	921658	83733	612000
BT1300M	1300*1300	50	2000	183	3	4.8	11000	129410	1146240	103388	915840	103388	915840	103388	662400
	1400*1400	50	2000	212	3	4.8	11500	137498	1217880	109860	973080	109860	973080	109860	703800
	1500*1500	50	2000	243	3	4.8	12000	161763	1432800	129248	1144800	129248	1144800	129248	828000
BT1600M	1600*1600	50	2000	276	3	4.8	12500	186687	1671275	152920	1354475	152920	1354475	152920	835200
	1700*1700	60	2000	375	3	4.8	13000	212273	1880184	172035	1523784	172035	1523784	172035	939600
	1800*1800	60	2000	420	3	4.8	13500	235859	2089094	191150	1693094	191150	1693094	191150	1044000

Remarks:

- 1) Sliptable inserts standard grid pattern: Armature inserts pattern plus 100mm*100mm grid.
- 2) The driver bar weight including connecting bolts weight.
- 3) All the specification here is for magnesium material. Please contact ETS for aluminum material specification.

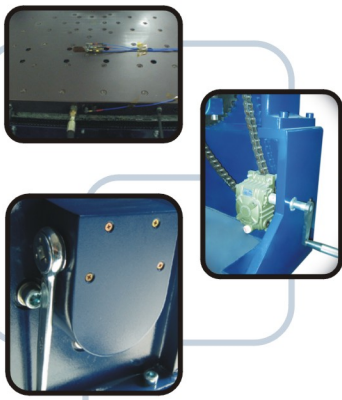
ETS Solutions offers options of unibase or standalone slip table to meet different requirements for horizontal test. The unibase is built-in with the vertical shaker body by a common steel base platform. The stand alone slip table is customized design with an independent steel base platform to match with any new or existing shaker.

Unibase Sliptable

The unibase design is the optimized solution for horizontal vibration testing. The common base reinforced assembly allows easy and consistent alignment between shaker and the slip table. The low profile concept conveniently fit for environmental testing with chamber.

Stand Alone Sliptable

The standalone design, an independent steel platform supported by the leveling feet. The customised design allows the feasibility of any vertical shaker from ETS or other manufacturers to couple with the standalone slip table assembly.



Standard Accessories

Geared Aided Rotation (ETS system only)

Rotation of the shaker body to work with the slip table is achieved by either ratchet crank rotation and chain wheel gear reducer. Rotating of the shaker is performed with ease by the rotation aid. Mechanical stop is installed to align the shaker with slip table precisely.

Safety Protection

The stainless steel guard is installed in front of slip plate. The safety protection prevents any operators from putting their fingers into the oil trough. It will prevent any falling foreign particles or contaminants from falling into the oil trough during the test.

Optional Accessories

Air Isolation Feet

Optional air isolation feet prevent the vibration from the shaker during operation from transmitting to the floor and building. The need for an seismic base can be eliminated.

Air Caster

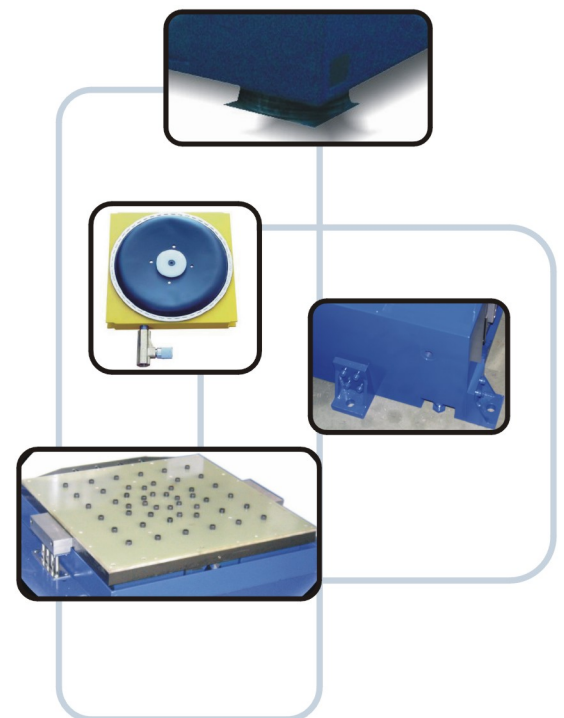
The air caster is the load module system, which utilizes the air film to float the shaker system. The load movement is easy, exceptionally smoothly and omni-directional.

Leveling Feet

The leveling feet is combined with the outrigger support and adjustable foot. The leveling feet could provide efficient precision mounting and swift screw adjustment. This allowing consistent and solid support for the heavy assembly.

Thermal Barriers

Glass fiber thermal insulating sheet is available when the slip table is to be integrated with the chamber for combined vibration-temperature testing. The thermal barrier isolates the thermal



Sliptable System Options

Shaker Model	Sliptable Model	Inserts	Inserts					Aided rotation ratchet crank	Aided rotation chain wheel	Thermal barrier	Air caster	Air isolation feet	Leveling feet	Uni- base	Stand alone base	Table safety guard	100psi oil pump	300psi oil pump
			M8	M10	M12	1/2"UNC	3/8"UNC											
L215M	GT300M	■	-	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
	GT400M	■	-	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
L315M	GT400M	■	-	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
	GT500M	■	-	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
L323A	GT400M	■	-	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
	GT500M	■	-	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
	GT600M	■	-	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
L620M	GT400M	■	□	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
	GT500M	■	□	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
	GT600M	■	□	-	-	-	■	-	□	□	□	□	■	□	■	■	-	
M124M	GT500M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT600M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT700M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT800M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
M232A	GT500M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT600M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT700M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT800M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
M337A	GT900M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT600M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT700M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT800M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
M437A	GT900M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT800M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT900M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
	GT1000M	□	■	□	□	□	■	-	□	□	□	□	■	□	■	■	-	
M544A	GT800M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
	GT900M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
	GT1000M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
	GT1100M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
M748A	GT1200M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
	GT800M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
	GT900M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
	GT1000M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
BT Series	GT1100M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
	GT1200M	□	□	■	□	□	-	■	□	□	□	□	■	□	■	■	-	
	BT800M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT900M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT1000M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT1100M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT1200M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT1300M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT1400M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT1500M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT1600M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT1700M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	
	BT1800M	□	□	■	□	□	□	■	□	□	□	□	■	□	■	-	■	

■ Standard □ Optional (By Special Order) - Not Available

Specifications are correct at the time of publication. In keeping with our commitment to continuous product improvement, The information herein is subject to change. ETS reserves the rights to amend specifications without prior notice.



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