

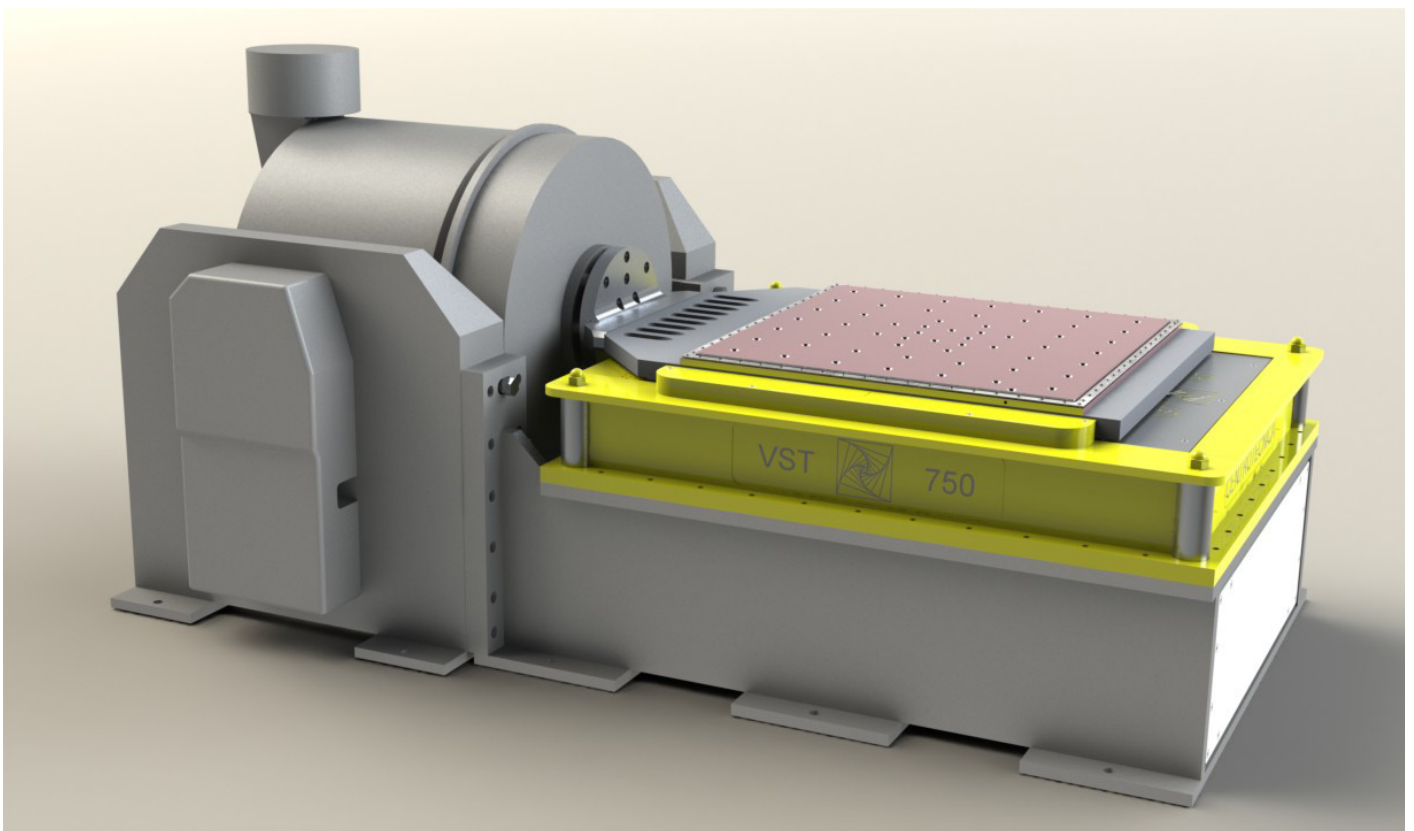
CENTROTECNICA S.r.l.



KVALITEST
— INDUSTRIAL —

VST - VACUUM SLIP TABLE

New concept slip table guided by balancing oil pressure
and vacuum force



GENERAL DESCRIPTION

Increasing demands in the field of vibration testing require additional slip table systems which make the testing of large and heavy test loads in a horizontal mounting position direction possible.

To meet specific requests of **horizontal position testings**, Centrotecnica offers a series of different sizes of **stand alone Vacuum Slip Tables**, as well as Vacuum Slip Tables integrated on a steel frame together with the shakers. (COMBO, on **SEISMIC BASE** and **RETROFIT** fittings are available if requested).

The shaker is coupled to the slip table by way of a driver bar; the slip table is supported and driven by a body containing the hydrostatic supports and drives.

The functional structure of Centrotecnica VST (Vacuum Slip Table) allows a quick, easy and user-friendly substitution of the table. If small payloads are to be tested at very high acceleration it is possible to substitute the standard table with a smaller and lighter one (Plate + body).

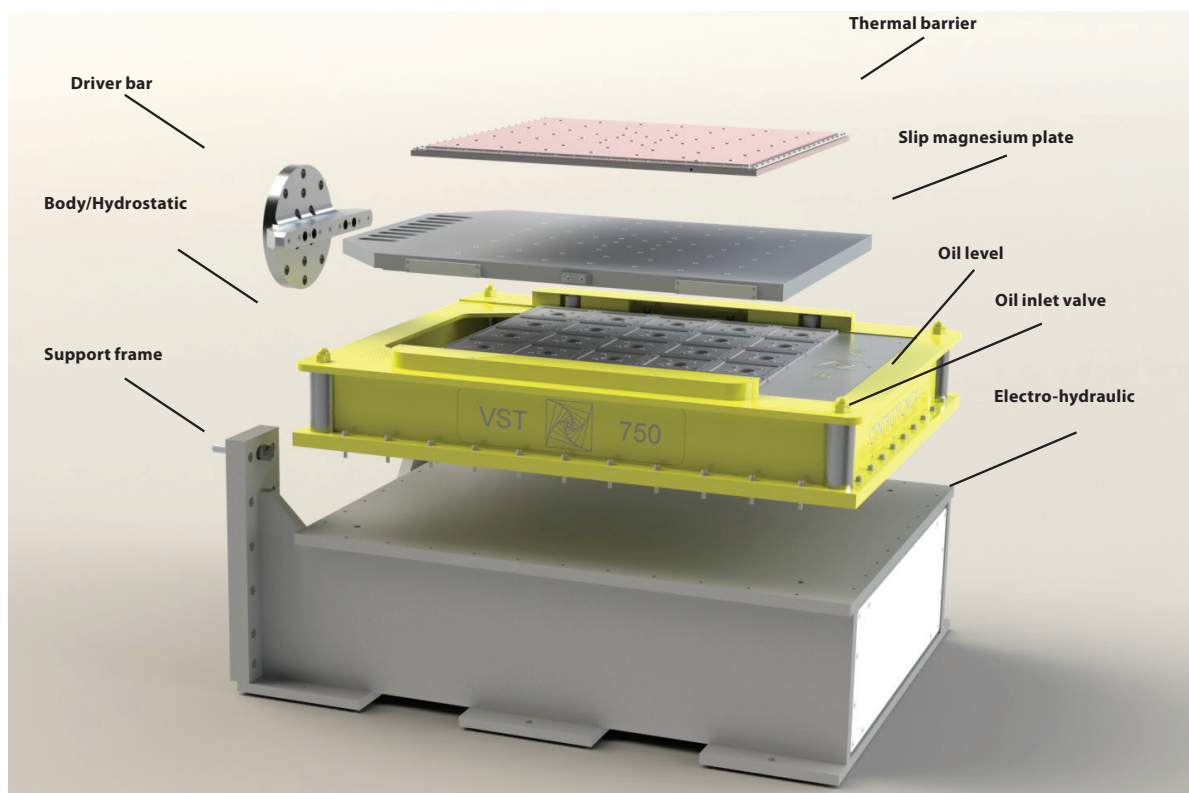
Oil and vacuum flow rates are supplied by an electro hydraulic power pack, allocated either inside the body or outside. If the slip table is mounted on a seismic base it is equipped with three feet with devices apt to correct the attitude and the alignment of the table with respect to the shaker.

If the ground is not reliable in terms of flatness and stiffness a support frame can be used to fix both the shaker and the slip table.

If the line-air is missing it may be useful to insert some insulator between the support frame and the ground.

On request an air glide set can be mounted.

VST IN DETAILS



MAIN ADAVANTAGES

- **Touchscreen display control panel.** On this panel you can set the most important parameters of the systems.
- **LAN PORT Integration:** this innovation setup enable the remote control and setting of the system.
- **Modular structure of the body:** innovative feature allows shorter time of production of the VST.
- **Longer stroke:** 160 mm
- **Interchangeable table** fits better customers needs; it is possible to have a big and a small table either in aluminum or in magnesium. So customer could install - in a few minutes - a small 440 mm magnesium table for an high g level test on electronic components or a larger 640 mm aluminum slip table for a very low g test on the whole system (Plate + body) (option).
- **High damping ratio:** the oil is supporting the plate with its pressure: the payload, the vacuum load and the dynamical load. When it is compressed and decompressed by the dynamical load it reacts increasing and decreasing its pressure. This results in a high damping ratio which increases with dynamical load. Furthermore the oil used is almost 4 times more viscous then the usual slip table oil, resulting in an increased damping effect.
- **High moments:** the high vacuum force results in high moments.
- **High payload support capability:** the payload is always small in comparison with the vacuum load so the slip table doesn't perceive it.
- **Minimum alignment** operation needed. The plate is installed simply by placing it on the basement.
- **Security on pump system:** malfunctioning of the oil pump is detected.
- **Security on guidance system:** interlock on vacuum level. The slip table stops on moment overload.
- **Driver bar not needed.** The driver bar could be installed on customer choice to reinforce shaker armature. Having just this aim it could be not high so it could be machined without welding or casting.
- **Low maintenance:** it consist just in replacing parts like filters, and oil.
- **No thermal expansion problems.**
- **Security on extra-stroke.**
- **No bearing mass.**



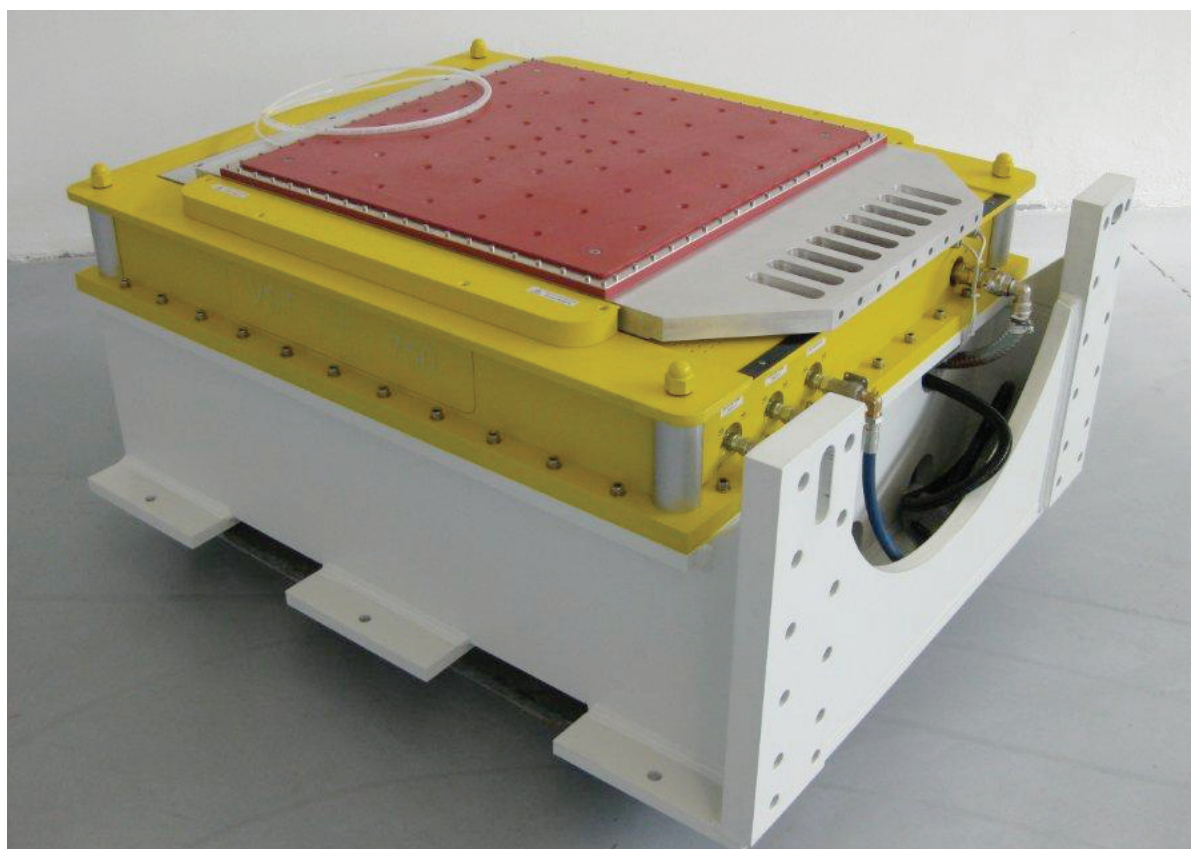
TECHNICAL DATA

TABLE SIZE		600X600	750X750	900X900	1050X1050	1200X1200	1500X1500
WEIGHT (kg)	Aluminium	63	89	119	154	193	284
	Magnesium	40	57	76	99	124	183
MOMENTS (kNm)	Pitch	7,7	15,0	25,9	41,2	61,4	120,0
	Roll	7,7	15,0	25,9	41,2	61,4	120,0
	Yaw continuous	2,8	3,7	4,7	5,6	6,5	8,4
	Yaw ultimate	23,4	31,2	39,0	46,8	54,6	70,2
MAX.DISPLACEMENT (mm)		160	160	160	160	160	160
MAX PAYLOAD (kg)		640	1000	1450	1950	2550	4000
USABLE FREQUENCY (Hz)		2000	2000	2000	2000	2000	2000
FIRST RESONANCE (Hz)		1250	1050	950	830	730	600
STANDARD INSERT PATTERN	100 mm grid	25	49	64	100	121	196
DRIVER BAR WEIGHT (kg)*		15	15	15	15	15	15

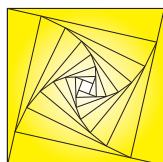
* SPECIAL SIZES AVAILABLE ON REQUEST

** TBC ACCORDING TO THE ARMATURE

Full comprehensive range of assembly configuration Slip table + Shaker



CT/02.13/Eng/Rev. 1



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