

CENTROTECNICA
stress to ensure

Suitable for all shakers and chosen as original equipment by IMV

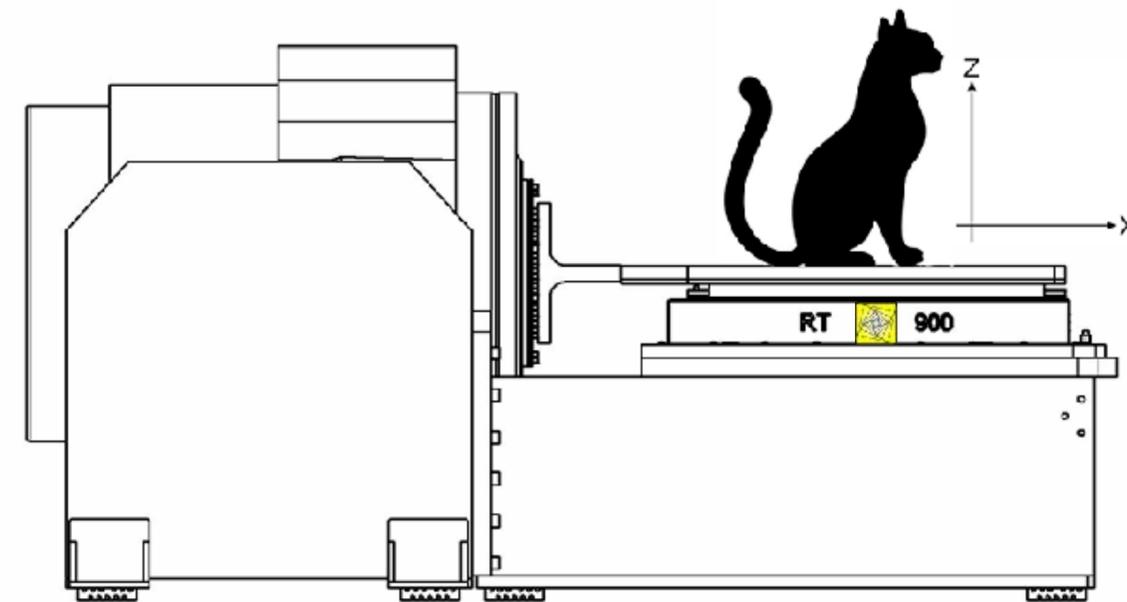
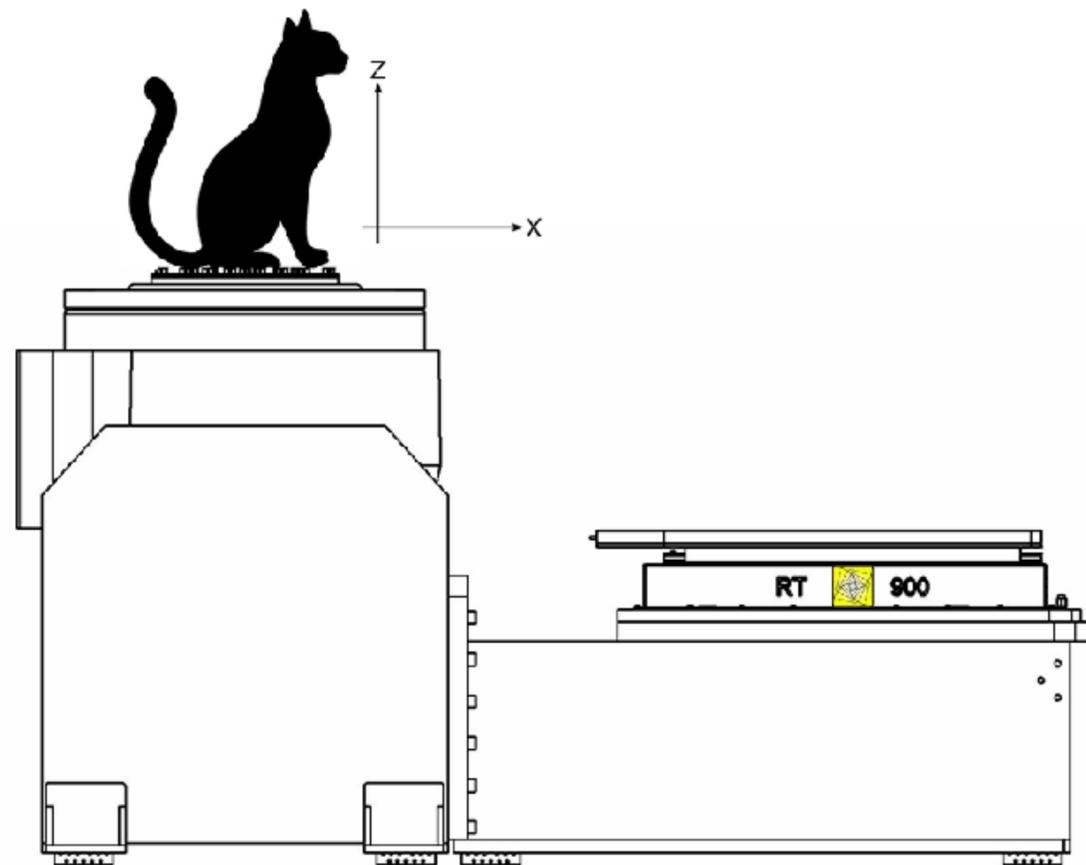
the Slip Tables

THE BEST SOLUTION TO VIBRATE HORIZONTALLY

THE SLIP TABLE, A PRECIOUS COMPLEMENT FOR THE SHAKER

The slip tables for shakers allow a sample to be tested along horizontal axes without changing its orientation with respect to gravity.

The need to maintain the orientation of the sample throughout the testing program is often a must.



VST AND RT: TWO TECHNOLOGIES TO MEET ALL REQUIREMENTS



VST: top product with very high performance, exclusive and patented technology that uses vacuum. The slipping of the table takes place on oil.

It can meet the most demanding tests for both sample weight or acceleration levels of the tests to be performed.

RT: innovative concept product. The table moves on skids that run along rails and is interchangeable with smaller tables to improve performance when used with smaller samples.

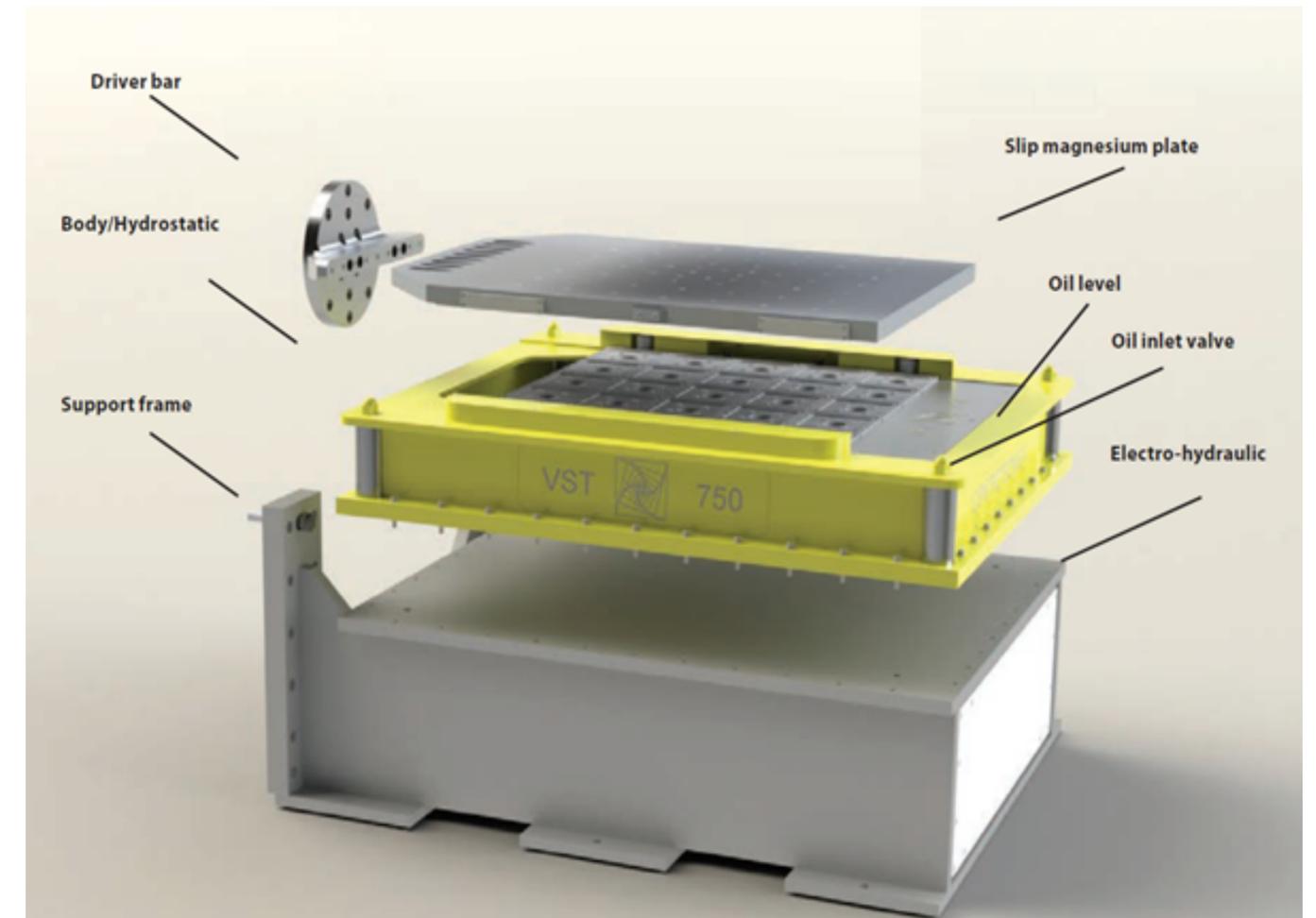
The mechanism is simple and reliable and maintenance is minimal.



VST: ACTIVATED BY BALANCING OIL PRESSURE AND VACUUM FORCE

MAIN FEATURES:

- Modular design
- High strength and reliability
- High damping ratio
- The table rests uniformly on the entire surface
- High vacuum force ensures high moments
- Interlock on over pitch moment
- No bearing mass in addition to the table mass
- Long stroke: 160 mm
- Minimum alignment
- Suitable for heavy samples
- ECO – plc controlled pressure and vacuum
- Log file of the parameters for maintenance



VST: DESIGNED IN EVERY DETAIL TO PROVIDE MAXIMUM PERFORMANCE

Vacuum and oil recirculation are ensured by a pump patented by CENTROTECNICA.

The table base is machined to extremely high surface treatment tolerances and ensures frictionlessness and durability.



The slip tables are interchangeable with the same base. In this way the optimum solution for the most efficient energy consumption can always be achieved.

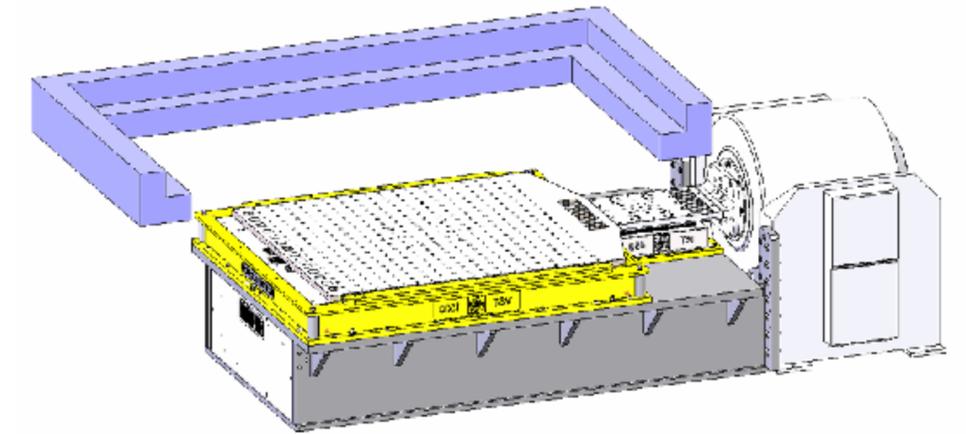
The optional front cover ensures that circulating oil does not come into contact with the sample. In some areas (such as aerospace), safeguarding the cleanliness of the sample is essential.



VST: SPECIAL OPTIONS FOR MAXIMUM VERSATILITY

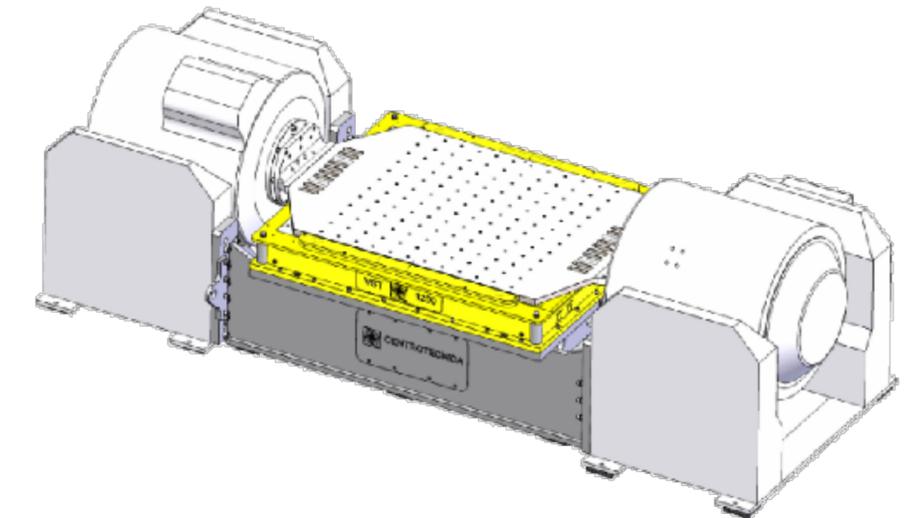
The spacer slip table is dedicated to couplings between slip tables and climate chambers:

- It allows a perfectly centred positioning between slip table and climatic chamber.
- It enables the complete lowering of the chamber (unlike elongated driver bars, whose ribs create interference).



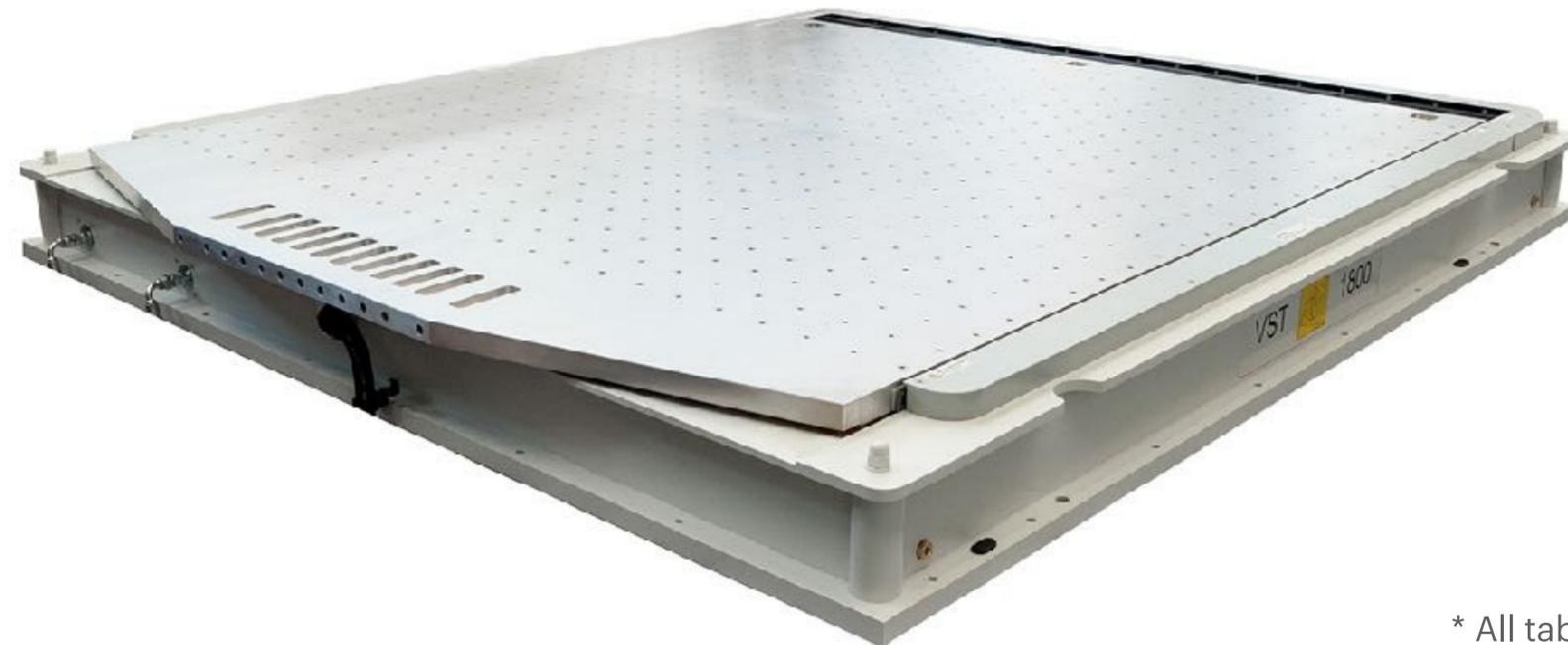
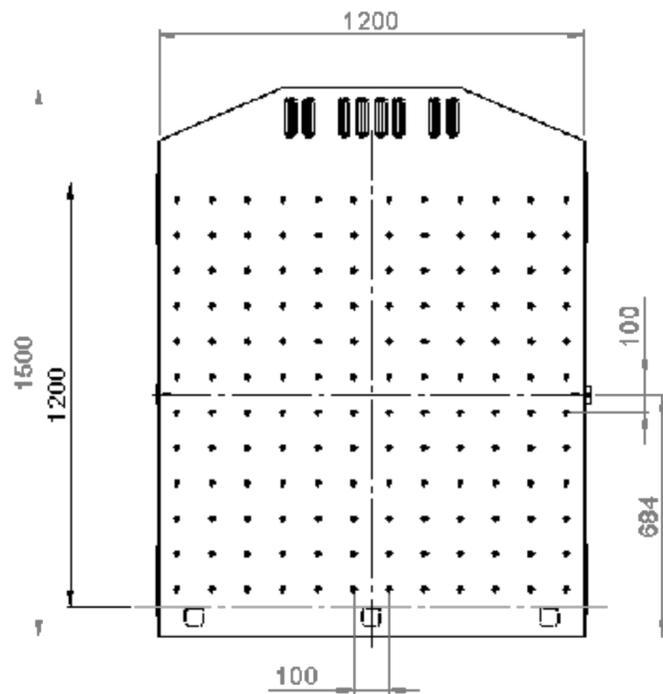
The slip table with double driver bar allows for in-line working of 2 opposing shakers.

This type of configuration is necessary when the force of a single shaker is not sufficient to replicate the test profile.



VST: SIZES AND TECHNICAL CHARACTERISTICS

MODEL	Table size (mm)	Table weight* (kg)	Max displacement (mm)	Max payloads (kg)	Usable frequency (Hz)	First resonance (Hz)	Overturning moments (kNm)			
							Pitch	Roll	Yaw continuous	Yaw ultimate
VST 600	600 x 600	35	160	640	2.000	1.250	7.7	7.7	2.8	23.4
VST 750	750 x 750	50	160	1.000	2.000	1.050	15.0	15.0	3.7	31.2
VST 900	900 x 900	67	160	1.450	2.000	950	25.9	25.9	4.7	39
VST 1050	1050 x 1050	88	160	1.950	2.000	830	41.2	41.2	5.6	46.8
VST 1200	1200 x 1200	111	160	2.550	2.000	730	61.4	61.4	6.5	54.6
VST 1350	1350 x 1350	150	160	3.200	2.000	660	87.5	87.5	7.4	62.4
VST 1500	1500 x 1500	167	160	4.000	2.000	600	120	120	8.4	70.2
VST 1800	1800 x 1800	243	160	5.650	2.000	550	207.4	207.4	10.2	85.8

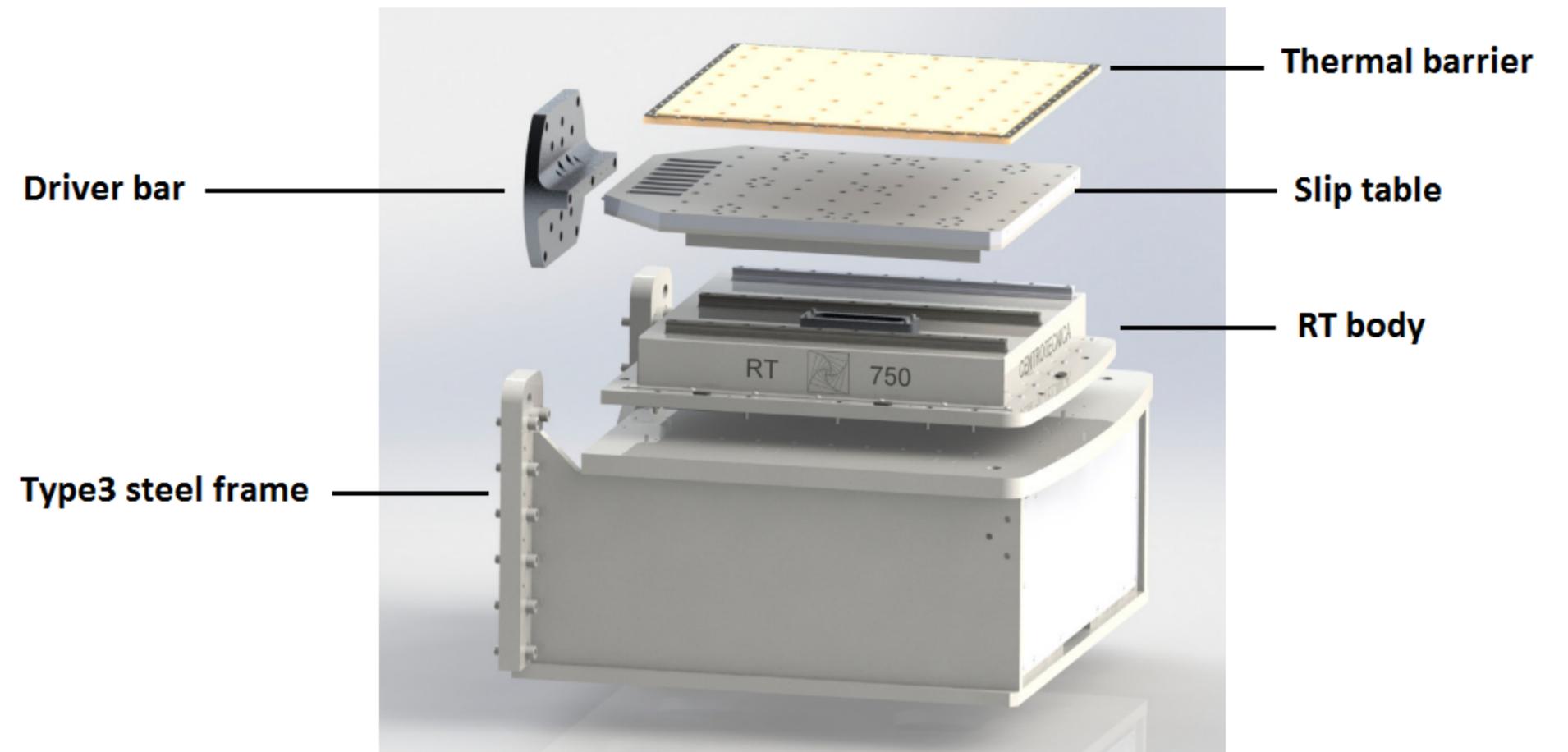


* All tables are made of magnesium.

RT: THE SIMPLICITY AND EFFECTIVENESS OF SLIDING ALONG RAILS

MAIN FEATURES:

- Purely mechanical structure
- No oil, no electric components, no compressed air
- High robustness and resistance to bending
- High damping ratio
- Reduced moving mass
- Quickly interchangeable table
- Easy alignment
- Heavy loads improve performance
- Ideal for coupling to climatic chambers
- The only ones with a system to allow thermal expansion without deformation
- Very simple maintenance: cleaning the skids

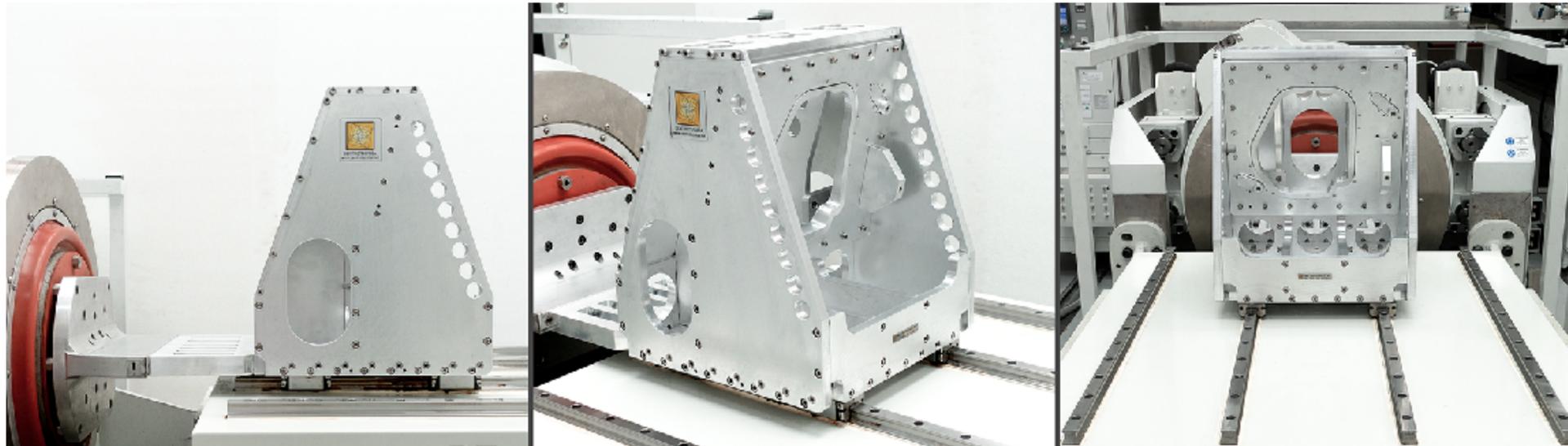
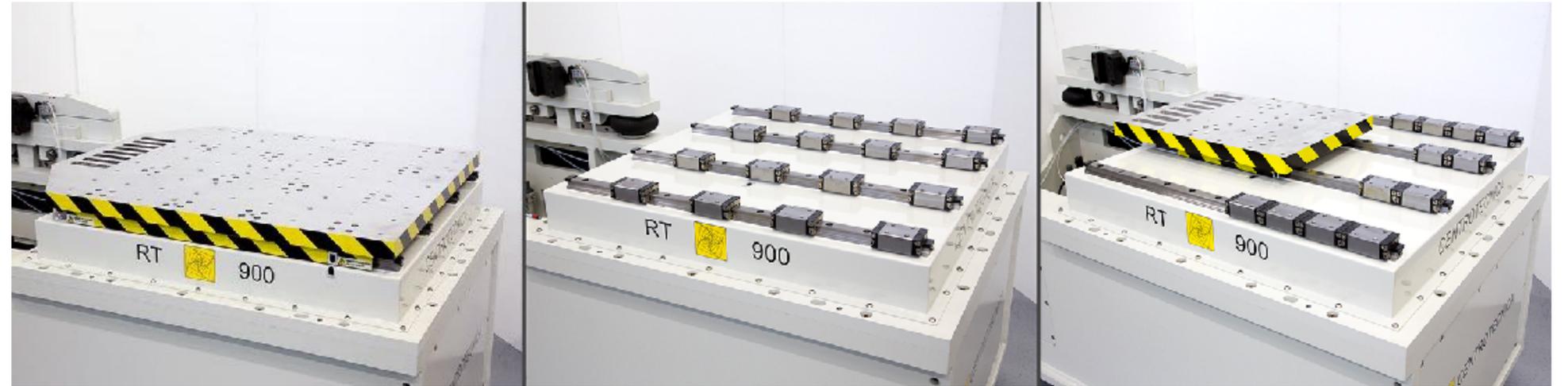


RT: DESIGNED IN EVERY DETAIL TO MINIMISE MOVING MASSES

The RT slip tables are interchangeable, and as there is only a mechanical connection between the base and the table, operation is particularly quick and easy.

There are no other systems that allow this level of versatility of configuration.

The use of a smaller slip table, when possible, is highly recommended to optimize power consumption, shaker wear and higher accelerations.

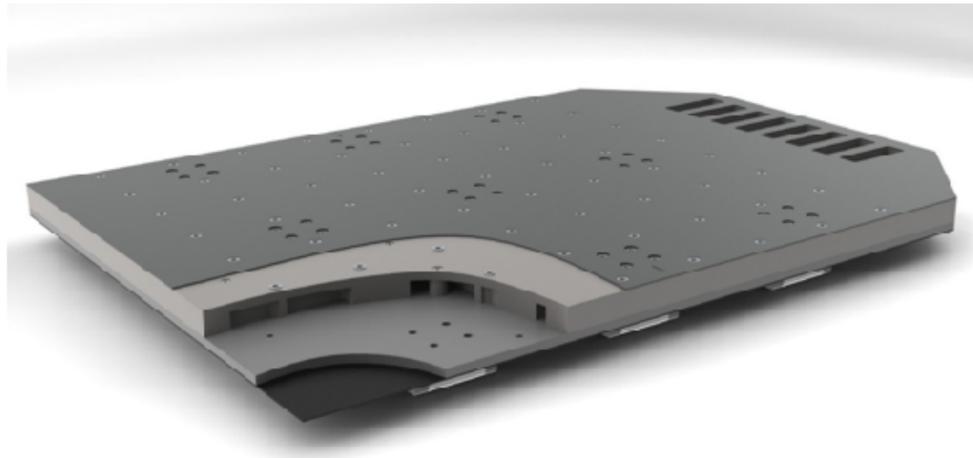


CENTROTECNICA has taken the concept of weight saving to the extreme by developing the RT fixture solution: fixtures that mount directly onto the RT slip table rails, eliminating the need for a table.

This very interesting and innovative system is currently only possible with the base of our RTs.

We can adapt almost any fixture for this use.

RT: DEDICATED SOLUTIONS AND ACCESSORIES THAT MAKE THEM UNIQUE



RT slip tables can resist bending better than any other slip table.

They are equipped with a special system to allow thermal expansion of the table while limiting bending.

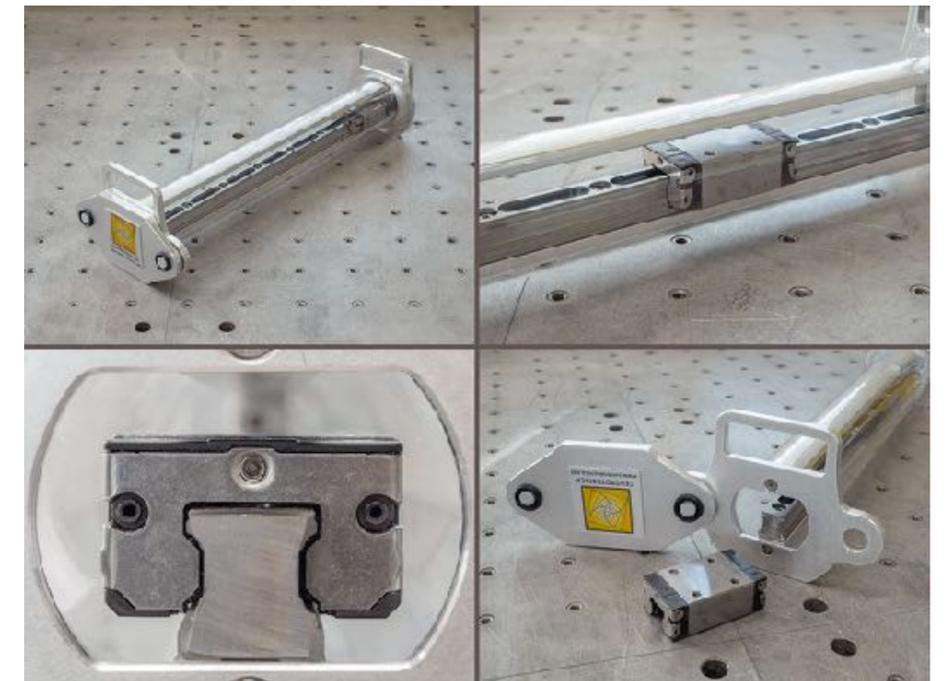
This makes RTs particularly suitable for climatic testing.

The unique multilayer structure of the RT table also makes it particularly light and with high damping, compensating for the absence of oil.



Direct Coupling Solutions: quick coupling system between climate chamber and slip table to take full advantage of the flexibility of slip tables (not just RTs).

Minimises human work time by facilitating configuration horizontal/vertical switching for combined tests.



CT-SPP: accessory intended for maintenance (limited to cleaning the runners) of RT type slip tables.

Once again, a unique product on the market, simple and effective, it allows the cleaning of a single skid in less than a minute.

KRT: ENHANCING MODULARITY AND EFFICIENCY

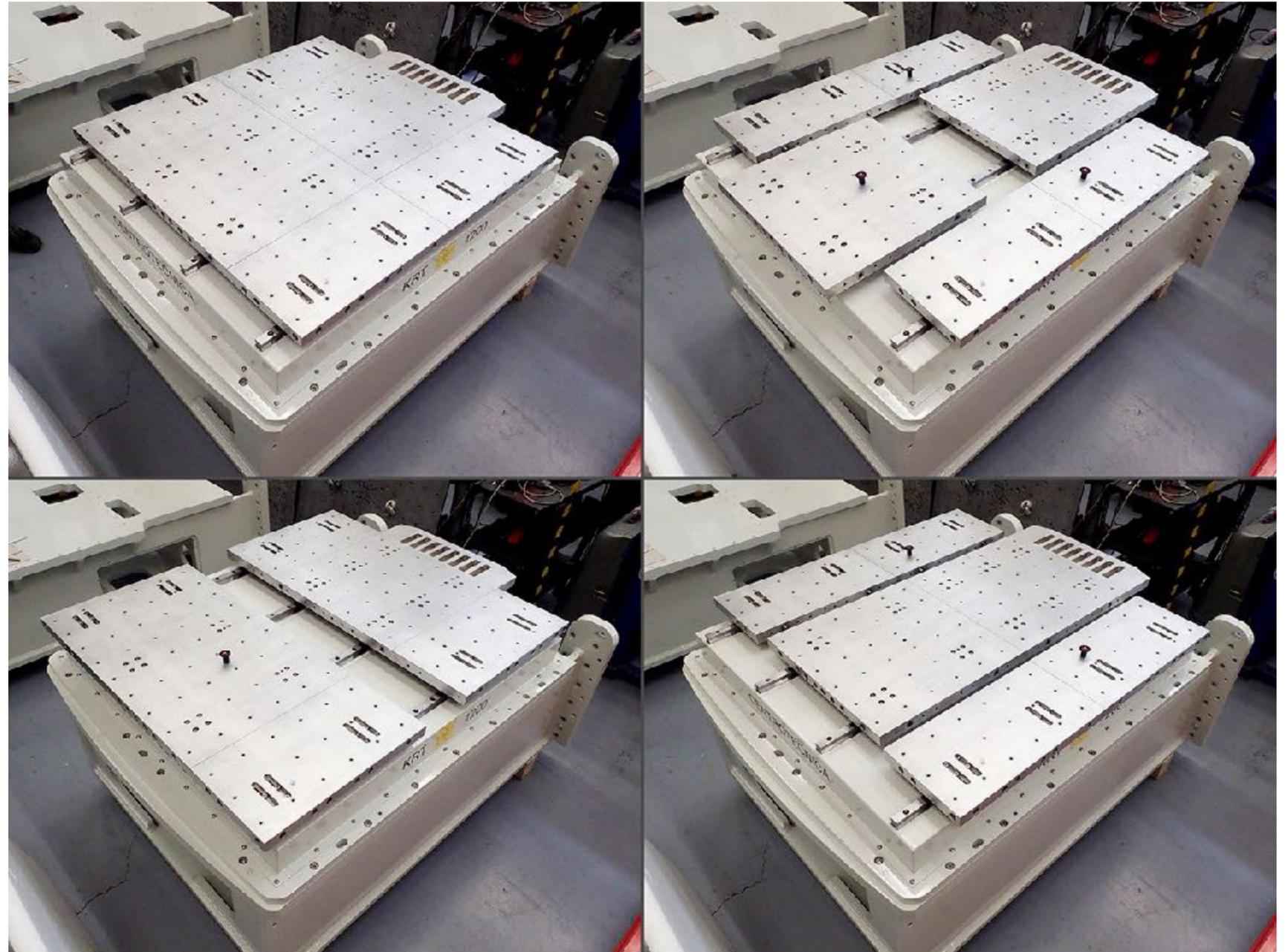
KRT modular tables are another innovation from CENTROTECNICA.

They make it possible **to modify the surface of the slip table as quickly and easily as possible**, adapting it to the shape and size of the sample to be tested.

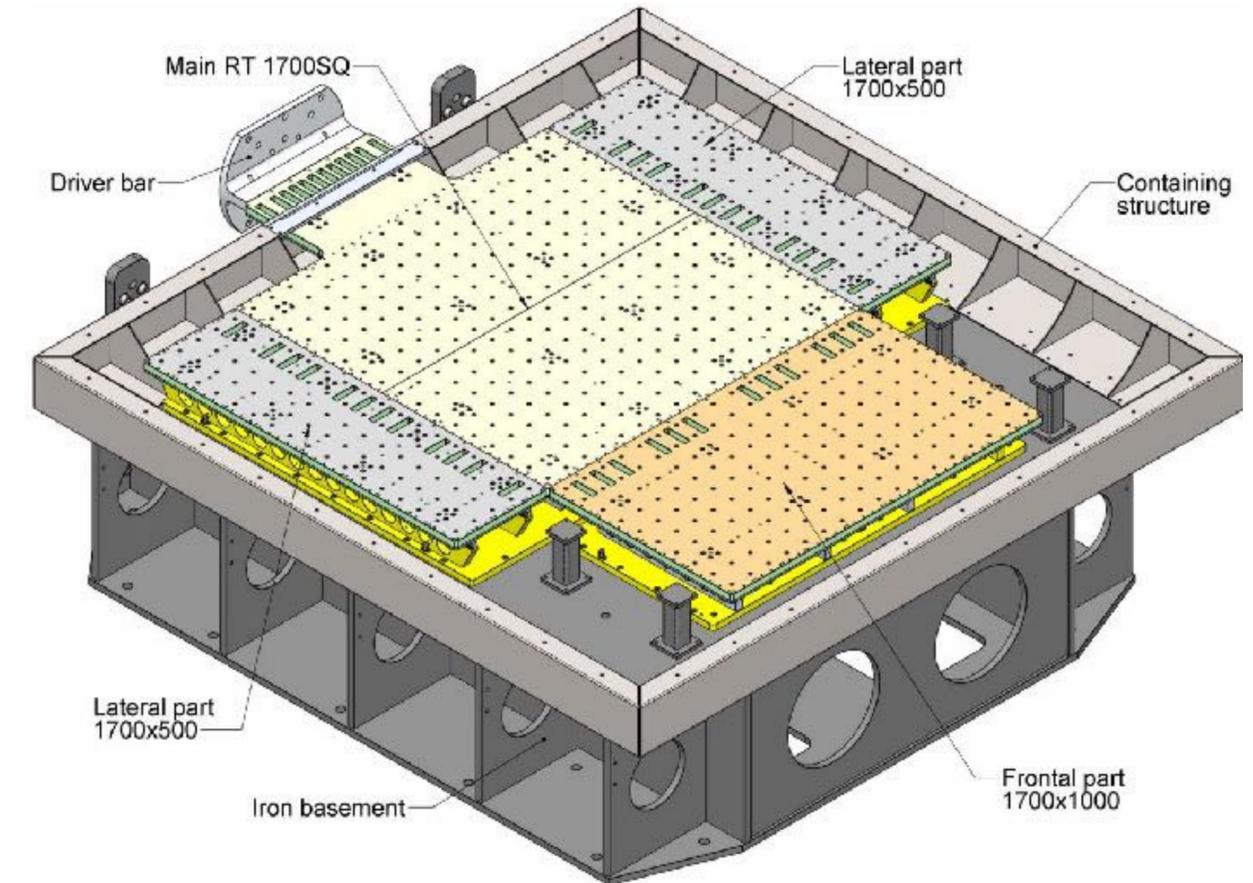
The advantages in reducing the moving masses are objective:

- reduce energy consumption
- reduce shaker wear and tear
- optimise shaker performance

In addition to this, the KRTs confirm all the points in favour of the RTs.



SPECIAL PRODUCTS (NOT IN THE CATALOGUE) ON REQUEST



Our design department will consider any request to meet specific requirements for products not in the catalogue.

In the example above: a large KRT slip table realized on specific request for combined climate + vibration battery testing, compared with a standard RT 1050 slip table.

RT: SIZES AND TECHNICAL DATA

MODEL	Table size (mm)	Table weight (kg)		Max displacement (mm)	Max payloads (kg)	Usable frequency (Hz)	First resonance (Hz)	Overturning moments (kNm)					
		Aluminium	Magnesium					Pitch		Roll		Yaw	
								Continuous	Ultimate	Continuous	Ultimate	Continuous	Ultimate
RT 450	450 x 450	30	23	160	414	2.000	1.400	1.7	22.3	1.3	17.1	1.7	22.3
RT 600	600 x 600	50	40	160	931	2.000	1.250	5.7	71.6	4.7	59.9	5.7	71.6
RT 750	750 x 750	68	53	160	931	2.000	1.050	7.4	93	6.5	81.3	7.4	93
RT 900	900 x 900	96	75	160	1.654	2.000	950	16.2	203.4	14.6	182.5	16.2	203.4
RT 1050	1050 x 1050	125	98	160	1.654	2.000	830	19.3	241.4	17.6	220.6	19.3	241.4
RT 1200	1200 x 1200	160	125	160	1.654	2.000	700	23	278.5	20.6	258.6	23	278.5
RT 1600	1600 x 1600	240	185	160	1.654	500*	570	27	337.5	28.9	361.2	27	337.5
RT 2000	2000x 2000	370	282	160	2.584	500*	430	55.1	688.7	55.9	698.7	55.1	688.7



* The frequency is indicative and can be exceeded with a suitable control strategy suggested by CENTROTECNICA.

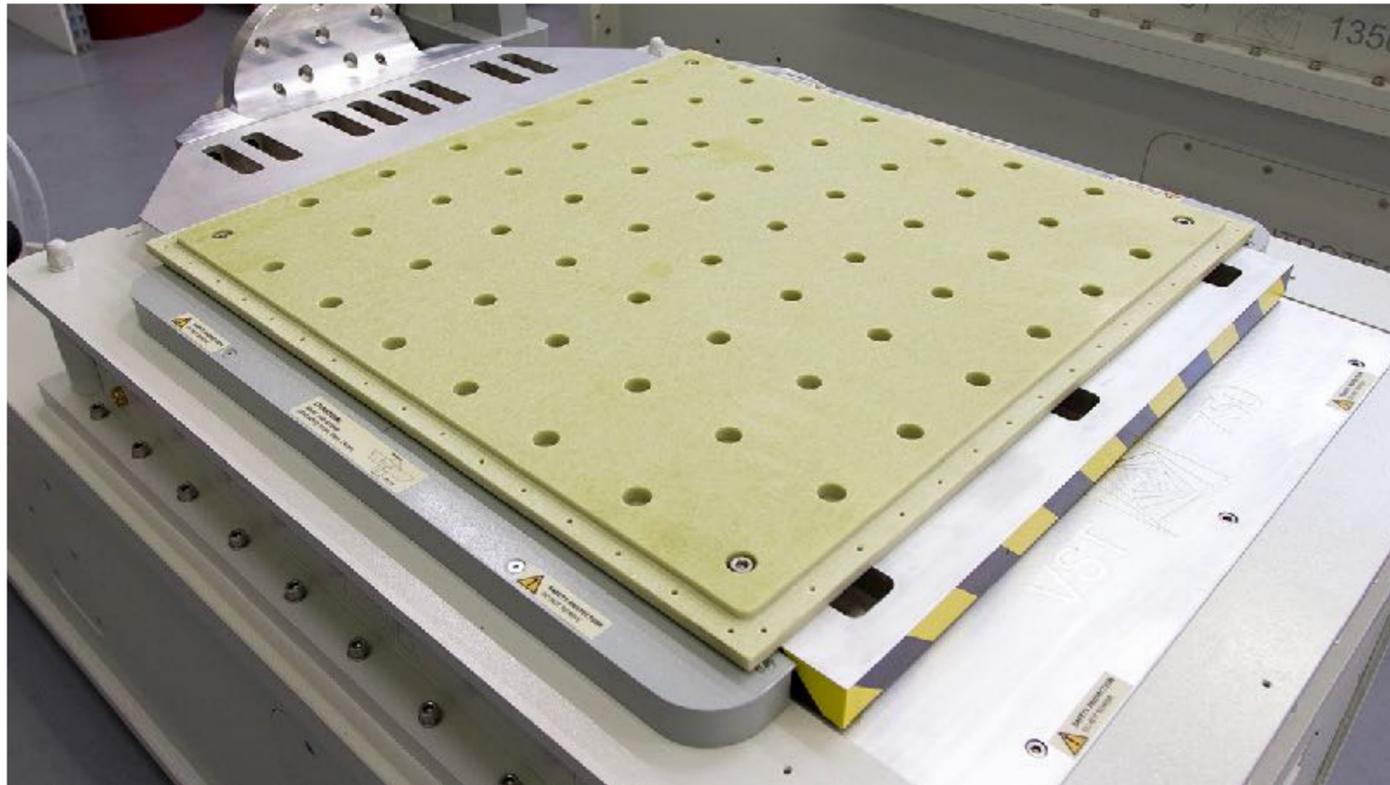
VERY USEFUL ACCESSORIES FOR SLIP TABLES FROM ANY MANUFACTURER

THERMAL BARRIER:

Thermal barriers are very important and highly recommended accessories in combined climate + vibration systems that offer a double advantage:

Ensure that the sample is properly insulated from the heat produced by the shaker. Safeguard the vibrating system from the large temperature variations that occur in the climate chamber.

We produce thermal barriers in all shapes and sizes, for coupling to any head expander or slip table (also KRT type), specific for battery testing or with water drainage system.



INSTANT CLAMP:

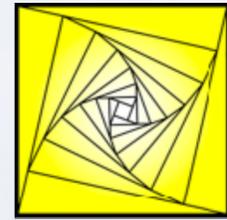
It is a revolutionary and patented system to achieve fastening between fixture and slip table or shaker or head expander assembly, in ultra-fast time.

The Instant Clamp ensures a fastening equivalent to that achieved with screws and saves an average of 95% of the time spent fixing the fixture or changing the axis to be tested..

In addition to this, it allows the design of simpler and lighter fixtures with an additional economic advantage.

It can operate in climatic chambers in a temperature range of -40°C / +140°C.





CENTROTECNICA
stress to ensure

REFERRING LINKS

Instant Clamp

thermal barriers

fixture RT

CT-SPP

design department

production department

CENTROTECNICA provides installation, support, service and maintenance for all slip tables delivered worldwide.
These services are provided through its network of distributors or directly.

For info or RFQs, pls contact us at mail: info@ctecnica.it - phone: +39(0)255305888

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