

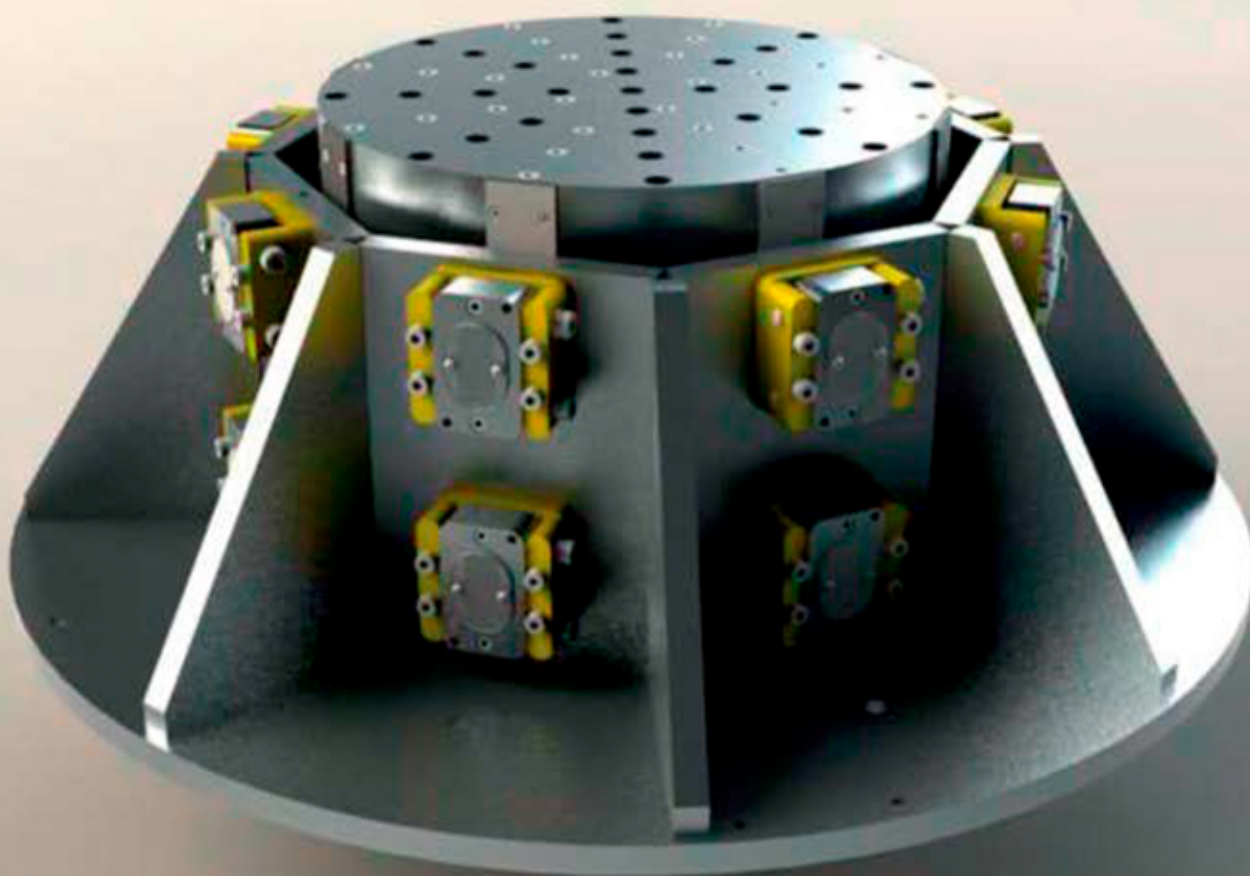


➤ PLATES & HEAD EXTENDERS

Purpose : to improve the test-bench with different inserts pattern or with an extension to cover the negative strokes or to pass through the chamber floor.

Key features:

- Customized thickness and height, by using modular solutions
- Casted and machined extenders, with a lightened design to save mass
- Material = aluminium or magnesium alloy
- Customized hole insert patterns and thread sizes available upon request





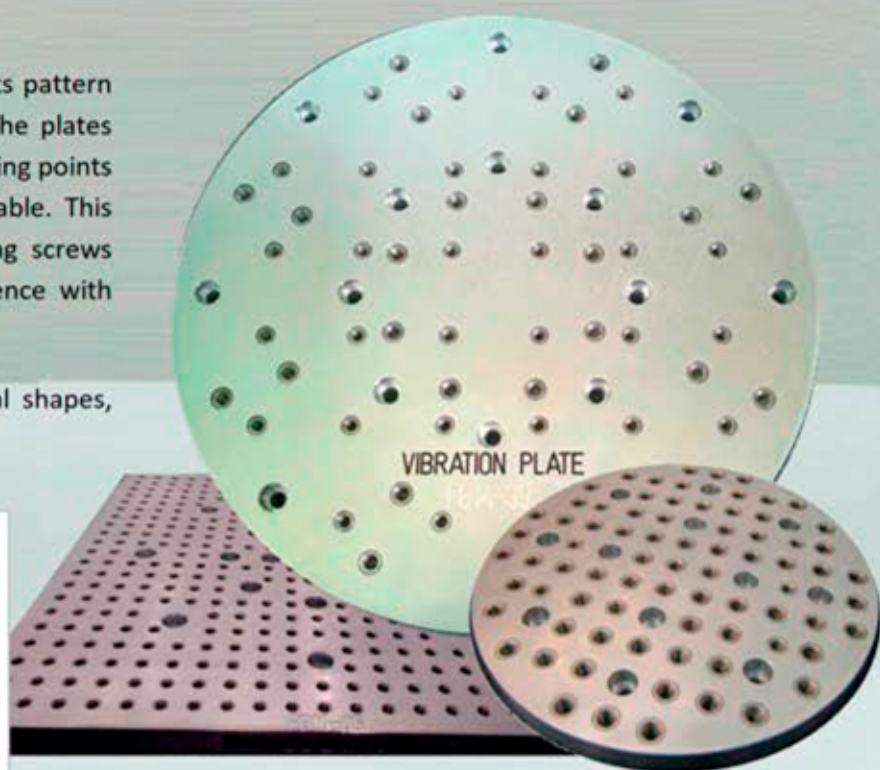
STANDARD PLATES

Centrotecnica plates are provided with inserts pattern as per the specific customer requirement. The plates are drilled with counter-bored holes at the fixing points on the armature shaker / expander / slip table. This design allows to hide the head of the fixing screws under the working plane, avoiding interference with the DUTs.

Centrotecnica can supply plates with several shapes, with carved serial number.

Plate/Extender Kit includes:

- inserts installed on the upper surface
- full mounting kit with screws and tools
- lifting eyebolt for the big extenders
- technical user manual
- certification document



STANDARD HEAD EXTENDERS

Centrotecnica produces cylindrical components for each shaker's armature. The extenders are designed with counter-bored holes for the fixing and provided with the inserts on the upper surface to replicate the armature pattern.

Head Extenders are typically installed on shaker armatures for test in combination with climatic chamber, to increase the height of the working plane beyond the floor.



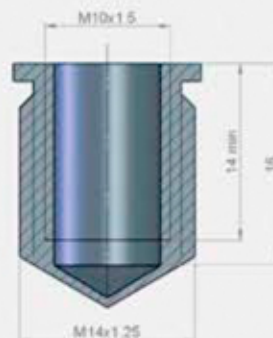


FOCUS POINTS

➤ **Inserts designed by Centrotecnica**

Stainless steel inserts are installed in the plates and in the extenders, applying the appropriate loctite and a tightening torque.

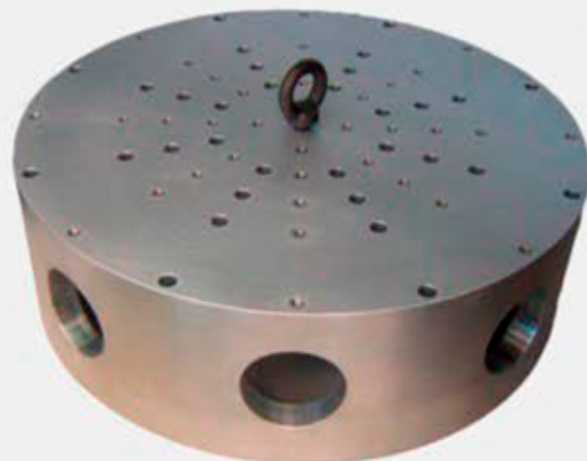
Many sizes and types are available to meet each customer requirement. In case of replacement, an oversize version is supplied to protect the thread of the holes.



➤ **Special Design**

Centrotecnica supplies the extenders with lightening design and a modular concepts to achieve every possible height.

Special shapes are studied to get the minimum moving mass, in particular, in case of extenders used in combination with thermal barriers and expanders.



➤ **Options: "guidance system" & "load support"**

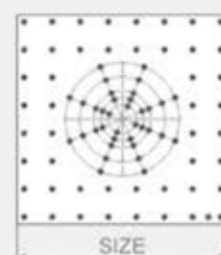
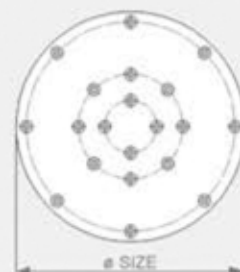
Upon request, Centrotecnica can produce technical solutions to increase the load support capability of the test-bench and to preserve the integrity of the shaker from damages due to the overturning moments of unbalanced payloads.



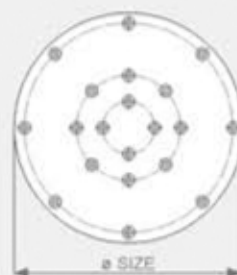


TECHNICAL SPECIFICATIONS - STANDARD PLATES & HEAD EXTENDERS

Shape	Size	Thickness	Aluminium version Weight $\pm 5\%$	Magnesium version Weight $\pm 5\%$
Round	Ø 160 mm	20 mm	1.2 kg	0.8 kg
Round	Ø 180 mm	20 mm	1.4 kg	0.9 kg
Round	Ø 240 mm	20 mm	2.4 kg	1.7 kg
Round	Ø 280 mm	20 mm	3 kg	2.1 kg
Round	Ø 335 mm	20 mm	4.7 kg	3.3 kg
Round	Ø 400 mm	20 mm	7 kg	4.6 kg
Round	Ø 440 mm	20 mm	8.6 kg	5.8 kg
Round	Ø 560 mm	20 mm	14 kg	9.7 kg
Round	Ø 610 mm	20 mm	16 kg	11 kg
Round	Ø 640 mm	20 mm	17.5 kg	12 kg
Round	Ø 760 mm	20 mm	25 kg	17 kg
Square	185 x 185 mm	20 mm	1.7 kg	1.2 kg
Square	280 x 280 mm	20 mm	3.8 kg	2.5 kg
Square	330 x 330 mm	20 mm	5.5 kg	3.6 kg
Square	440 x 440 mm	20 mm	10 kg	6.5 kg
Square	500 x 500 mm	20 mm	14 kg	9 kg
Square	600 x 600 mm	20 mm	19 kg	13 kg
Square	750 x 750 mm	20 mm	29 kg	19 kg



Shape	Size	Height	Aluminium version Weight $\pm 5\%$	Magnesium version Weight $\pm 5\%$
Cylindrical	Ø 180 mm	60 mm	3 kg	2 kg
Cylindrical	Ø 180 mm	100 mm	4.5 kg	3 kg
Cylindrical	Ø 280 mm	100 mm	11.5 kg	8 kg
Cylindrical	Ø 280 mm	150 mm	18 kg	12 kg
Cylindrical	Ø 335 mm	100 mm	14.8 kg	10 kg
Cylindrical	Ø 335 mm	150 mm	21 kg	14 kg
Cylindrical	Ø 440 mm	100 mm	23.5 kg	15 kg
Cylindrical	Ø 440 mm	150 mm	35 kg	26 kg
Cylindrical	Ø 440 mm	200 mm	45 kg	30 kg
Cylindrical	Ø 560 mm	100 mm	36 kg	24 kg
Cylindrical	Ø 640 mm	100 mm	41 kg	27.5 kg
Cylindrical	Ø 640 mm	150 mm	58 kg	38 kg



By request, Centrotecnica can provide plates and extenders with other dimensions, shapes and heights than the above standard ones .

An approval design is shared with the customer before the production starting.

