

MagLevit[®]

Anti-Vibration Platform & Table Magnetic Isolation Technique

Efficient Use
Easy Installation
Compact Design
Revolutionary Concept

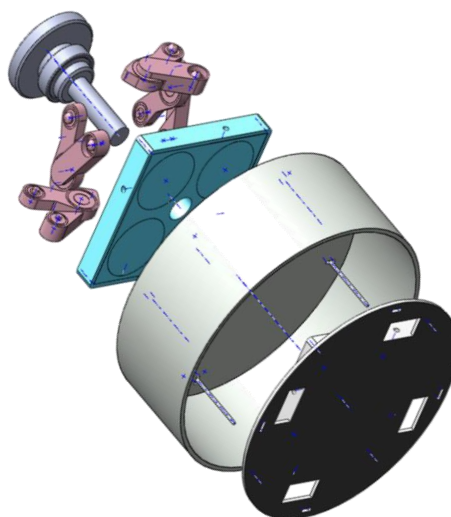
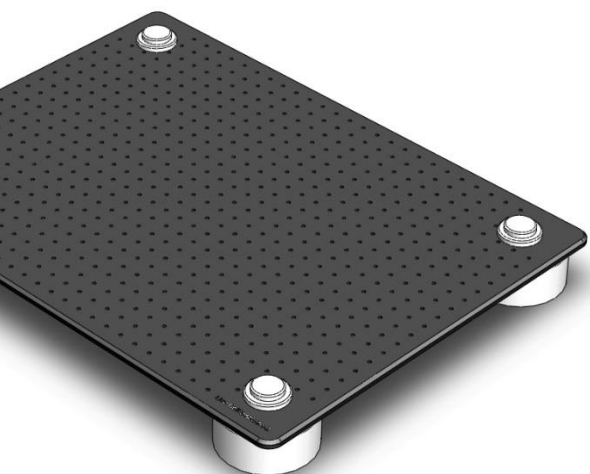
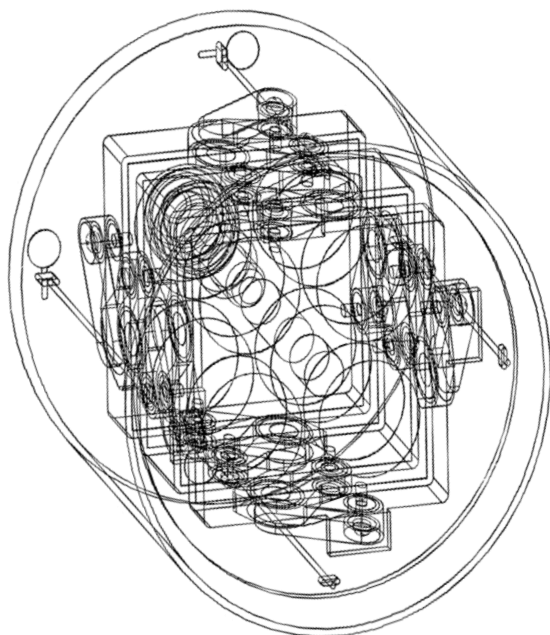


Table-Top Type MagLevit[®] Performance

Description

- Anti-vibration platform with a revolutionary concept in low frequency vibration
- The best performance to isolate transmission of variable vibration in all directions by two patent pending methods: vertical isolation (magnetic isolation technique) and horizontal isolation (suspension mechanism)
- A compact design to mount on any tables to fit all kinds of microscopes and live cell imaging systems.

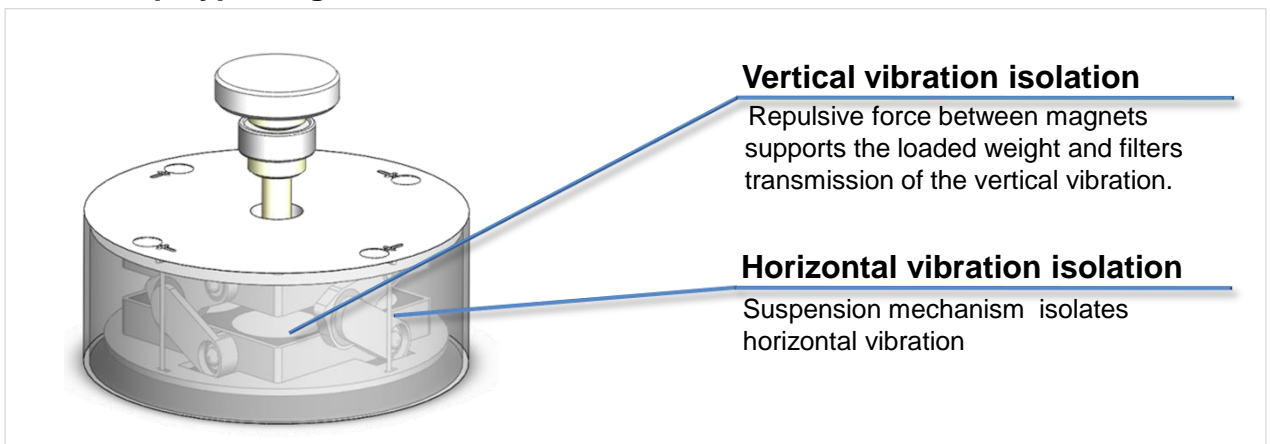


Specification

MagLevit module adopts a new technology for vibration isolation different from existing ways using the air damping or springs.

- Vertical vibration isolated by repulsive force between magnets to support the loaded weight and to prevent vibration transmission.
- Horizontal vibration isolated by flexible wires connecting magnets inner to outer structure.
- Considerable reduction of the vibration transmission contributes to microscopic imaging experiments extensively.
- None of any peripheral devices is required such as pressurized air tank or air compressor.

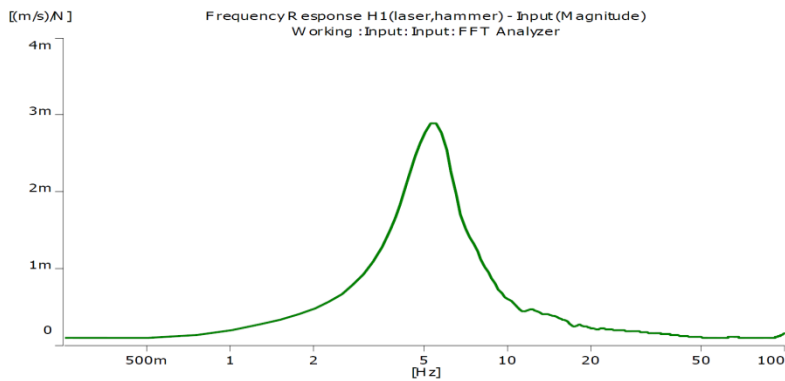
Table-Top Type MagLevit Module





Vertical Direction

x-axis (Log scale) , y-axis (Linear scale)



$$m\ddot{x} + kx = 0$$

$$\ddot{x} + w_n^2 x = 0$$

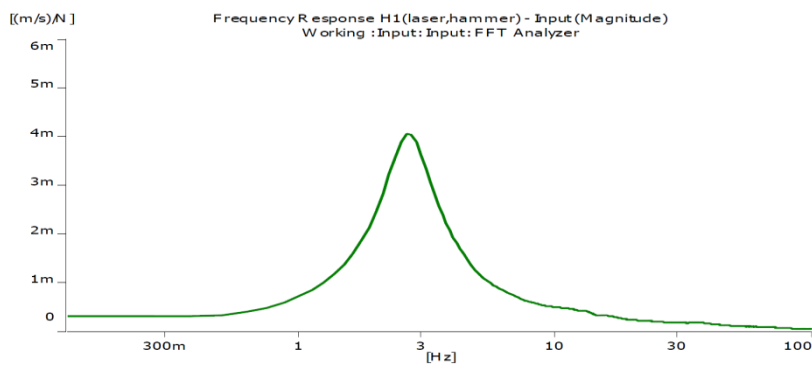
$$\therefore 2\pi f = w_n$$

$$f = \frac{w_n}{2\pi}$$

$$\{w_n = \sqrt{\frac{k}{m}}\}$$

Horizontal Direction

x-axis (Log scale) , y-axis (Linear scale)



$$ml^2\ddot{\theta} + mgl\theta = 0$$

$$\ddot{x} + w_n^2 x = 0$$

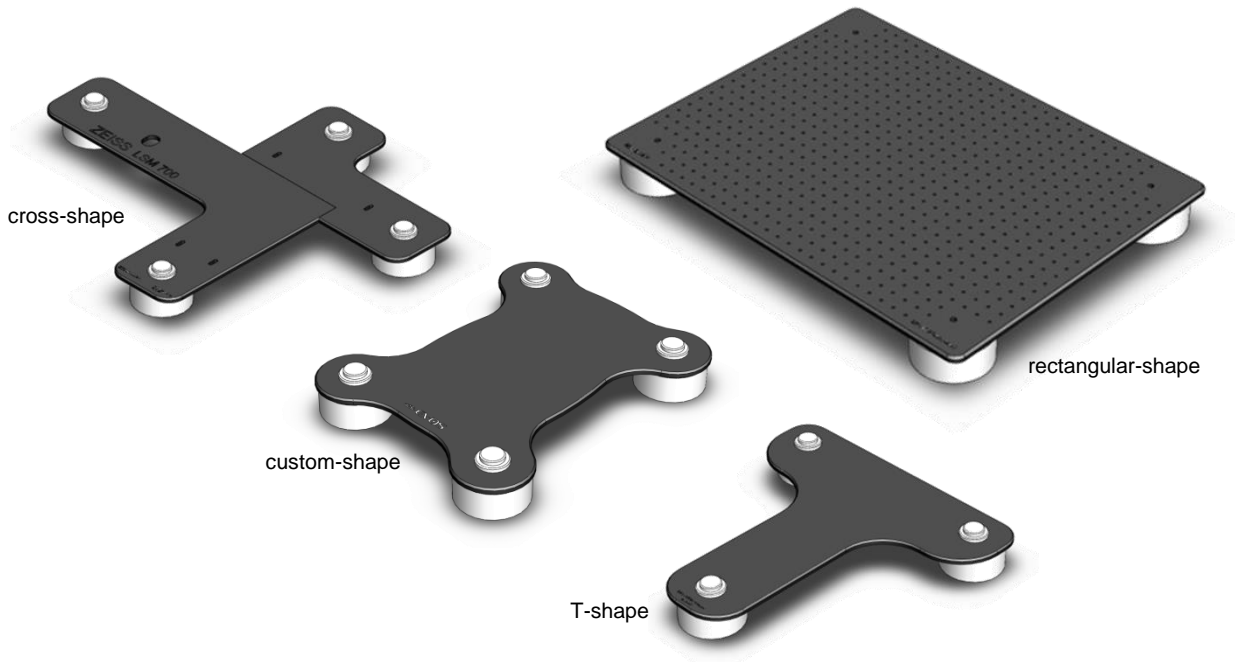
$$\therefore 2\pi f = w_n$$

$$f = \frac{w_n}{2\pi}$$

$$\{w_n = \sqrt{\frac{g}{l}}\}$$

Table-Top Type MagLevit[®]

Technical Specification



- We will custom-make any sizes or any shapes of MagLevit to fit all microscopes.
- Standard types of shapes (T / cross / rectangular shapes) depend on types of the microscopes.
- Height adjustment of the isolation module by using knobs or a hexagonal wrench
- Usable with all equipment for vibration isolation for the balance, the centrifuge, the pump, and the microscope
- Efficient installation in a very small space
- Cross shape is designed for a confocal microscope (e.g. Zeiss LSM 700 or etc.)

Armrest



- The arm rest is offered as an option to microscope users for easy-use of the lens-controlled knob.
- T-shape and cross shape are available.

Knob & Thread Type

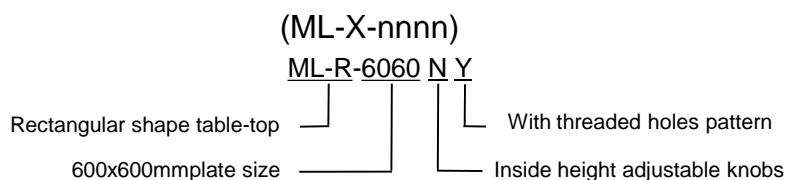


Ordering Chart

Table-Top Type MagLevit				
Plate Size		Model No.	Height Adjustable Knobs	Threaded Holes Pattern (M6 at 25mm spacing)
Rectangular Shape	600 x 600mm	ML-R-6060	Y (Outside)	Y (With threaded holes)
	600 x 700mm	ML-R-6070		
	600 x 800mm	ML-R-6080		
	600 x 900mm	ML-R-6090		
	600 x 1,000mm	ML-R-6100		
T-shape		ML-T-6060	N (Inside)	N (Without threaded holes)
Cross shape		ML-C-6080		
Custom-make		ML-X-nnnn		

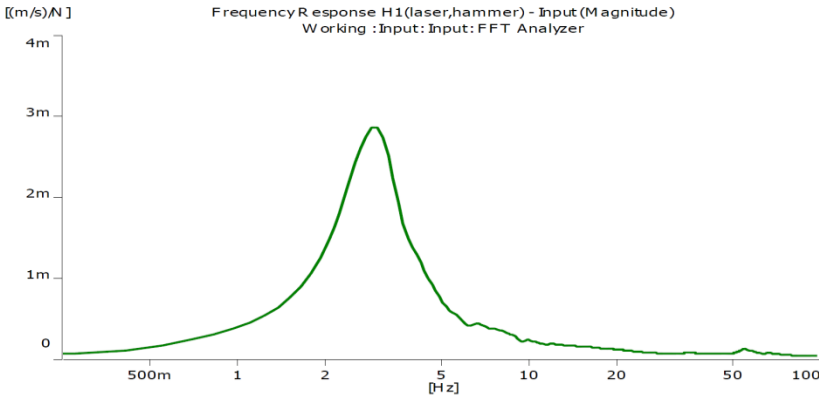
We will custom-make any sizes or any shapes of table-top type MagLevit.

(e.g.)



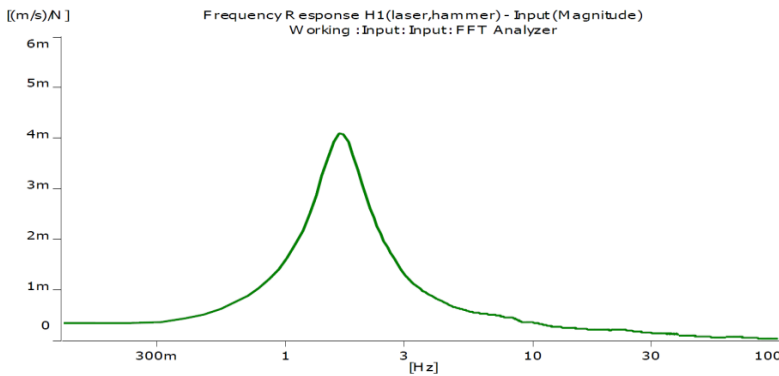
Vertical Direction

x-axis (Log scale) , y-axis (Linear scale)



Horizontal Direction

x-axis (Log scale) , y-axis (Linear scale)

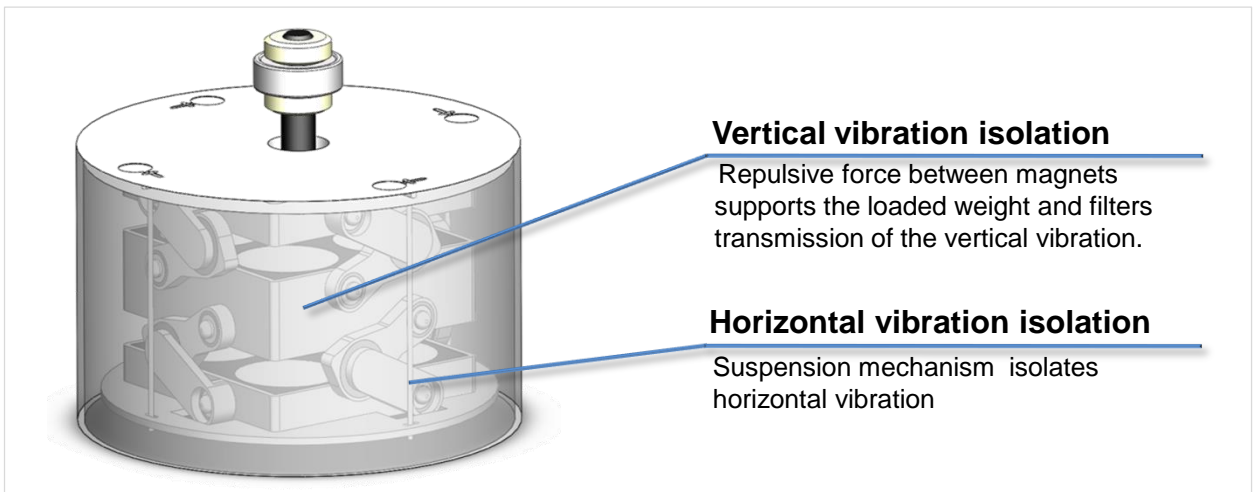


MegLevit reduced spring constant to improve performance of the module by combining spring and magnets. The reduction of spring constant maximized effect of anti-vibration by decreasing its natural frequency to vertical direction without increasing mass.

The frequency of the pendulum movement was decreased by using longer length of the wire of table top type module than table type module, so that horizontal anti-vibration was maximized.

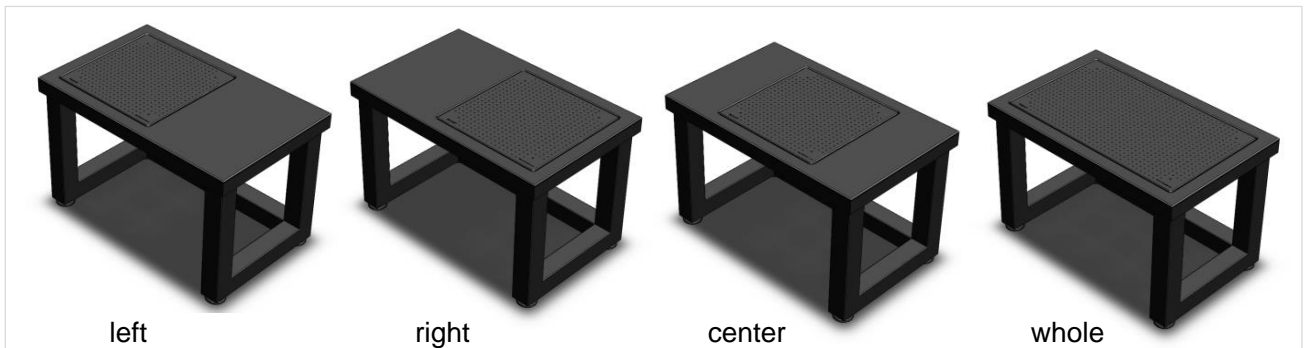
This module is higher than the module for table-top so that usually applied only to a table type. However, this module for table-top MagLevit can be manufactured depending on a customer's request.

Table Type MagLevit Module

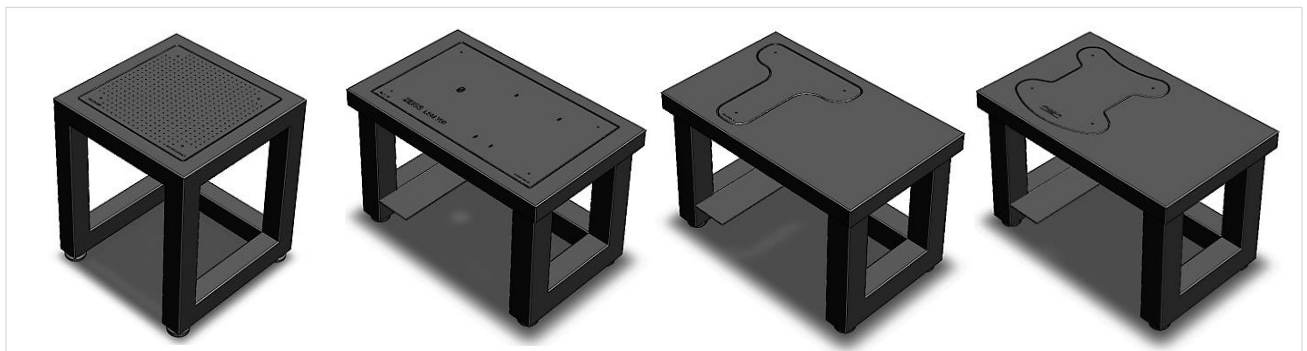


- We will custom-make any size of MagLevit.
- All types equipped on a specific table frame.
- The position of the table frame depends on a customer's request. (left, center, right and/ or whole)
- Table type MagLevit has height adjustable knobs inside.
- Standard size: 1,200mm(w) x 750mm(d) x 750mm(h)

Standard Table Type MagLevit



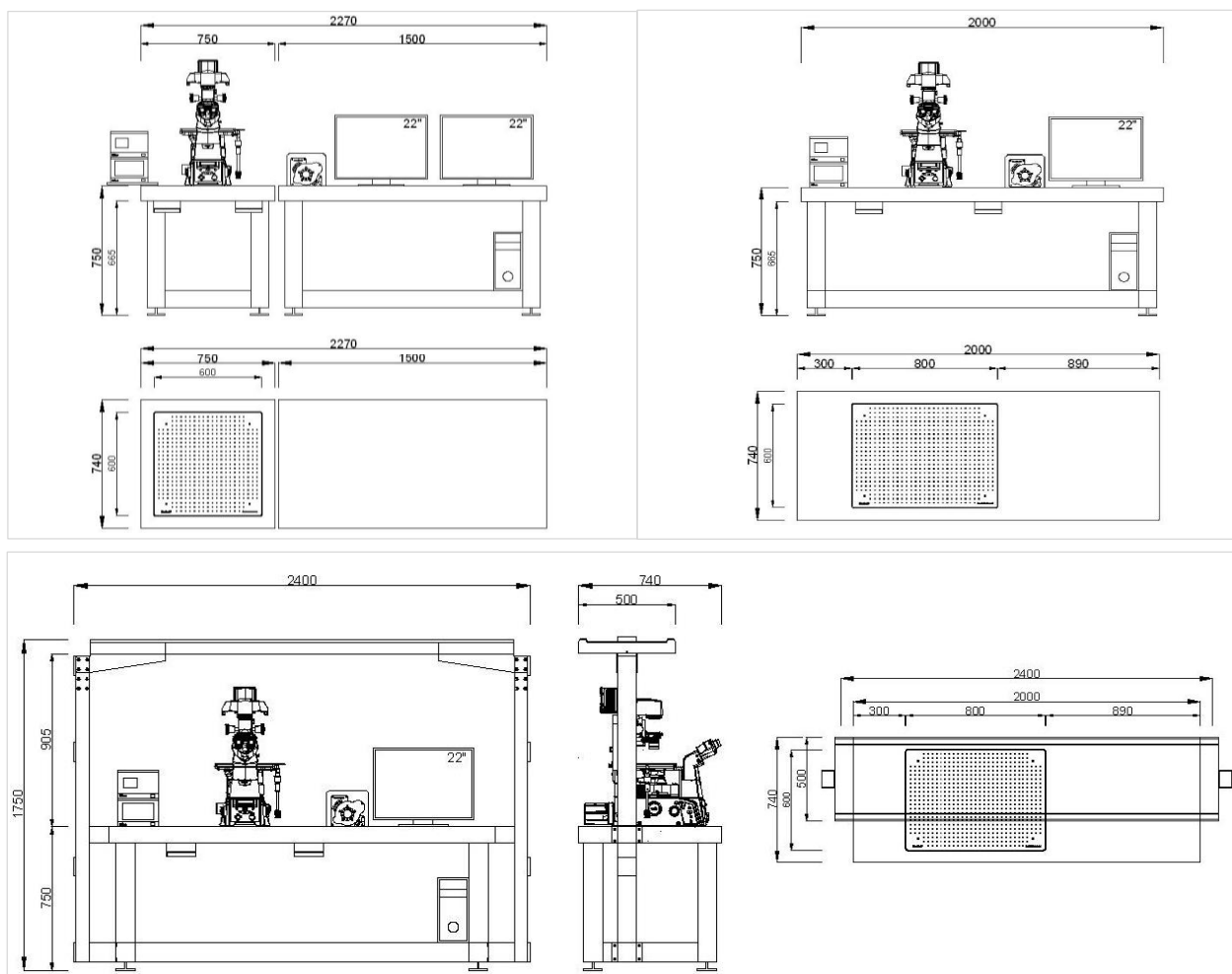
Custom-Make Table Type MagLevit



A variety of shapes and sizes of MagLevit tables with diverse shelves

Table Type MagLevit[®]

Technical Specification



Ordering Chart

Table Type MagLevit			
Anti-Vibration Plate Size	Model No.	Position of the MagLevit on the Table	Threaded Holes Pattern (M6 at 25mm spacing)
600 x 600mm	MF-6060	L (left), C (center), R (right)	Y (With threaded holes)
600 x 1,000mm	MF-6100	W (whole)	
Custom-make	MF-X-nnnn		N (Without threaded holes)

(e.g.)

(MF-X-nnnn)

MF-6060 R N

Table type MagLevit ————
 600x600mm plate size ———— Without threaded holes
 Right (Position of anti-vibration plate)