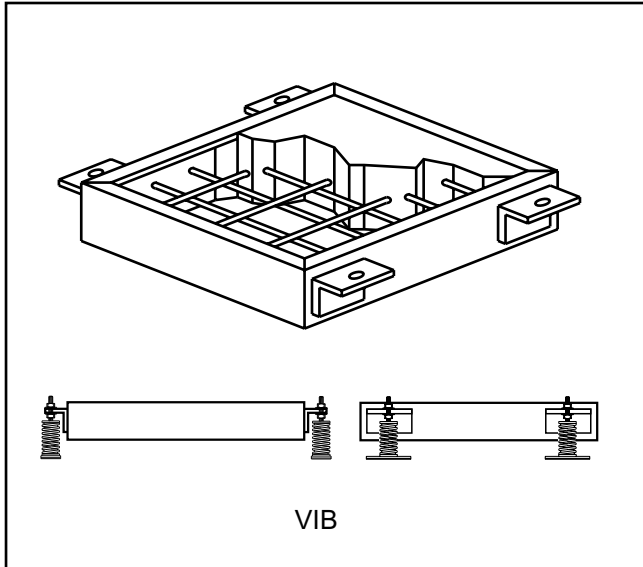


INERTIA BASES

Model VIB



APPLICATIONS

Inertia bases are designed to reduce noise and vibration transmission between plant equipment and the building structure. They are usually supported on helical steel spring mounts and are used to:-

- Provide stability to a system.
- Lower the centre of mass.
- Reduce coupled mode problems.
- Minimise the effect of external forces.
- Ensure an even load distribution.
- Add rigidity to the plant / equipment.
- Reduce the effect of centre of mass estimates.
- Provide suitable anti-vibration mount fixings.
- Reduce vibratory movement due to plant start-up and run-down as the resonant frequency is passed.

Max' Plant Weight (kg)	Frame Length L (mm)	Frame Width W (mm)	Frame Depth D (mm)	Concrete Weight (kg)	Product Code (MODEL-L-W-D)
50	500	500	150	90	VIB-0500-0500-150
70	750	500	150	135	VIB-0750-0500-150
100	750	750	150	202	VIB-0750-0750-150
140	1000	750	150	270	VIB-1000-0750-150
180	1000	1000	150	360	VIB-1000-1000-150
230	1250	1000	150	450	VIB-1250-1000-150
280	1250	1250	150	563	VIB-1250-1250-150
240	1000	1000	200	480	VIB-1000-1000-200
300	1250	1000	200	600	VIB-1250-1000-200
380	1250	1250	200	750	VIB-1250-1250-200
450	1500	1250	200	900	VIB-1500-1250-200
540	1500	1500	200	1080	VIB-1500-1500-200
630	1750	1500	200	1260	VIB-1750-1500-200
730	1750	1750	200	1470	VIB-1750-1750-200

SPECIFICATION

VIB - a formed steel frame (pre-galvanised) fitted with steel reinforcing bars, BZP steel 'outrigger' mounting brackets and supplied with anti-vibration mounts appropriate to the plant type and the category / efficiency of the vibration isolation required.

Heavy steel sections, such as RSC and RSA, may be used where necessary. These can incorporate 'inboard' mounting brackets.

Inertia Bases are normally supplied to site ready for filling with concrete.

A concrete mix having a ratio of 4 parts gravel : 2 parts sand : 1 part cement should be used to give a concrete density of approximately 2,400 to 2,500 kg/m³.

Heavy steel inertia plates can be used for small plant items where an inertia base would be too bulky.

OPERATING PARAMETERS

Ensure operation is within the following parameters:-

The vertical distance to the combined centre of mass from the top of the spring mounts must be less than horizontal distance.

The spring mounts must be outside the 'boundary' of the rotating mass.

All equipment must be rigidly coupled together as one mass on a single platform.

The mass of the platform must be very large compared to the mass of the plant, i.e. the platform must be twice that of the plant.

Flexible pipe connectors must be of the 'restrained' or 'tied' type.