Inertia Pouring Frame

Type IPF

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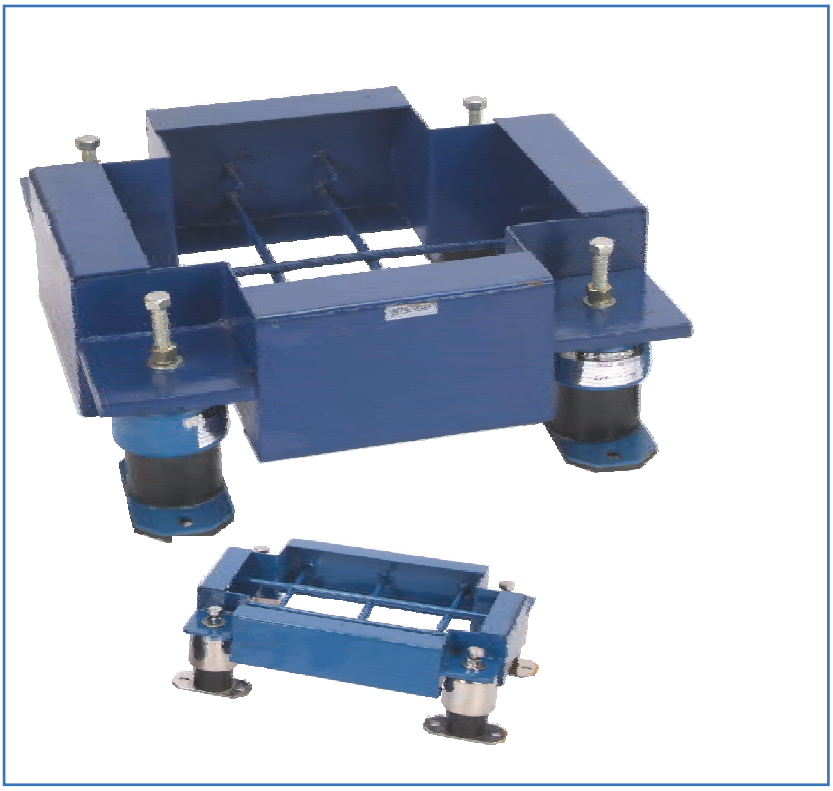
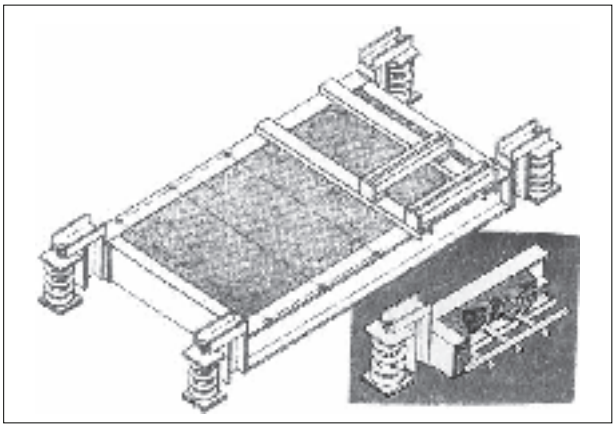
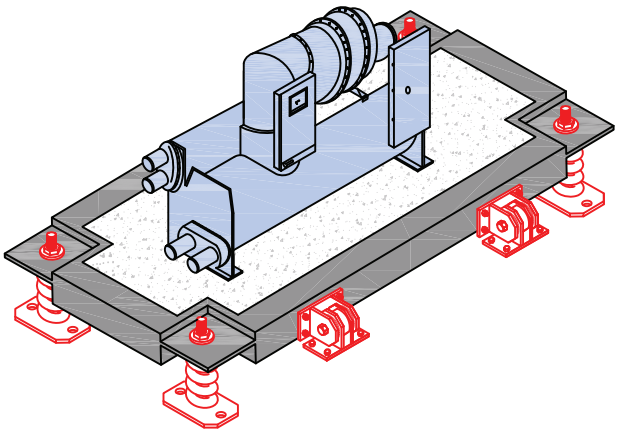
CHRISTIE & GREY







Inertia Pouring Frame has been developed for use with machines which produced high level of Vibration or those which are subjected to external forces or are simply unstable when mounted directly on high deflection/low stiffness helical spring or rubber Mountings for giving extremely high degree of vibration isolation without excessive motion.

Vibration attenuation is dependent on base rigidity as well as Isolator deflection. If the base becomes distorted because of weight distribution, belt pull or the torque introduced by a direct drive, the equipment will wear out more quickly and vibrate excessively because of the loss of the alignment.

Base RESONANCE is another difficulty that can result from poor frame construction, If base members are light and long, they will tend to RESONATE at low frequencies that may be sympathetic or close to the operating speeds of the mounted equipment.

The Frame is of fully welded construction with reinforcing bars and can be straight away filled at site with concrete to become rigid floating concrete platform.

The inertia weight of the concrete will also reduce the operating amplitude of equipment.

Viscous Damper can be incorporated to further control motion during transient conditions such as machine run-down and machine faults.

Height saving brackets can be used to further lower the Centre of Gravity for better stability.

TYPICAL APPLICATIONS

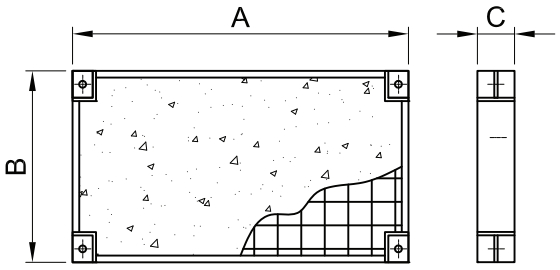
- Compressors
- Generating Sets
- Engine/Dynamometer Test Rigs
- Refrigeration Plant
- Pumps (particularly Belt Driven)

RESISTOFLEX
SINCE 1947
Vibration Shock Seismic Control

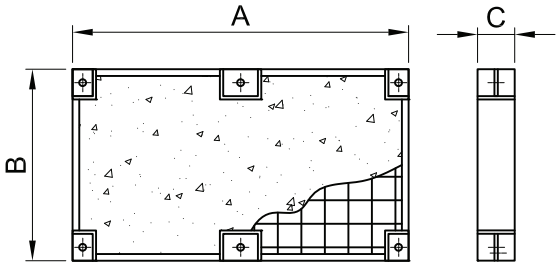
Inertia Pouring Frame

IPF

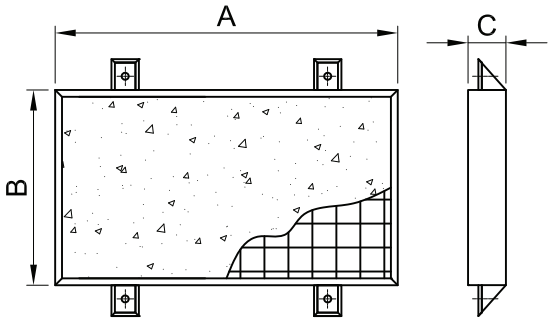
STANDARD DESIGN



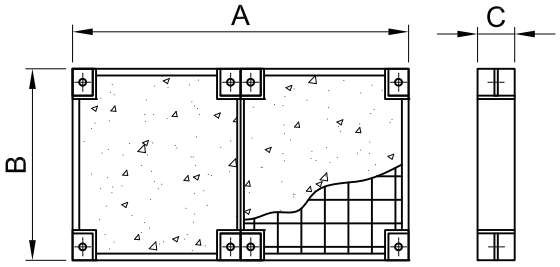
INTERMEDIATE BRACKETS FOR LONGER BASES



CANTILEVER BRACKET DESIGN FOR LARGER MOUNTINGS



SECTIONAL DESIGN FOR LONGER BASES



NOTE: For frame sizes coloured grey additional mountings should be used or a deeper frame selected.

STANDARD FILLED FRAME WEIGHTS & SIZES

TECHNICAL CHARACTERISTICS			
FRAME SIZE AXB (mm)	C=150mm	C=200mm	C=300mm
	WT(Kg)	WT(Kg)	WT(Kg)
600 X 600	122	160	237
750 X 600	154	203	300
900 X 600	186	245	363
1200 X 600	250	330	489
1500 X 600	314	414	615
750 X 750	194	255	379
900 X 750	233	308	457
1200 X 750	313	413	613
1500 X 750	392	518	770
1800 X 750	471	623	926
900 X 900	281	371	550
1200 X 900	375	496	737
1500 X 900	470	621	924
1800 X 900	564	747	1111
2100 X 900	See Note	872	1298
1050 X 1050	383	506	753
1500 X 1050	548	725	1079
1800 X 1050	658	871	1297
2100 X 1050	See Note	1016	1514
2400 X 1050	See Note	1162	1732
1200 X 1200	500	662	985
1500 X 1200	626	828	1233
1800 X 1200	751	995	1482
2100 X 1200	See Note	1161	1730
2400 X 1200	See Note	1327	1978
1400 X 1400	681	902	1343
1800 X 1400	876	1160	1728
2100 X 1400	See Note	1353	2017
2400 X 1400	See Note	1547	2306

Frame weights include concrete at 2245Kg/m^3 and mounting selections are based on 4 mountings per frame allowing 50% additional weight for the equipment to be supported. Nominal 25mm deflection Isolators, however the exact deflection will vary depending on the applied load.

Design and Installation Notes:-

- The equipment should be located on the frame such that the load is evenly distributed over the mounting positions.
- Equipment and ancillary parts should not overhang the frame and hold down bolts MUST NOT be less than 100mm from the outer edge of the frame.
- All connections to the equipment should incorporate flexible sections and pipe work etc must be independently supported.
- Grade 25 (25N/mm^2) concrete should be used as a minimum strength requirement for filling Inertia Pouring Frames.
- When filling frames with concrete, positions on flat and level fully supported shuttering board with a polythene separations layer. Mountings should NOT be fitted at this stage.