

Farrat Isolevel designs and manufactures steel formwork for reinforced concrete inertia blocks as part of a scheme for the structural isolation of machines.

The **Farrat INERTIA BASE FORM** which is a permanent encasement for concrete contains steel reinforcement, machine holding down bolts and the facility for attaching a vibration and shock isolation system.

An **INERTIA BASE FORM** simplifies the construction of a machine foundation block. The only builder's work required is pouring and floating level a suitable grade of concrete and then grouting the pockets of the holding down bolts after the machine has been set in position.

There are several reasons for considering the use of a concrete foundation block when devising an effective vibration isolation system:

Increasing machine stiffness so as to maintain accurate alignment and level particularly during changes in load distribution.

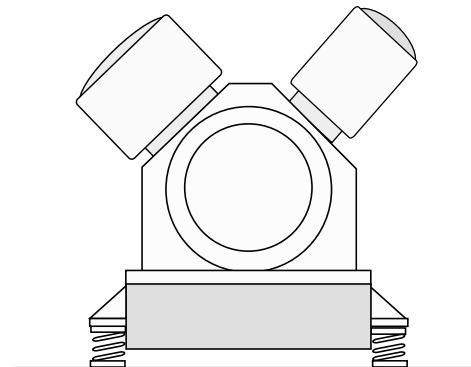
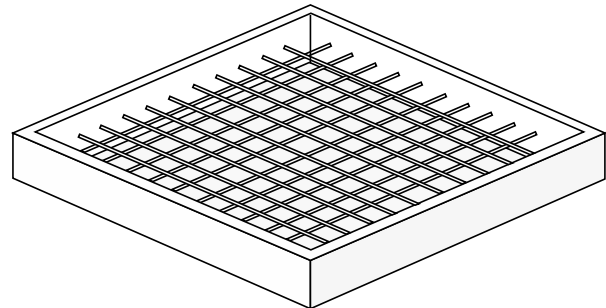
To increase the inertia mass of a flexibly supported machine and limit dynamic movement.

An improvement in the stability of the isolation system by lowering the position of centre of gravity.

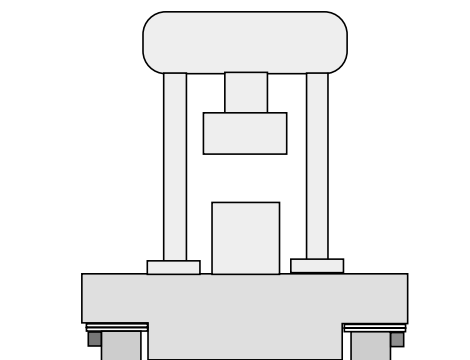
A Farrat **INERTIA BASE FORM** consists of a fabricated folded and welded sheet steel container suitably stiffened for rigidity. As standard, all external surfaces are finished in two coats of red oxide paint, internally the metal is self finish.

Concrete reinforcement bars and hooks are fully welded into the **BASE FORM**. Machine holding down bolts having a small amount of lateral clearance are located in steel grouting pockets. **BASE FORMS** can incorporate sockets, jacking plates, slotted rails or any method of machine fixing to suit a specific requirement.

There is no limitation to the size of a **BASE FORM** since prefabrication and final assembly can be carried out on site.



Increase in the inertia mass



Lower position of the centre of gravity

The **INERTIA BASE FORM** should be placed onto a layer of 50mm thick expanded polystyrene boards on a flat level floor.

The edge of the boards should have small sections removed for the later insertion of toe jacks.

Concrete to Grade (CP 110) with anti-shrinkage and non-dusting additives is poured, vibrated and floated off to the top edge of the **BASE FORM**.

Care should be taken to ensure that the wet concrete does not impair the machine fixing facility.

After an established curing time for concrete the machine can be placed on the **BASE** then levelled and fixed in the conventional manner. Holding down bolts can be secured by the use of a proprietary grout.

Toe jacks can be inserted under the edges of the **BASE** and the polystyrene boards removed.

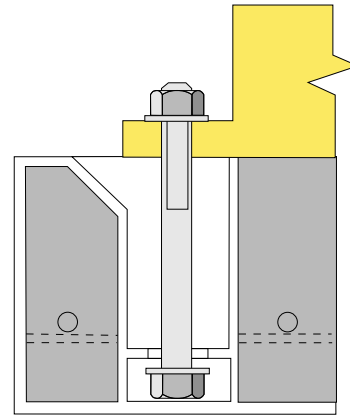
Farrat Vibration Isolation Mounts or Materials can be installed and commissioned following instructions supplied by Farrat Isolation Techniques.

A) Brackets located on the side of the **INERTIA BASE FORM** provide a convenient facility for lifting and subsequent attachment of vibration isolators. Correctly positioned isolators will greatly improve the stability of the isolated system.

B) Stud or tapped insert fixings hooked into the concrete permit side fixing of bracket type isolators or other supplementary devices.

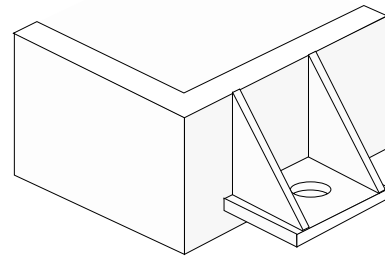
C) It is quite common for **INERTIA BASE FORMS** to have recessed lower edges in order to accommodate the isolation equipment without protrusions. This feature makes for a very attractive installation whilst providing extra stability.

Against receipt of full information, free advice and proposals will be given for all Farrat Isolation Technique's products. A charge may be made where a detailed site survey is required involving vibration measurements.

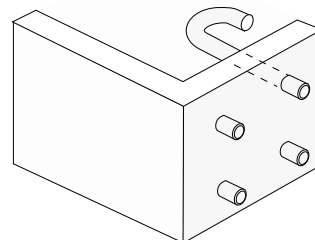


Bolt to be adjusted before grouting

A



B



C

