Isoblocs

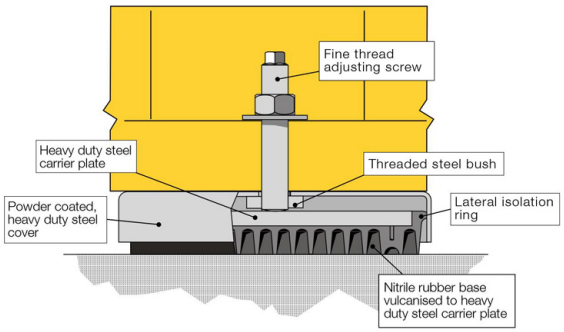
High Load Shock and Vibration damping Levelling Mounts

For more information visit: **www.farrat.com**

Why choose Farrat Isoblocs?

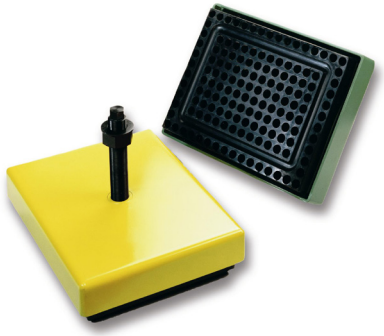
Farrat Isoblocs have been developed specifically for, although their use is not limited too, power presses to provide effective vertical and horizontal shock absorption, vibration isolation and damping as well as easy and precise levelling on a much larger scale than Isomounts.

Load range from 7,500kg up to 50,000kg per mount.



Features & Benefits

- Load capacity up to 50 tonnes
- Precision fine screw thread height adjustment
- Excellent, proven, vertical and horizontal shock and vibration isolation performance
- Machine installation without bolting down or grouting



Layout Flexibility

Farrat Isoblocs provide a simple, economical and flexible solution to factory or plant room layout planning, enabling easy installation and movement of machines without the need for bolting down or grouting.

Fig. 1.1 Power Press installed on Farrat Isoblocs

Quality & Durability

Farrat Isoblocs are manufactured from the highest quality powder coated steel and Farrat NBR isolation materials. The design has been continuously improved to ensure long term durability against mechanical degradation and chemical corrosion. This is proven with hundreds of worldwide industrial applications.

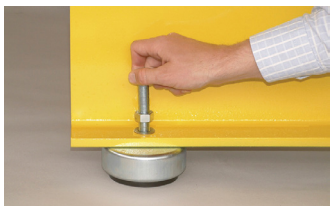
Typical Applications

- Diecasting Machines
- Diesel Generators
- Injection Moulding Machines
- Testing and Measuring Machines
- Rubber Machinery
- Presses: Forging, Hydraulic and Mechanical

Fig. 1.2 Die Casting machine installed on Farrat Isoblocs

Farrat Isobloc Installation and Levelling Guide

Farrat Isoblocs are as simple and efficient to install as Farrat Isomounts.

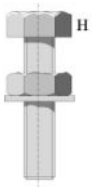


Hexogonal Head (H)

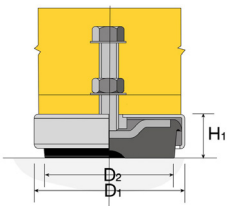
- Place machine on temporary packing e.g. blocks of wood about 10mm thicker than the minimum height of selected Farrat Isomount or Farrat Isobloc. Place mounts under machine base, at bolt hole positions.
- Place steel washer on top of machine base over hole and pass adjusting screw into threaded hole in mount until the Isomount or Isobloc touches the machine.
- With all the mounts installed, tighten up each adjusting screw clockwise until each Isomount starts to take load. Take away packings so that the machine rests on Isomount. Machines can now be levelled using the Isomount or Isobloc adjusting screws.

  NOTE: If the machine is heavy, only make small upward movements at a time or if necessary assist upward movement with jack.
- Once levelled, tighten up locking nuts on adjusting screws. Remember to undo locknuts before re-adjusting mounts.

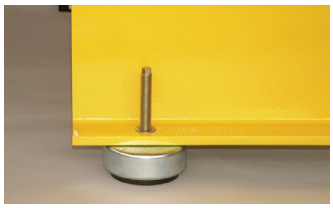
Check the level of the machine after 24hrs operation, and re-level if necessary. Check machine level periodically according to machine manufacturer's recommendations or at least every 6 months, whichever is sooner.

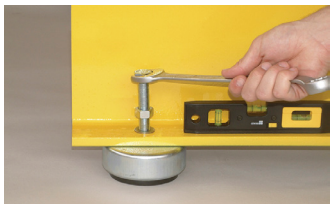


H



Use of additional steel spacer in case the Farrat Isobloc height adjustment is not sufficient.



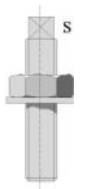


Squarehead (SH)

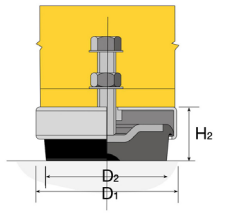
- Place machine on temporary packing e.g. blocks of wood about 10mm thicker than the minimum height of selected Farrat Isomount or Farrat Isobloc. Place mounts under machine base, at bolt hole positions.
- Lower machine onto the Isomount or Isobloc so that the bolt passes through the bolt hole.
- With all the mounts installed, tighten up each adjusting screw clockwise until each Isomount or Isobloc starts to take load.
- Take away packings so that the machine rests on Isomount or Isobloc. Machines can now be levelled using the Isomount or Isobloc, adjusting screw.

  NOTE: If the machine is heavy, only make small upward movements at a time or if necessary assist upward movement with jack.
- Once levelled, tighten up locking nuts on adjusting screws. Remember to undo locknuts before re-adjusting mounts.

Check the level of the machine after 24hrs operation, and re-level if necessary. Check machine level periodically according to machine manufacturer's recommendations or at least every 6 months, whichever is sooner.



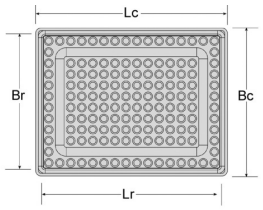
SH

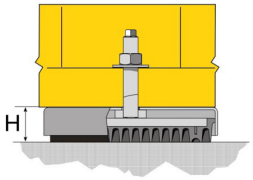


Use of additional steel spacer in case the Farrat Isobloc height adjustment is not sufficient.

Adjusting Screws Sizes & Lengths Available

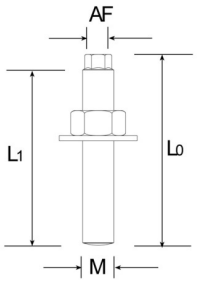
Farrat Isobloc (ISB) - Dimensions and Capabilities						
Isomount (ISO)	**ISB variants**		**Units**	**Isobloc ISB 10**	**Isobloc ISB 25**	**Isobloc ISB 50**
Maximum Load / Mount	-70		kg	7,500	18,000	36,000
	-80		kg	10,000	25,000	50,000
Cover	Length	Lc	mm	284	434	675
	Width	Bc	mm	234	334	475
Rubber base	Length	Lr	mm	250	400	600
	Width	Bc	mm	200	300	400
Overall Mount Height (unloaded)	Min	Hmin	mm	87	87	150
Max		Hmax	mm	109	109	180
Height Adjustment			mm	22	22	30





Farrat Isobloc (ISB) - Static Spring Constant (K)						
Isomount (ISO)	**ISB variants**		**Units**	**Isobloc ISB 10**	**Isobloc ISB 25**	**Isobloc ISB 50**
Vertical	-70	Ksv	kN/mm	6.25	15	29
Horizontal	-70	Ksv	kN/mm	2.3	5.5	10
Vertical	-80	Ksv	kN/mm	9	22	42
Horizontal	-80	Ksv	kN/mm	3.3	8	14
Damping Factor		C/Cc		0.09	0.09	0.09
Ratio Dynamic to Static Modulus				2.4	2.4	2.4

Farrat Isobloc (ISB) - Standard Adjusting Screws (SH)							
Zinc Plated Steel Grade 8.8 with 1 Nut & 1 Washer - Dimensions in mm							
For ISB variant		10	10	10, 25	25, 50	25, 50	50
Threads	**SH**	**M24 x 1.5**	**M30 x 1.5**	**M36 x 1.5**	**M42 x 1.5**	**M48 x 2.0**	**M56 x 2.0**
AF	mm	17	24	27	32	36	41
Length - Lo* (to be specified)	**mm**	**170**	**170**	**220**	**220**	**220**	**220**
Lengths - L1	mm	160	160	200	200	200	260



Farrat Isobloc Selection

Select Mounts so that the below equation result is within the maximum load mount given in the table above. If the machine is made up of sections, calculate load per mount for each section:

$$\frac{\text{Machine + Tooling + Workpiece Weight (Kg)}}{\text{Number of Mounts}}$$

Order example (mount + screw assembly):
ISB10-70 + SH30x1.5x170

Next Steps:

For further information, technical advice or to place an order, please contact us:

T. +44 (0) 161 924 1600
E. sales@farrat.com
W. www.farrat.com

This brochure features our standardised range. Other damping/isolation materials are available and we would happily draw upon our 57+ years' experience to advise you on an appropriate solution for specialised applications.