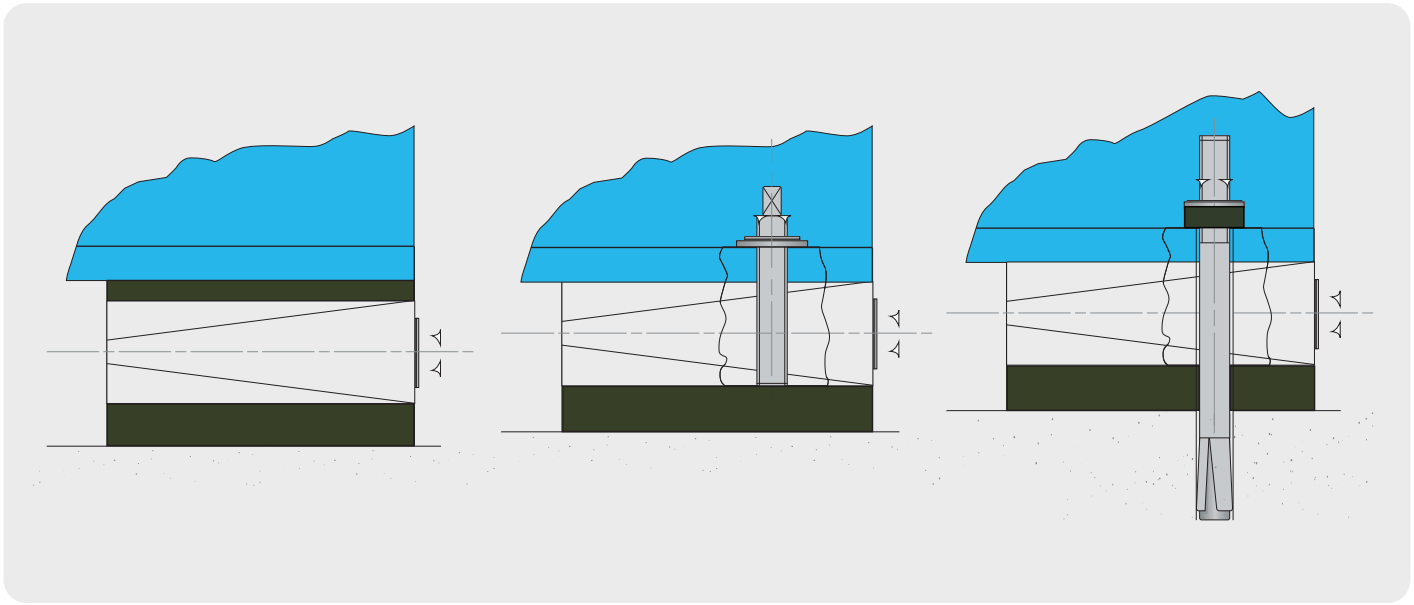
Farrat
ENGINEERS ON A MISSION

Data Sheet

Farrat Wedgemounts

Levelling Mounts with Anti-Vibration and Damping Variants



Wedgemounts

Wedgemounts are Levelling Mounts with Anti-Vibration Variants.

Farrat Wedgemounts have provided the ideal solution for accurate, efficient and economical machine installations globally, for over 50 years. Whether you are relocating existing machinery, a machine manufacturer, or simply require a better solution for your existing installation, Farrat can help.

Features and Benefits

- Enhanced mechanical advantage for easier levelling
- Enhanced machine stability which provides high stiffness and support in both horizontal and vertical directions
- Damping pads reduce vibration within the machine and contribute to the isolation of the foundation below
- Easy installation and relocation of machines
- Flexibility in applications where high loads and/or damping is required

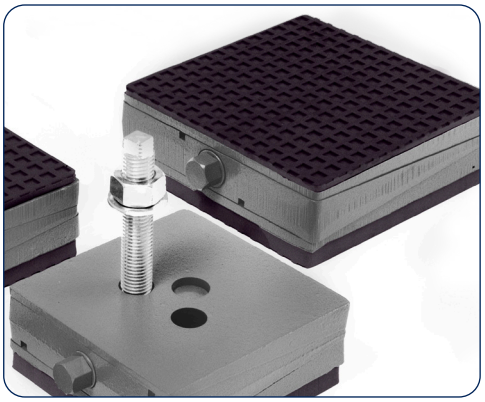
Typical Applications

- General Machine Tools
- Printing Machines
- CNC Lathes and Machining Centres
- Boring and Milling Machines
- Injection Moulding Machines
- Die-Casting Machines
- Grinding Machines
- Transfer Machines
- Rolling Mills
- Long Bed Machinery
- Building and Structures
- Civil Engineering

Precision Levelling and Damping Options

Farrat Wedgemounts are designed to cover all standard requirements. They are available in 10 sizes and offer load capacities up to 25 tonne per mount. There are 3 standard damping options, 3 installation options and a range of accessories including Farrat Screw Assemblies, Farrat Anti-Vibration Washers and Farrat Spheriseats.

The Standard Grade* offers the greatest amount of damping but does have the greatest compression under load, so is recommended for machines which have a high level of structural stiffness. The Very Stiff Grade* offers the greatest support with little deflection, but with the benefits of micro-damping to improve the performance of the machine. To achieve the greatest support / stiffness for a machine, the Precision Wedgemount without pads is recommended.
See datatables on page 6 for Grade details.

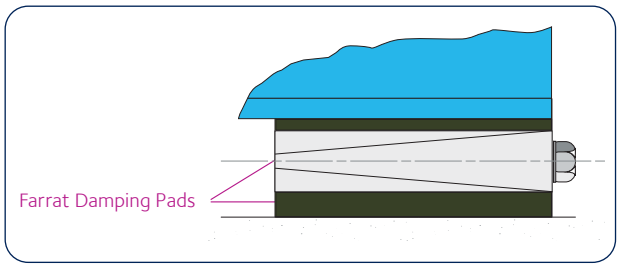


Global Reach

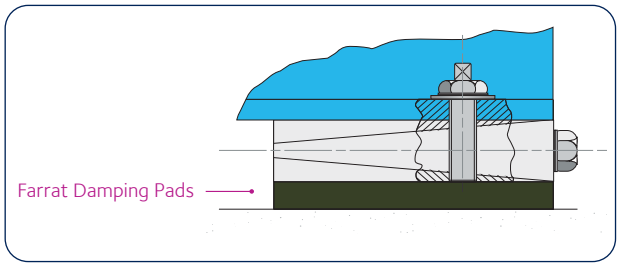
Farrat supplies directly to a broad range of customers in size and industry, across all continents. Customers range from the Original Equipment Manufacturers, end users relocating machinery, to Production Engineers wishing to enhance operational effectiveness.

Farrat Wedgemounts are available in three forms:

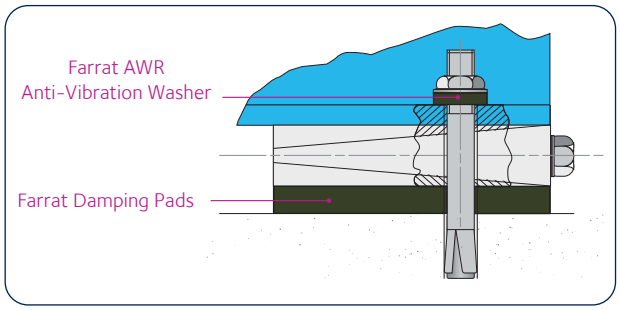
Freestanding (F) The machine rests on the Wedgemount with no bolted connection. The top pad aids damping and provides a high friction surface for the machine foot to grip to.



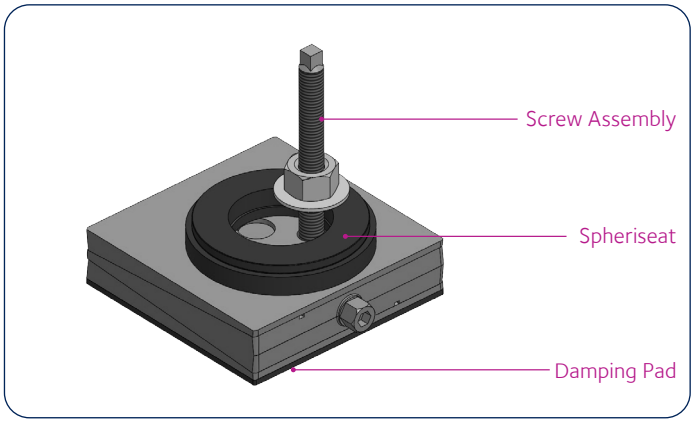
Bolt-On (B) The machine is bolted to the Wedgemount which sits on the floor ensuring a fixed connection between the Wedgemount and machine. This helps with machine installation as the Wedgemount can be fitted to the machine prior to final machine placement.



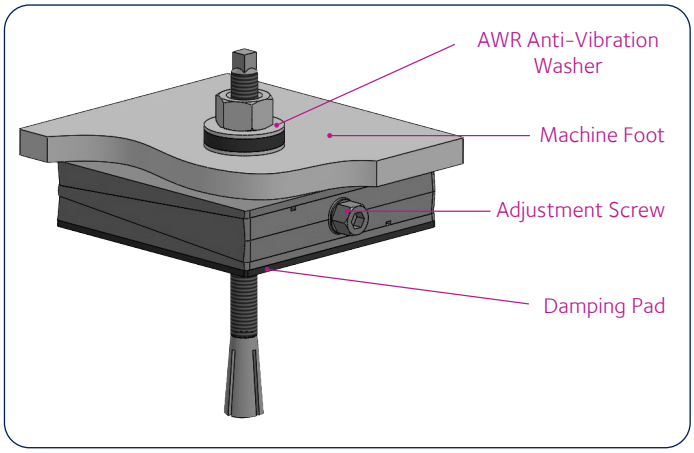
Bolt-Through (T) The machine is bolted through the Wedgemount and into the foundation. This option provides the stiffest connection and is used for large bed / low stiffness machines where the foundation can add to the stiffness of the machine. Anti-vibration washers are required with this option to prevent vibration bridging through the bolted connection.



Bolt-On Wedgemount
(Showing Farrat Spheriseats as an option)



Bolt-On Wedgemount



Wedgemount Accessories

- Farrat Spheriseats fit on the top plate of the Farrat Wedgemount and allow up to 3.2° misalignment for when the floor is not level, providing equal distribution of the load through the Wedgemount
- Farrat Screw Assemblies are offered as an option for the Bolt-On Wedgemount
- Farrat AWR Anti-Vibration Washers are required for Bolt-Through Wedgemounts with damping pads to prevent the vibration bridging through the holding down bolt

Wedgemount Installation

Heavy Machinery Installation on Wedgemounts and Precision Levelling Elements

METHOD 1: WHERE FACILITIES ARE AVAILABLE FOR LOWERING MACHINE ONTO THE MOUNTS USING A CRANE.

Figures 1.1 and 1.2

1. Place the mounts in position on the floor.

2. Adjust them all to a common height using a laser level or straight edge and spirit level from one mount to the next.

Figure 1.3

2b. If there is insufficient adjustment on any mount to cater for excessive floor slope or uneven surfaces, individual mounts may be packed up to bring them in line with the others using a combination of steel plates and Farrat Squaregrip pads. Packers can consist of a steel plate with a 5mm thick Farrat Squaregrip SG (SG5P2) pad bonded to the underside. The packer should be at least the same size as the underside of the mount.

Figure 1.4

3. The machine can now be lowered onto the mounts.

Figure 1.5

4. Carry out fine levelling of the machine. Should it be found that a mount requires undue torque, incrementally adjust the neighbouring mounts so that the lifting load is shared by several mounts, or use ancillary jacks.

5. After the machine has been levelled, check that each mount is taking load by applying a spanner to each screw and ensuring that the mount is tight.

6. Check alignment after 24 hours and correct if necessary.

7. Check alignment after one weeks service and correct if necessary.

8. Wedgemount installation enables any foundation settlement to be readily and quickly corrected by adjustment to the mounts. Check alignment once every six months, or at other intervals depending on machine manufacturer's recommendations.

Figure 1.1

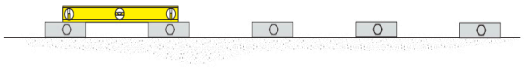


Figure 1.2

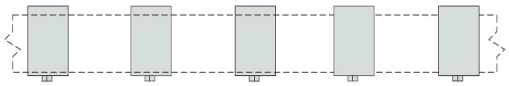
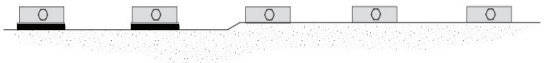


Figure 1.3



Steel plate and Farrat Squaregrip Pads used to bring pads level with others

Figure 1.4

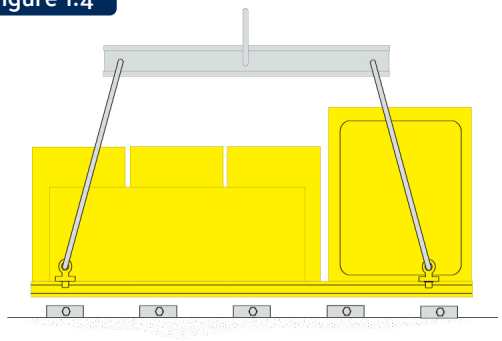
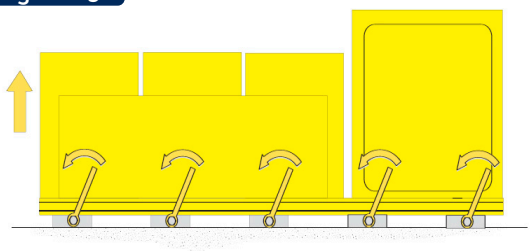


Figure 1.5



METHOD 2: WHERE NO CRANE FACILITIES ARE AVAILABLE.

Figures 2.1

9. Before the machine is brought into position place the mounts on the floor and adjust them all to a common height using a laser level or straight edge and spirit level from one mount to the next. Mark the location of each mount then move them to one side.

Figure 2.2

10. Bring the machine into position and leave on temporary packing, or rollers or jacks. Ensure that there is sufficient gap between the underside of the machine and the floor to accommodate the mount.

Figure 2.3

11. Place the mounts into position again under the machine, jacking the machine further if necessary.

12. Withdraw the temporary supports, lowering the machine onto the mounts.

13. Proceed as paragraphs: 4, 5, 6, 7 & 8 on previous page. Figure 2.4

14. Ensure that before the machine is lowered onto the mounts, the sliding surfaces of the WL mounts are all in contact with each other, i.e., that the wedges have not ridden up on their keys.

15. Never use excessive torque when adjusting upwards. Bring up several mounts together in small increments. This will ensure that the heavy overloads during levelling can be shared by several mounts. Alternatively use ancillary jacks.

16. Ratchet spanners provide the quickest way of adjusting WL mounts.

Figure 2.5 - Twisted Machine Bases

17. Should the machine be twisted, it may be possible to correct this by temporarily jacking the machine (with the WL mounts) in opposition to the twist and leaving for 24 hours.

Figure 2.6 - Alternatively

18. If the twist is excessive then the preceding method may not work. This would be particularly the case if a light end of the machine was twisted relative to a heavy end. In this case it will be necessary to clamp the machine down on the high side of the twist and adjust the mounts on the low side until the twist is pulled out.

Figure 2.1

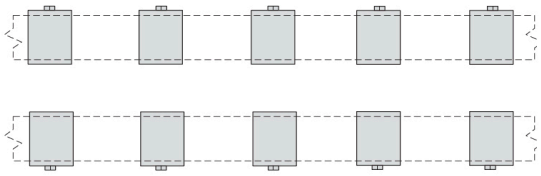


Figure 2.2

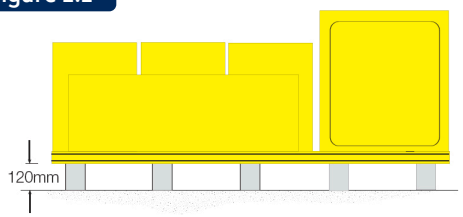


Figure 2.3

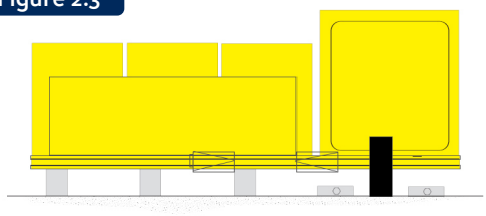


Figure 2.4

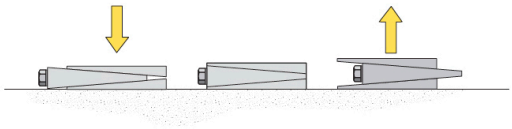


Figure 2.5

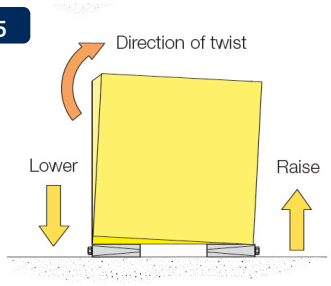
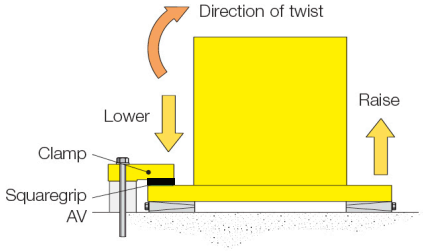


Figure 2.6



How to select Farrat Wedgemounts

STEP 1.

If damping is required, please refer to Table 1 to select the appropriate grade of damping.
If no damping is required, the grade will be P for Precision Levelling with no pads. Selection is made according to whether the Wedgemount is Free Standing, Bolt-On or Bolt-Through. A Selection Example is provided on Page 5 and highlighted in the tables.

Table 1 Machine Type, Damping Grade and Connection Type

	Free Standing			Bolt-On / Bolt-Through			
Damping Grade	**A**	**B**	**E**	**F**	**G**	**H**	**P**
Level of Flexibility	Standard	Stiff	Very Stiff	Standard	Stiff	Very Stiff	Precision
Top Plate Pad Type	SG05TP	SG02PP	SG02PP	-	-	-	-
Bottom Plate Pad Type	SG15TP	SG05PP	SG02PP	SG15TP	SG05PP	SG02PP	-
General m/c tools	✔			✔			For applications where Precision Levelling is required with no damping.
Printing machines	✔			✔			
CNC lathes		✔			✔		
Machining centres		✔			✔		
Boring machines		✔			✔		
Milling machines		✔			✔		
Grinders		✔			✔		
Transfer machines		✔			✔		
Long bed machinery			✔			✔	

STEP 2.

The next step is to select the **size** of Wedgemount appropriate for the **load** and Wedgemount **dimensions**

Table 2 Freestanding Wedgemount Style Dimensions and Load Ratings

				Load capacity per mount (kg) / mid height, h (mm)						
Size Ref.	**Length, l (mm)**	**Width, w (mm)**	**Height Adjustment, n (+/- mm)**	**A**	**B**	**E**	**F**	**G**	**H**	**P**
1R	115	80	5	1,000 / 60	1,300 / 47	3,000 / 44				3,000 / 40
2R	150	75	5	900 / 60	1,200 / 47	3,000 / 44				3,000 / 40
2S	115	115	6	1,300 / 66	1,600 / 53	4,000 / 50				4,000 / 46
3R	200	95	6	1,900 / 66	2,200 / 53	6,000 / 50				6,000 / 46
3S	150	150	6	2,300 / 66	3,000 / 53	7,000 / 50				7,000 / 46
4S	200	200	6	4,000 / 66	5,000 / 53	12,000 / 50				12,000 / 46
5R	250	115	9	3,000 / 90	4,000 / 77	9,000 / 74				9,000 / 70
5S	200	200	10	5,000 / 92	6,000 / 79	12,000 / 76				12,000 / 72
6R	200	250	10	6,000 / 92	7,000 / 79	14,000 / 76				14,000 / 72
7R	250	330	9	9,000 / 90	10,000 / 77	25,000 / 74				25,000 / 70

Reference: R = Rectangle Wedgemount, S = Square Wedgemount

Table 3 Bolt-On and Bolt-Through Wedgemount Style Dimensions and Load Ratings

				Load capacity per mount (kg) / mid height, h (mm)						
Size Ref.	**(mm)**	**(mm)**	**(+/- mm)**	**A**	**B**	**E**	**F**	**G**	**H**	**P**
1R	115	80	5				900 / 55	1,200 / 45	3,000 / 42	3,000 / 40
2S	115	115	6				1,300 / 61	1,600 / 51	4,000 / 48	4,000 / 46
3S	150	150	6				2,300 / 61	**3,000 / 51**	7,000 / 48	7,000 / 46
4S	200	200	6				4,000 / 61	5,000 / 51	12,000 / 48	12,000 / 46
5S	200	200	10				5,000 / 87	6,000 / 77	12,000 / 74	12,000 / 72
6R	200	250	10				6,000 / 87	7,000 / 77	14,000 / 74	14,000 / 72
7R	250	330	9				9,000 / 85	10,000 / 75	25,000 / 72	25,000 / 70

STEP 3.
Having selected any required damping / isolation, Wedgemount size, the next step is to select any additional requirements from Table 4.

Table 4 Wedgemount Range Specifications and Accessories

					Bolt-On Only		Bolt-Through Only	
Size Ref.	**Mass (Kg)**	**Adjusting Nut Size A/F (mm)**	**Rise Per Full Turn (mm)**	**Farrat Spheriseat Size**	**Thread Size Metric**	**Farrat Screw Assemblies**	**Clearance Hole Size (mm)**	**Farrat AWR Anti- Vibration Washers**
1R	2.6	17/8	0.307	1SPS-80	M12	1SN1210	14	1AWR12
2R	3.2	19/10	0.28	1SPS-80				
2S	3.5	19/10	0.396	1SPS-110	M16	1SN1610	18	1AWR16
3R	5.25	22/12	0.325	1SPS-110				
3S	6.9	19/10	0.303	1SPS-150	**M20**	**1SN2010**	23	1AWR20
4S	11.8	22/12	0.26	1SPS-150	M20	1SN2010	23	1AWR20
5R	13.5	24/12	0.304	1SPS-110				
5S	14.35	30/17	0.575	1SPS-150	M20	1SN2010	22	1AWR20
6R	18	30/17	0.575	1SPS-150	M20	1SN2010	24	1AWR20
7R	28.5	30/17	0.4		M24		26	1AWR24

For further details on Farrat's Wedgemount Accessories, please refer to the tables on page 6.

Selection Example:

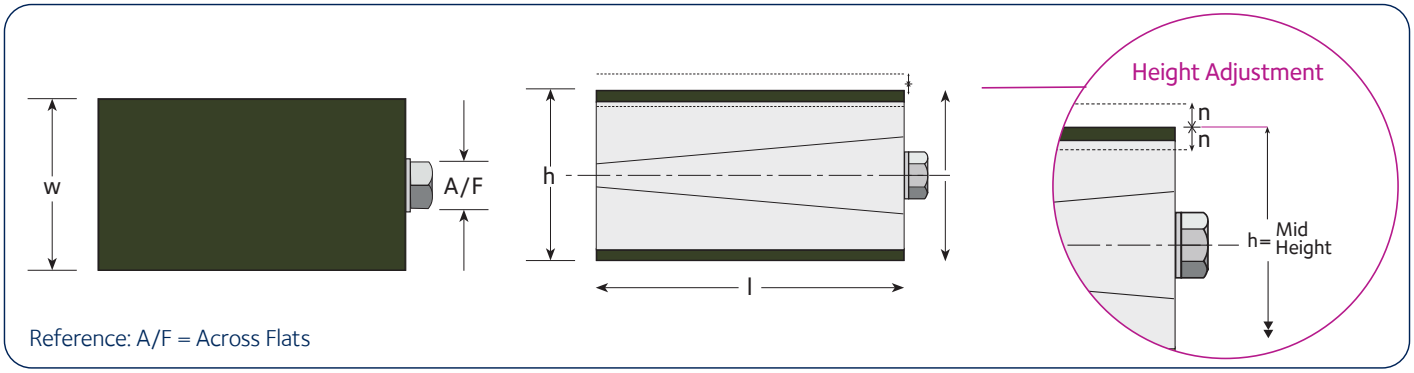
10 tonne CNC lathe with four points each supporting an equal amount of load. Load per Wedgemount = 2,500kg. Machine foot dimensions are 200mm x 200mm with a central 22mm clearance hole. The machine foundation is to be re-located on a flat concrete base.

Step 1: Select Damping Grade - Using Table 1, select the Machine Type from the left hand column and search across to where a tick indicates the correct damping grade according to the fixing type. Result: Damping Grade G.

Step 2: Select the Wedgemount style and dimensions - As the fixing type is Bolt-On refer to Table 3 and column G to find an equal or greater load per Wedgemount (2,500Kg). 3S has a load capacity of 3,000Kg for a Damping Grade G. The second number in the cell provides the mid-height of that size Wedgemount including the damping pads, which is 51mm. Table 3 indicates that the 3S Wedgemount has plan dimensions of 150mm x 150mm which is acceptable as the full area of the Wedgemount is under load. Point or part loads are not recommended as this may affect the performance of the Wedgemount.

Step 3: Check whether the bolt thread size is suitable - Referring to Table 4, the bolt thread size of the 3S Wedgemount is M20 which fits in a 22mm clearance hole, so it is suitable. As Bolt-On Wedgemounts require a Screw Assembly, this can be selected from Table 4, which indicates that the 1SN2010 is appropriate for 3S Wedgemounts. If some points of the floor are not parallel to the other points, Spheriseats are recommended on all Wedgemounts as they allow up to 3.2° of angular misalignment to ensure the load is supported evenly and at an equal height. For the 3S, this would be part reference 1SPS-150.

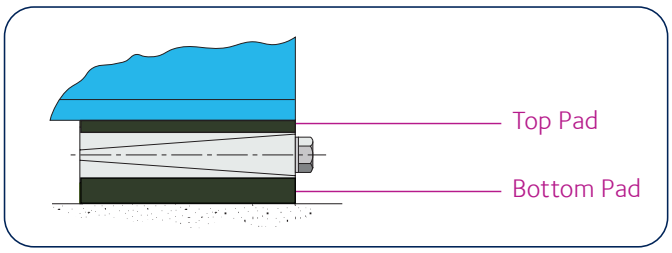
This worked example is for use as a guide only. Please contact us if you have any queries about the selection of an appropriate solution.

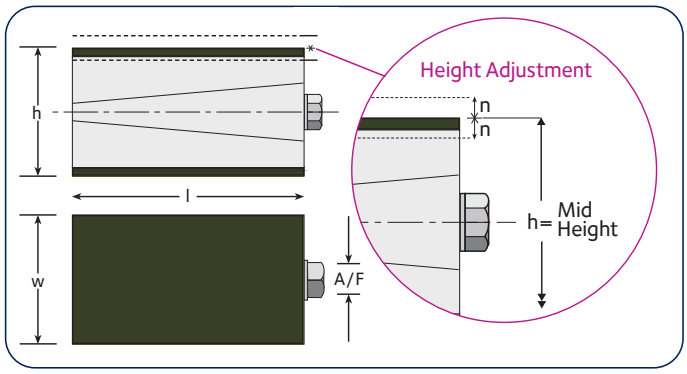


Reference: A/F = Across Flats

Wedgemount Standard Size Range

Variants for **Freestanding** Wedgemounts



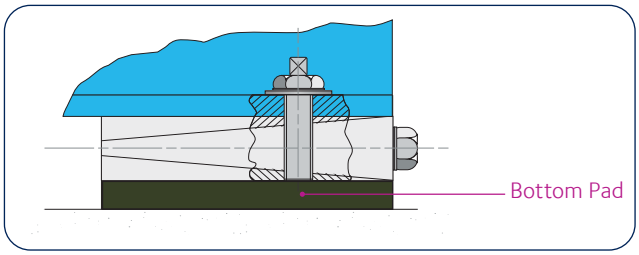


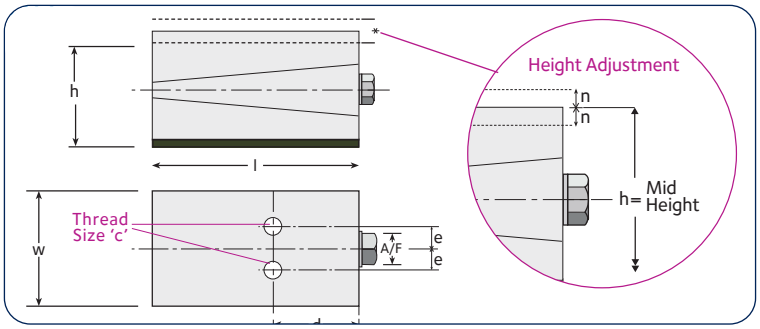
GRADE A Damping Grade - Standard								
Size Reference	Part Ref	Load (Kg)	l (mm)	w (mm)	h (mm)	n ± (mm)	A/F (mm)	Mass (Kg)
1R	1WL-F-1R-A	1,000	115	80	60	5	17/8	2.1
2R	1WL-F-2R-A	900	150	75	60	5	19/10	2.8
2S	1WL-F-2S-A	1,300	115	115	66	6	19/10	3.6
3R	1WL-F-3R-A	1,900	200	95	66	6	22/12	5.4
3S	1WL-F-3S-A	2,300	150	150	66	6	19/10	6.0
4S	1WL-F-4S-A	4,000	200	200	66	6	22/12	10.4
5R	1WL-F-5R-A	3,000	250	115	90	9	24/12	12.6
5S	1WL-F-5S-A	5,000	200	200	92	10	30/17	14.7
6R	1WL-F-6R-A	6,000	200	250	92	10	30/17	18.3
7R	1WL-F-7R-A	9,000	250	330	90	9	30/17	31.2

GRADE B Damping Grade - Stiff								
Size Reference	Part Ref	Load (Kg)	l (mm)	w (mm)	h (mm)	n ± (mm)	A/F (mm)	Mass (Kg)
1R	1WL-F-1R-B	1,300	115	80	47	5	17/8	1.9
2R	1WL-F-2R-B	1,200	150	75	47	5	19/10	2.6
2S	1WL-F-2S-B	1,600	115	115	53	6	19/10	3.3
3R	1WL-F-3R-B	2,200	200	95	53	6	22/12	5.0
3S	1WL-F-3S-B	3,000	150	150	53	6	19/10	5.5
4S	1WL-F-4S-B	5,000	200	200	53	6	22/12	9.4
5R	1WL-F-5R-B	4,000	250	115	77	9	24/12	11.9
5S	1WL-F-5S-B	6,000	200	200	79	10	30/17	13.7
6R	1WL-F-6R-B	7,000	200	250	79	10	30/17	17.4
7R	1WL-F-7R-B	10,000	250	330	77	9	30/17	29.5

GRADE E Damping Grade - Very Stiff								
Size Reference	Part Ref	Load (Kg)	l (mm)	w (mm)	h (mm)	n ± (mm)	A/F (mm)	Mass (Kg)
1R	1WL-F-1R-E	3,000	115	80	44	5	17/8	1.9
2R	1WL-F-2R-E	3,000	150	75	44	5	19/10	2.5
2S	1WL-F-2S-E	4,000	115	115	50	6	19/10	3.3
3R	1WL-F-3R-E	6,000	200	95	50	6	22/12	4.9
3S	1WL-F-3S-E	7,000	150	150	50	6	19/10	5.3
4S	1WL-F-4S-E	12,000	200	200	50	6	22/12	9.2
5R	1WL-F-5R-E	9,000	250	115	74	9	24/12	11.8
5S	1WL-F-5S-E	12,000	200	200	76	10	30/17	13.5
6R	1WL-F-6R-E	14,000	200	250	76	10	30/17	17.1
7R	1WL-F-7R-E	25,000	250	330	74	9	30/17	29.0

Variants for **Bolt-On** Wedgemounts





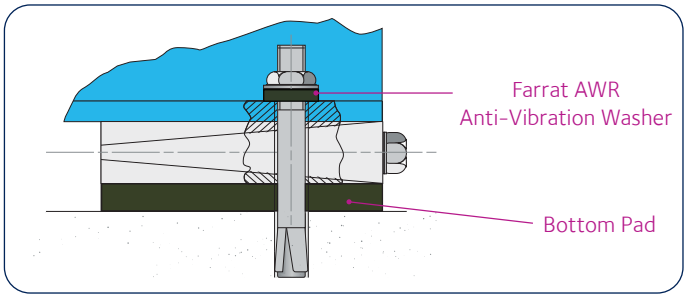
GRADE F Damping Grade - Standard											
Size Reference	Part Ref	Load (Kg)	l (mm)	w (mm)	h (mm)	n ± (mm)	A/F (mm)	c (thread size)	d (mm)	e (mm)	Mass (Kg)
1R	1WL-B-1R-F	900	115	80	55	5	17/8	M12	45	17	2.1
2S	1WL-B-2S-F	1,300	115	115	61	6	19/10	M16	50	24	3.5
3S	1WL-B-3S-F	2,300	150	150	61	6	19/10	M20	60	24	5.8
4S	1WL-B-4S-F	4,000	200	200	61	6	22/12	M20	75	27	10.0
5S	1WL-B-5S-F	5,000	200	200	87	10	30/17	M20	97	27	14.3
6R	1WL-B-6R-F	6,000	200	250	87	10	30/17	M20	95	27	17.9
7R	1WL-B-7R-F	9,000	250	330	85	9	30/17	M24	125	105	30.5

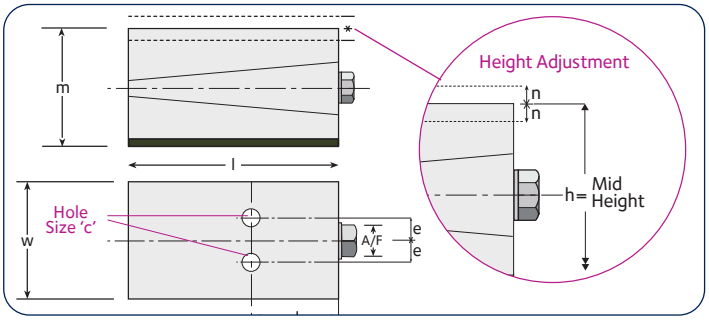
GRADE G Damping Grade - Stiff											
Size Reference	Part Ref	Load (Kg)	l (mm)	w (mm)	h (mm)	n ± (mm)	A/F (mm)	c (thread size)	d (mm)	e (mm)	Mass (Kg)
1R	1WL-B-1R-G	1,200	115	80	45	5	17/8	M12	45	17	1.9
2S	1WL-B-2S-G	1,600	115	115	51	6	19/10	M16	50	24	3.5
3S	1WL-B-3S-G	3,000	150	150	51	6	19/10	M20	60	24	5.4
4S	1WL-B-4S-G	5,000	200	200	51	6	22/12	M20	75	27	9.3
5S	1WL-B-5S-G	6,000	200	200	77	10	30/17	M20	97	27	13.6
6R	1WL-B-6R-G	7,000	200	250	77	10	30/17	M20	95	27	16.9
7R	1WL-B-7R-G	10,000	250	330	75	9	30/17	M24	125	105	29.2

GRADE H Damping Grade - Very Stiff											
Size Reference	Part Ref	Load (Kg)	l (mm)	w (mm)	h (mm)	n ± (mm)	A/F (mm)	c (thread size)	d (mm)	e (mm)	Mass (Kg)
1R	1WL-B-1R-H	3,000	115	80	42	5	17/8	M12	45	17	1.8
2S	1WL-B-2S-H	4,000	115	115	48	6	19/10	M16	50	24	3.2
3S	1WL-B-3S-H	7,000	150	150	48	6	19/10	M20	60	24	5.3
4S	1WL-B-4S-H	12,000	200	200	48	6	22/12	M20	75	27	9.0
5S	1WL-B-5S-H	12,000	200	200	74	10	30/17	M20	97	27	13.3
6R	1WL-B-6R-H	14,000	200	250	74	10	30/17	M20	95	27	16.8
7R	1WL-B-7R-H	25,000	250	330	72	9	30/17	M24	125	105	28.8

For Farrat Spheriseats, Farrat Anti-Vibration Washers (AVW) and Farrat Bolt Assemblies (SN), please view Table 4 and Wedgemount Accessories.

Variants for **Bolt-Through** Wedgemounts





GRADE F Damping Grade - Standard											
Size Reference	Part Ref	Load (Kg)	l (mm)	w (mm)	h (mm)	n ± (mm)	A/F (mm)	c (hole size, mm)	d (mm)	e (mm)	Mass (Kg)
1R	1WL-T-1R-F	900	115	80	55	5	17/8	14	45	17	2.1
2S	1WL-T-2S-F	1,300	115	115	61	6	19/10	18	50	24	3.5
3S	1WL-T-3S-F	2,300	150	150	61	6	19/10	23	60	24	5.8
4S	1WL-T-4S-F	4,000	200	200	61	6	22/12	23	75	27	10.0
5S	1WL-T-5S-F	5,000	200	200	87	10	30/17	22	97	27	14.3
6R	1WL-T-6R-F	6,000	200	250	87	10	30/17	24	95	27	17.9
7R	1WL-T-7R-F	9,000	250	330	85	9	30/17	26	125	105	30.5

GRADE G Damping Grade - Stiff											
Size Reference	Part Ref	Load (Kg)	l (mm)	w (mm)	h (mm)	n ± (mm)	A/F (mm)	c (hole size, mm)	d (mm)	e (mm)	Mass (Kg)
1R	1WL-T-1R-G	1,200	115	80	45	5	17/8	14	45	17	1.9
2S	1WL-T-2S-G	1,600	115	115	51	6	19/10	18	50	24	3.5
3S	1WL-T-3S-G	3,000	150	150	51	6	19/10	23	60	24	5.4
4S	1WL-T-4S-G	5,000	200	200	51	6	22/12	23	75	27	9.3
5S	1WL-T-5S-G	6,000	200	200	77	10	30/17	22	97	27	13.6
6R	1WL-T-6R-G	7,000	200	250	77	10	30/17	24	95	27	16.9
7R	1WL-T-7R-G	10,000	250	330	75	9	30/17	26	125	105	29.2

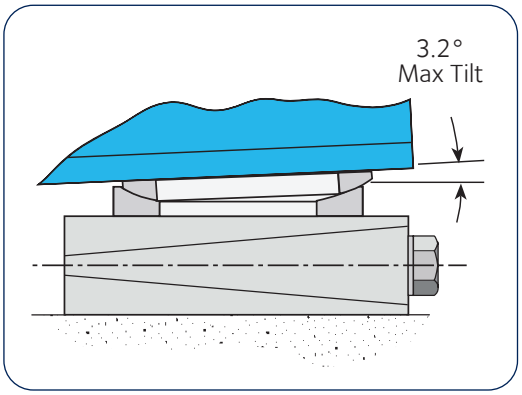
GRADE H Damping Grade - Very Stiff											
Size Reference	Part Ref	Load (Kg)	l (mm)	w (mm)	h (mm)	n ± (mm)	A/F (mm)	c (hole size, mm)	d (mm)	e (mm)	Mass (Kg)
1R	1WL-T-1R-H	3,000	115	80	42	5	17/8	14	45	17	1.8
2S	1WL-T-2S-H	4,000	115	115	48	6	19/10	18	50	24	3.2
3S	1WL-T-3S-H	7,000	150	150	48	6	19/10	23	60	24	5.3
4S	1WL-T-4S-H	12,000	200	200	48	6	22/12	23	75	27	9.0
5S	1WL-T-5S-H	12,000	200	200	74	10	30/17	22	97	27	13.3
6R	1WL-T-6R-H	14,000	200	250	74	10	30/17	24	95	27	16.9
7R	1WL-T-7R-H	25,000	250	330	72	9	30/17	26	125	105	28.8

For Farrat Spheriseats and Farrat Anti-Vibration Washers (AVW) please view Table 4 and Wedgemount Accessories.

Wedgemounts Accessories

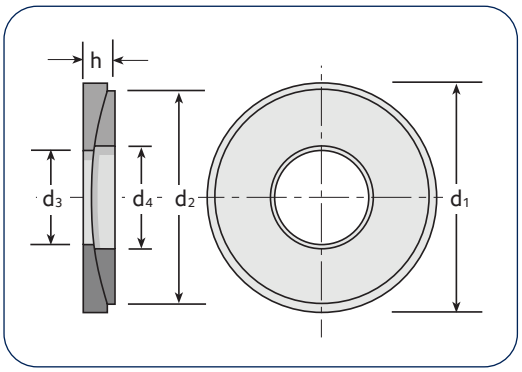
Farrat Spheriseats (SPS)

Farrat Spheriseats can be supplied bonded on top of the Farrat Precision Levelling Elements units (Types G, H & P) to take up complex angles from floor irregularities etc., between the floor and the machine. This is important to ensure a full, secure seating and to relieve any stresses which could build up in the machine base.



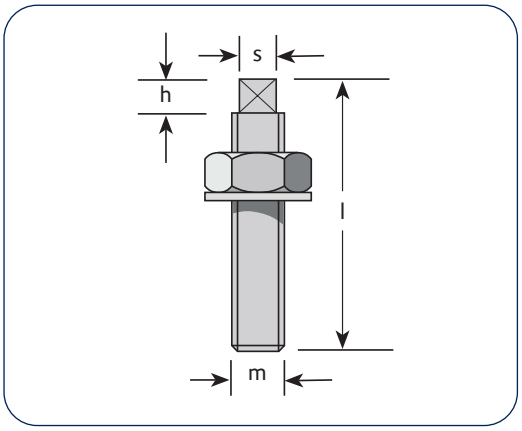
Part Ref	d1	d2	d3	d4	h
	mm	mm	mm	mm	mm
1SPS080	80	80	49	58	18
1SPS110	110	110	70	81	24
1SPS150	150	150	80	95	30
Alternative dimensions of d3 and d4 can be made to order					

Alternative variants are available on request



Farrat Bolt-on Screw Assemblies (SN)

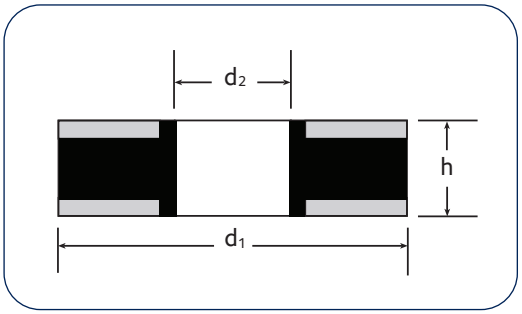
Material: Zinc plated mild steel



Part Ref	m	s	h	l
	Thread	mm	mm	mm
1SN1210	M12	8	10	100
1SN1610	M16	11	10	100
1SN2010	M20	13	10	100

Alternative screw lengths available on request.

Farrat AWR Anti-Vibration Washers



Part Ref	Bolt Dia.	d1	d2	h	Max. Torque	Max. Bolt Tension	Max. Deflection
	mm	mm	mm	mm	Nm	KN	mm
1SN1210	12	40	13	11	20	8.3	0.9
1SN1610	16	50	17	16	30	9.4	1.5
1SN2010	20	61	21	16	44	11.0	1.5
1SN2010	24	65	25	18	54	11.2	1.5

Heavy Duty Washers available on request.

Precision Wedge Levelling Elements

Farrat Levelling Mounts (WL-LE)

Farrat WL-LE's provide a system of installation of large or heavy equipment which requires a very rigid connection to their foundations and which also require very accurate alignment for satisfactory performance; for example machines which are subjected to significant changes in load distribution during operation. Farrat WL-LE's can be used for supporting and levelling machinery and equipment during construction, erection and operation.

Farrat WL-LE's are the same basic form as the standard Farrat Wedgemount, but the top and bottom faces are precision machined to provide an accurate, rigid support for maximum stiffness.

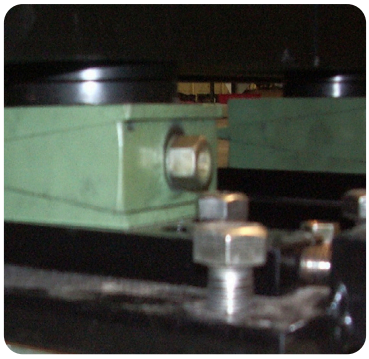
Features and Benefits

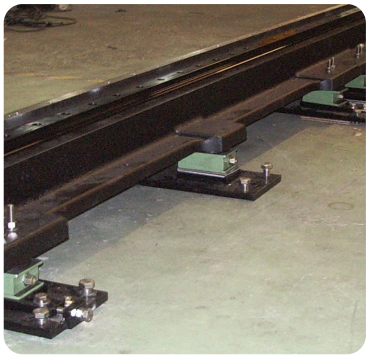
- Rigid machine to foundation integration
- Precision adjustment to obtain very fine alignment
- Systemised heavy machine installation
- An extremly high degree of machine bed stiffness
- Minimal machine bed distortion
- Facility to carry out subsequent alignment readjustments
- For machines with significant changes in load distribution
- No horizontal forces applied when adjusting
- High ratio of lifting force to adjustment torque
- Developed and manufactured by Farrat
- Used for decades in countless applications worldwide

Typical Applications

- Heavy components on Machine Tool Tables
- Long Bed Machinery
- Grinding Machines
- Large Compressors
- Boring and Milling Machines
- Transfer Machines
- Rolling Mills
- Gas Turbines
- Nuclear Reactors

Farrat WL-LE's installed under an Aerospace NDT Test Machine





Total flexibility to adapt to your specific needs

Farrat Freestanding WL-LE's (Figure 3.1) can be used in a variety of ways to suit the particular needs of the application.

For machines **without** strong dynamic forces, Freestanding mounts can also be used in conjunction with holding down bolts located alongside the mount (Figures 3.2 and 3.3).

Figure 3.1

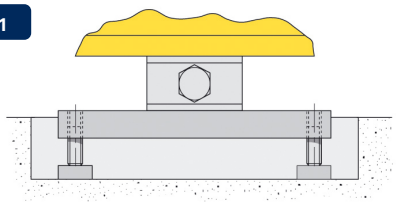


Figure 3.2

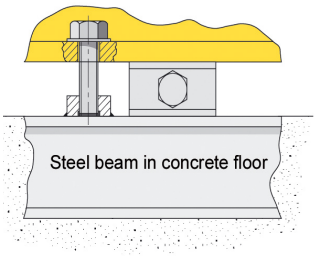
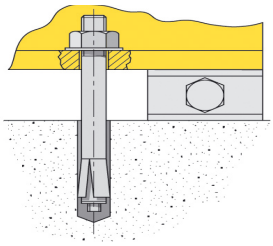
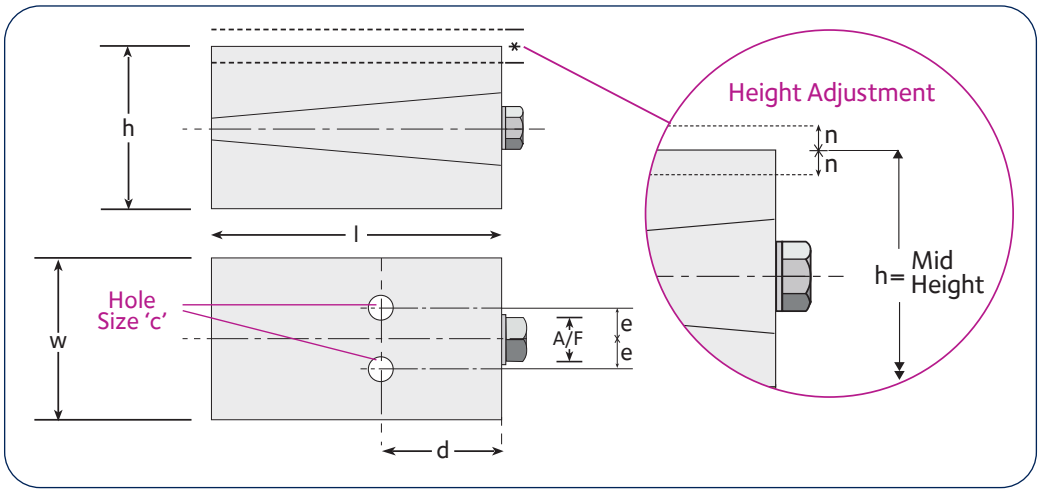


Figure 3.3



For machines **with** strong dynamic forces that have to be rigidly bolted down, the methods shown in Figures 3.2 and 3.3 can introduce bending moments and stresses around the support, which can distort the machine base. In such cases, we recommend Farrat Bolt-Through Mounts (WLT-LE) or Farrat Levalators.

Farrat WL-LE Mouting Sketch



Product Details

Size Reference	Load	l	w	h	n	A/F	Bolt / Hole size 'c'		d	e	Mass
							Bolt-On	Bolt-Through			
	(Kg)	(mm)	(mm)	(mm)	± (mm)	(mm)			(mm)	(mm)	(Kg)
1R	3,000	115	80	40	5	17/8	M12	14	45	17	2.1
2R	3,000	150	75	40	5	19/10					2.8
2S	4,000	115	115	46	6	19/10	M16	18	50	24	3.6
3R	6,000	200	95	46	6	22/12					5.4
3S	7,000	150	150	46	6	19/10	M20	23	60	24	6.0
4S	12,000	200	200	46	6	22/12	M20	23	75	27	10.4
5R	9,000	250	115	70	9	24/12					12.6
5S	12,000	200	200	72	10	30/17	M20	22	97	27	14.7
6R	14,000	200	250	72	10	30/17	M20	24	95	27	18.3
7R	25,000	250	330	70	9	30/17	M24	26	125	105	28.5

Variants and Part Numbers

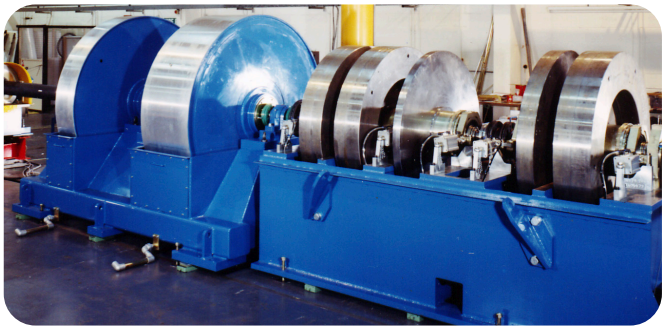
Size Reference	Freestanding	Bolt-On	Bolt-Through
1R	1WL-F-1R-P	1WL-B-1R-P	1WL-T-1R-P
2R	1WL-F-2R-P		
2S	1WL-F-2S-P	1WL-B-2S-P	1WL-T-2S-P
3R	1WL-F-3R-P		
3S	1WL-F-3S-P	1WL-B-3S-P	1WL-T-3S-P
4S	1WL-F-4S-P	1WL-B-4S-P	1WL-T-4S-P
5R	1WL-F-5R-P		
5S	1WL-F-5S-P	1WL-B-5S-P	1WL-T-5S-P
6R	1WL-F-6R-P	1WL-B-6R-P	1WL-T-6R-P
7R	1WL-F-7R-P	1WL-B-7R-P	1WL-T-7R-P

Wedgemount Applications

Farrat Wedgemount and Farrat WL-LE Installations

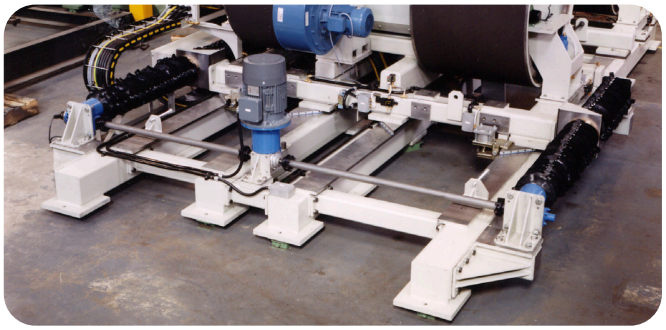
Farrat Wedgemounts have provided the ideal solution for accurate, efficient and economical machine installations globally for over 50 years. Whether you are relocating existing machinery, a machine manufacturer, or simply require a better solution for your existing installation, Farrat can help.

Electric Motor Dynometer on Farrat WLF Wedgemounts

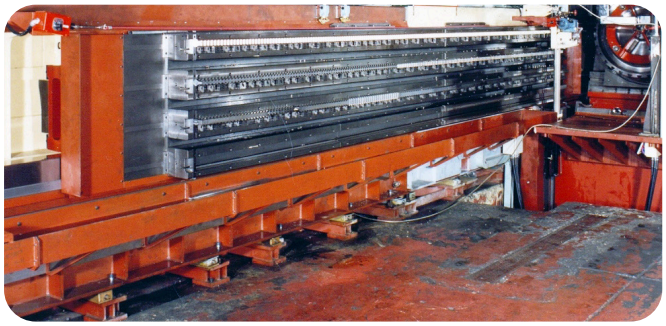


Spindle-Drilling Machine on Farrat WL-LE Precision Levelling Elements

Automotive Rolling Road on Farrat WLT Wedgemounts

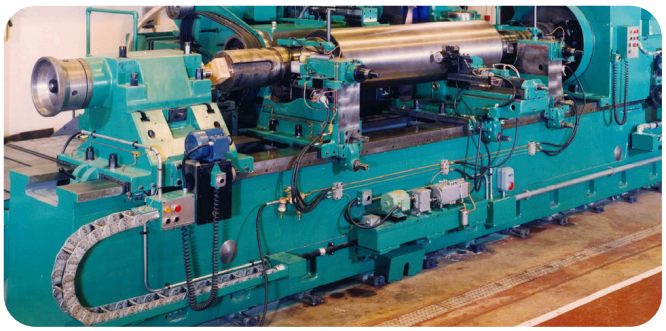


Horizontal Broach on Farrat WL-LE Precision Levelling Elements



Blow Moulding Machine on Farrat WLB Wedgemounts

Roll Grinder on Farrat WLF Wedgemounts.



Next Steps:

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

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E. sales@farrat.com
W. www.farrat.com

This brochure features our standardised Farrat Wedgemount range. Other damping/ isolation materials are available and we would happily draw upon our 60 years' experience to advise you on an appropriate solution for specialised applications.