

### **UNICK CUSHY FOOT**

Unick cushy foot is manufactured with the combinations of high quality cast iron and sandwich mounts (rubber to metal bond). when a machine is installed on unick cushy foot, the sandwich mounts inside are loaded in compression and shear. These pads have provision to be anchored to the ground through the holes provided in the foot/ base of the machine. An anti skid rubber is also provided at the bottom of the mount to grip with the floor.

Unick cushy foot is a multipurpose anti vibration pads almost used in all industrial machinery. Unick cushy foot offers high load capacity and long service life as compared to other cushy foot/ flexi foot available in market. Rubber cast iron gives high stability to the machinery. Unick has a well professional team engaged in manufacturing to make it "not just a formal pad/mount". It is a robust anti vibration pads/mount.



#### **Applications:-**

Centrifuge compressors, Diesel engines, Crushers, Engine test beds, Exhaust system, Fan, Blowers, Generators, Pumps, Machine tools, CNC Machines, Cooling towers, Chillers etc.

#### Advantages :-

Resistant to abrasion, Fine finishing Enhanced Durability, Suitable for dry and humid environment etc.

Model	Length(L) (mm)	Width(B) (mm)	Height (H) (mm)	Load kg/pc	Natural frequency at Max. Load (Hz)	Bolt
UCF1-A	120	90	85	90	6.0	M12
UCF1-B	120	90	85	120	6.5	M12
UCF1-C	120	90	85	170	6.5	M12
UCF1-D	120	90	85	250	6.5	M12
UCF1-E	120	90	85	330	7.0	M12
UCF2-A	195	145	125	300	6.5	M16
UCF2-B	195	145	125	650	7.0	M16
UCF2-C	195	145	125	1000	7.0	M16
UCF2-D	195	145	125	1600	7.0	M16
UCF2-E	195	145	125	1900	7.3	M16



### Unick Machine Support Mounts

Unick offer Machine Support Mount in different sizes to meet the requirements of various industries.

Models of Unick Machine Support Mounts are: ULC, UL, ULT and ULF.

Levelling adjustment in mm: USS, USL, USLT

Levelling adjustement in inches: USLF.

ULC: If machine has a plain hole.

UL: If machine has a threaded hole.

ULT: Bolted to the machine and Floor along with Anchoring of the machine to the ground.

ULF: Fix Bolt in this model. Two nuts are available called Chuck Nut and Levelling Nut. This particular model is best suitable for Conveyor, Power Pack, Cutting Oil Tank, Assembly Chain, Packaging Machines etc.

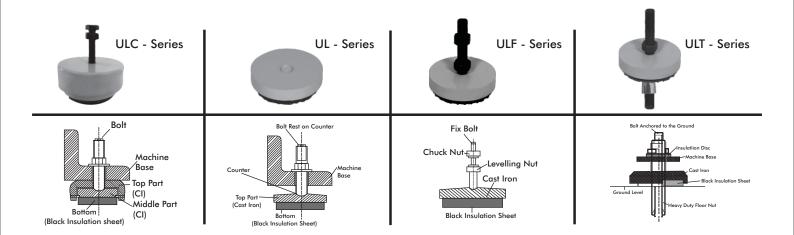
#### **Applications:-**

- Compressors
- Tool Room Machines
- Plastic Injection Moulding Machines
- Pressure Die Casting Machines
- Shaper Machines
- Printing Machines
- Textile Machines et

#### **Properties:-**

- Optimum Quality
- High Durability
- · Precisely Designed
- · Long Life
- No Maintenance

- High Strength
- Easy to Install
- Excellent Finish
- Durable Finish Standard
- Rugged Construction
- Simple Mounting
- Dimensional Accuracy
- Easy usage etc.







## Unick Machine Support Mounts

**ULC** - Series

				Height with BH		Height with BA	& Load 1-25	Height a	I	Heigh with B	t & Load M-15	Height with Bl	& Load 1-25
Model	Dia (mm)	Adjust Range (mm)	Bolt Size (mm)	Maxi. Load kg/pc	Height (H) mm								
ULC-A	65	6	12X100	180	39	220	49	90	39	150	39	280	49
ULC-B	100	8	12X100	400	43	500	53	210	43	375	43	660	53
ULC-C	125	10	16X100	700	47	900	57	350	47	650	47	1150	57
ULC-D	150	10	16X100	1020	49	1300	59	600	49	1050	49	1750	59
ULC-E	175	12	18X150	1600	57	2000	67	850	57	1400	57	2700	67
ULC-F	200	12	20X150	2150	59	2700	69	1150	59	2200	59	3600	69
ULC-G	225	14	20X150	2850	65	3700	75	1450	65	2500	65	4850	75
ULC-H	250	18	20X150	3800	75	4200	85	1600	75	3100	85	5500	85
ULC-I	300	18	20X150	4500	85	5300	95	2200	85	3800	95	7200	95

And so on...



**UL** - Series

(Machine bolt can be use)



**ULF** - Series



**ULT** - Series

			Height with BH		Height with BA	& Load 1-25	Height a		Height & Load with BM-15		Height & Load with BH-25	
Model	Dia (mm)	Bolt Size (mm)	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm
UL/ULF/ULT-A	70	12X100	180	25	220	35	90	25	150	25	280	35
UL/ULF/ULT-B	95	12X100	400	30	500	40	210	30	375	30	660	40
UL/ULF/ULT-C	115	16X100	700	30	900	40	350	30	650	30	1150	40
UL/ULF/ULT-D	135	16X100	1020	36	1300	46	600	36	1050	36	1750	46
UL/ULF/ULT-E	155	18X150	1600	40	2000	50	850	40	1400	40	2700	50
UL/ULF/ULT-F	185	20X150	2150	40	2700	50	1150	40	2200	40	3600	50
UL/ULF/ULT-G	200	20X150	2850	42	3700	52	1450	42	2500	42	4850	52
UL/ULF/ULT-H	250	20X150	3800	75	4200	85	1600	75	3100	85	5500	85
UL/ULF/ULT-I	300	20X150	4500	85	5300	95	2200	85	3800	95	7200	95

And so on...



### Unick Levelling Pads >

Just like the name, Unick Levelling Pads give vibration reduction at floor and machine levelling. Unick Levelling Pads is a combination of three parts- two parts are made up of Cast Iron which is also a vibration damping material and third part is Unick Insulation Sheet (Anti Vibration Sheet).

First Part(Upper) is attached with the machine foundation base and has option of bolting.

Middle Part provides levelling adjustment with the help of first (Outer) part by tighten the bolt.

Last Part(Bottom part) has Insulation Sheet to provide vibration reduction and anti skid or anti slip at the shop floor.

Unick offer levelling pads in different sizes to meet the requirements of various industries.

Models of UnickLevelling Pads are: USS, USL, USLT and USLF.

Levelling adjustment in mm: USS, USL, USLT

Levellingadjustement in inches: USLF.

USS: If machine has a plain hole.

USL: If machine has a threaded hole.

USLT: Bolted to the machine and Floor along with Anchoring of the machine to the ground.

USLF: Fix Bolt in this model. Two nuts are available called Chuck Nut and Levelling Nut. This particular model is best suitable for Conveyor, Power Pack, Cutting Oil Tank, Assembly Chain, Packaging Machines etc.

**Note:** USLF model is also available in Stainless Steel(SS) for food processing industries and pharmaceutical plants etc. The Selection of Size(Diameter) of Levelling Pads, Range of Levelling and Type of Insulation Sheets are according to the machine type, application and its load.

#### **Applications:-**

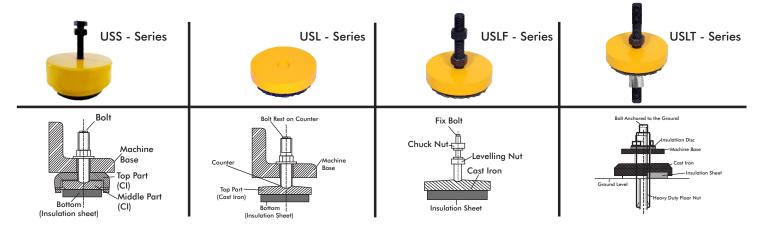
All industrial machinery that has light and medium weight and required machine levelling with vibration damping.

- Compressors
- Tool Room Machines
- Plastic Injection Moulding Machines
- Pressure Die Casting Machines
- Shaper Machines
- Printing Machines
- Textile Machines et

#### **Properties:-**

- Optimum Quality
- High Durability
- · Precisely Designed
- Long Life
- No Maintenance

- · High Strength
- · Easy to Install
- Excellent Finish
- Durable Finish Standard
- Rugged Construction
- · Simple Mounting
- Dimensional Accuracy
- Easy usage etc.



## **CONTRACTION MUST** BE CONTROLLED 7,7



## Unick Levelling Pads >



				Height with UH		Height with U <i>I</i>	& Load N-25	Height with UP		Heigh with U	t & Load M-15	Height with U	& Load H-25
Model	Dia (mm)	Adjust Range (mm)	Bolt Size (mm)	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm
USS-A	65	6	12X100	180	39	220	49	90	39	150	39	280	49
USS-B	100	8	12X100	400	43	500	53	210	43	375	43	660	53
USS-C	125	10	16X100	700	47	900	57	350	47	650	47	1150	57
USS-D	150	10	16X100	1020	49	1300	59	600	49	1050	49	1750	59
USS-E	175	12	18X150	1600	57	2000	67	850	57	1400	57	2700	67
USS-F	200	12	20X150	2150	59	2700	69	1150	59	2200	59	3600	69
USS-G	225	14	20X150	2850	65	3700	75	1450	65	2500	65	4850	75
USS-H	250	18	20X150	3800	75	4200	85	1600	75	3100	85	5500	85
USS-I	300	18	20X150	4500	85	5300	95	2200	85	3800	95	7200	95

And so on...







			Height with UH		Height with U	& Load N-25	Height with UP		Heigh with U	t & Load M-15	Height with UI	& Load H-25
Model	Dia (mm)	Bolt Size (mm)	Maxi. Load kg/pc	Height (H) mm								
USL/USLF/USLT-A	70	12X100	180	25	220	35	90	25	150	25	280	35
USL/USLF/USLT-B	95	12X100	400	30	500	40	210	30	375	30	660	40
USL/USLF/USLT-C	115	16X100	700	30	900	40	350	30	650	30	1150	40
USL/USLF/USLT-D	135	16X100	1020	36	1300	46	600	36	1050	36	1750	46
USL/USLF/USLT-E	155	18X150	1600	40	2000	50	850	40	1400	40	2700	50
USL/USLF/USLT-F	185	20X150	2150	40	2700	50	1150	40	2200	40	3600	50
USL/USLF/USLT-G	200	20X150	2850	42	3700	52	1450	42	2500	42	4850	52
USL/USLF/USLT-H	250	20X150	3800	75	4200	85	1600	75	3100	85	5500	85
USL/USLF/USLT-I	300	20X150	4500	85	5300	95	2200	85	3800	95	7200	95

And so on...



### **Unick Spring Pads**

Massive reduction in vibration and structure- borne noise by Unick Spring Pads with viscous damping inside it. Viscous damping is the feature to control the excessive movement of the machine due to the action/back force of Springs.

Unick Spring Pads consists of high quality coil spring elements with protective coating, high viscosity oil, pistons and dampers. Unick Spring Pads has anti skid plates on both sides of the pad for griping with the machine and the floor.

Unick Spring Pads designed to provide large static deflection. It is suitable for high range of RPM/SPM. Unick Spring Pads offers solution for machines that have static weight starting from 0.1 tonn upto 100 tonn load range.

How to select an appropriate solution/model of Unick Spring Pads:

**Option 1:** Let us know the details like- Machine Type, Static Weight, RPM/SPM, No. of mounting required, Type of Machine Base etc.

Option 2: Our On-Site Engineers is always available to consult you the best suitable solution at your premises.

#### **Applications:-**

- All type of Heavy Industrial Machinery
- Power Presses
- Reducing Mills & Mixers
- Power Generating Units
- Forging Hammers
- Coal Crushers
- Generator Sets
- Fans
- Stone Crushers
- Air Handling Units
- Blowers

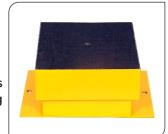
- · Refrigeration Units
- Air Compressors
- Diesel Generators
- Chillers
- Engine Test Beds
- Centrifuges
- Cooling Towers
- HVAC's
- Textile Machines
- Boilers
- · Sheet Metal Machinery
- Press Brakes
- Pumps

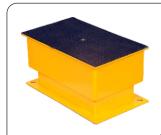
### Advantages:-

- Huge reduction in vibrations at your works and surrounding.
- Better Structural Safety
- Installation of sensitive measuring equipments/Lab equipments and heavy impact machinery are possible in the same working area.
- Increased life of tools and machines
- Easy to maintain
- Shock Isolation
- · Self Leveled and Self Adhesive Pads
- Reduced high impact Isolation
- Meet the environmental constriants.
- No need of Foundation for Small and Medium weight machines, and in case of heavy machines reduced the depth of foundation.
- Easy to Install.
- · Highly Reliable.
- Rugged Construction
- Simple Mounting
- Dimensional Accuracy
- Easy usage etc.















### **Unick Insulation Sheets**

Unick offers Insulation Sheets in various industrial applications to reduce the vibrations and structure-borne noise. These insulation sheets are a combination of Nitrile Rubber, some Cork Particles and Synthetic Fibres.

Unick Insulation Sheet possesses superior physical and mechanical properties.

These insulation sheets are available in many stiffness value, stress value, load capacities and respective natural frequencies.

For perfect selection of insulation sheet to get better vibration reduction and long life.

- The weight of the machine should not exceed the maximum load capacity of the sheet.
- Stress and Stiffness should have the appropriate value.

These insulation sheets have "checks design" to grip the shop floor under the weight of the machine to provide anti skid/anti slip. Standard thickness of Unick Insulation Sheets are 2mm, 8mm, 15mm, 20mm, 25mm, 65mm and so on. Maximum dimension available is 500x500mm. Operating Range is -15 degC to +120 degC.

Unick Insulation Sheets have characteristics to solve the both active and passive vibration depend upon the application and selection criteria.

#### **Properties:-**

- Resistance to higher temperatures.
- Effective reduction in Machine Vibration and Structureborne noise.
- Highly resistance to any type of oils, any water and any fuel etc.
- · Properties remain unchanged in all weather and seasons.
- · Long life performance.
- Never deformed permanently.
- · Easy to Install.
- No need of service and maintenance.
- · Reliability is high.
- · Anti Skid Properties.

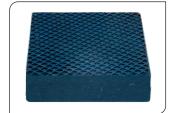
### **Applications:-**

- Tool room machines.
- Plastic injection moulding machines.
- Pressure die casting machines.
- Printing machines.
- Textile machines
- Lathe machines
- Milling machines
- Grinding machine.
- Machining centres.
- Turning centres.
- · Power presses.
- Punching machine.
- Stamping machine
- · Shearing machine
- Compressors.
- · Measuring and testing machine.
- Grinders etc.



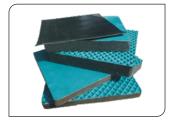
















### **Unick Sandwich Mounts**

Unick Sandwich Mount comprise of rubber sections sandwiched or bonded between metal plates. It can be loaded directly in compression or shear, or combination of both.

The rugged construction and high load carrying capacity of Unick Sandwich Mounts are widely used for mounting engines in road vehicles and mobile construction plant.

Also, available in large sizes used as vehicle suspension springs and as mounting for acoustic chambers, hoppers and various types of heavy installation.

Unick Sandwich Mount has high axial rigidity(Stiffness in an particular axis).

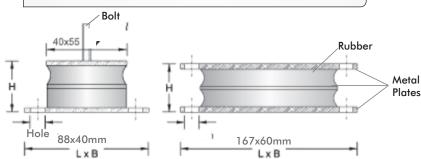
#### Features:-

Moulded in high grade of rubber.

#### **Applications:-**

- · Generator Sets.
- Shock Mountings.
- · Core Crushers.
- Conveyor Systems.
- Mobile Construction Plant.
- Lift Hand Gear.
- · Hoppers.
- Acoustic Chambers.





Model	Length(L) (mm)	Width(B) (mm)	Height (H) (mm)	Load kg/pc	Natural frequency at Max. Load (Hz)	Bolt-Size
USM1-A	88	40	35	45	6.0	M8
USM1-B	88	40	35	60	6.5	M8
USM1-C	88	40	35	85	6.5	M8
USM1-D	88	40	35	125	6.5	M8
USM1-E	88	40	35	165	7.0	M8
USM2-A	167	60	45	150	6.5	M10
USM2-B	167	60	45	325	7.0	M10
USM2-C	167	60	45	500	7.0	M10
USM2-D	167	60	45	800	7.0	M10
USM2-E	167	60	45	950	7.3	M10



## **■ Unick Insulation Sheets 3**

Model	Load (kg/ sq.cm)	Thickness (mm)	Natural Frequency (Hz)	Coefficient of Friction	Applications	Category
US-2	1-8	2	20Hz-18Hz	0.8	Floor Griping Sheet for Electrical Control Panel, Electrical Battery base, Transmission Rack base etc.	
UH-2	2-18	2	30Hz-18Hz	0.9	Anti -Skid Insulation Sheet for Mechanical use.	
US-8	1-4	8	22Hz-7Hz	0.8	Floor Griping Sheet for Electrical Control Panel, Electrical Battery base, Transmission Rack base etc.	
UH-8	2-10	8	35Hz-15Hz	0.9	Anti -Skid Insulation Sheet for Mechanical use.	
UH-15	3-9	15	35Hz-18Hz	0.9	Printing Machines,Textile Machines, Plastic Injection Moulding Machines, Pressure Die Casting Machines, Tool Room Machines, All Machines having Axial forces etc.	
UM-15	5-10	15	50Hz-30Hz	0.8	Milling Machines, Lathe Machines, Grinding Machines, Turning Centres , Machining Centres etc.	
UP-15	1-4	15	20Hz-7Hz	0.8	Measuring and Testing Equipments, Textile Machines, All passive case vibration, Passive Isolation Foundation Material etc.	
UEH-15	10-35	15	70Hz-45Hz	0.7	Heavy and Long Bed Machines, Planners etc.	
US-20	5-35	20	35Hz-15Hz	0.8	Tool Room Machines, Machine on Upper Floors etc.	
UH-25	5-14	25	25Hz-7Hz	0.9	Power Presses, Shearing Machines, Punching Machines, Stamping Machines, All Machines having Vertical Impacts etc.	
UM-25	2-8	25	35Hz-7Hz	0.8	Best for both active and passive range, High speed rotating machines, Medium power presses, Medium Stamping Machines, Medium shearing Machines etc.	
US-65	3-20	65	9Hz-30Hz	0.7	Civil Contraction work, Active Isolation Foundation Material, Power Press Foundation, etc.	
UH-65	5-35	65	6Hz-15Hz	0.9	Heavy Industrial Machines e.g. Forging Hammers, Forging Presses, Screw Presses, Heavy Hydraulic Presses etc.	



### Unick Wedge Mounts.

Unick Wedge Mounts offers precise levelling and reduction in vibration of heavy industrial machinery.

Unick Wedge Mount basically consists of three modular cast iron parts. The Centre(or middle) part of the mount has a levelling bolt through which middle wedge can move back and forth and gives high precision levelling to the machine.

- Tighten the bolt results in increase in height.
- Loosen the bolt results in decrease in height.

Except middle part, other two part of Cast Iron gently inclined on the middle(wedge) produce a large lifting force with small input torque. High quality with low fluorine grease is used between all the three parts.

As we know, the cast iron is also a vibration damping material. But, for more vibration absorption, we make a combination of Unick Wedge Mount and Unick Insulation Sheet either on both sides or single side of the mounts.

Unick Wedge Mount provide large surface solidity and rigidity. It is easily levelled even under the heaviest loads. It providing both passive and active Vibration Isolation.

Unick Wedge Mount providing more and accurate precise levelling which is very easy, fast and efficient. As the height of the machine is increased appropriate, as a result, its easy to clean the machine surrounding area, below area, and also helpful during the time of machine maintenance.

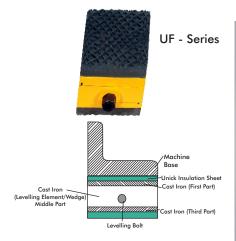
Unick Wedge Mount are available in different models and selection depend upon the type of machine and its applications.

- UF (Unick Free Standing Wedge Mount).
- UB (Unick Bolt On Wedge Mount): Machine with High Axial Thrust.
- UT (Unick Anchored Bolt to the Ground Through Hole Wedge Mount): For Heavy Machines. The Machine having eccentric motion or necessity to be anchored with the ground.

#### Features:-

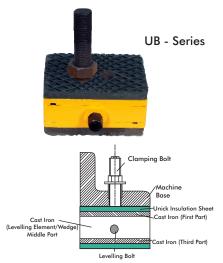
- Optimum Finish.
- Sturdily Manufactured.
- Optimum Strength.
- Perfect Finish.
- Easy to Level/Adjust.
- Highly Reliable.
- Easy to Install.

- Longer Life.
- Best for Heavy duty Machinery.
- Capable to control both horizontal impact and vertical impact.
- Gives Stability because of combination of Unick Insulation Sheet which has anti skid/anti slip properties.
- Reduced shock and vibration at the shop floor.
- Prevent machine shifting/walk during run time.

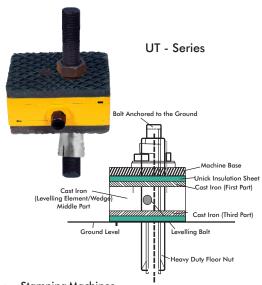


#### **Applications:-**

- Boring Machines.
- CNC Machines.
- Drilling Machines.
- Heavy CNC Machines.
- Milling Machines.
- Tool Room Machines.
- Machining Centres.
- Plastic Injection Moulding Machines.



- Special Purpose Machines.
- Pressure Die Casting Machines.
- Long Lathes.
- Shaper Machines.
- Long Planers.
- Printing Machines.
- Power Presses.
- Textile Machines.



- Stamping Machines.
- General Multi-Purpose Machines with Long Beds.
- Shears.
- CNC Lathes.
- Surface Grinders.
- Cylindrical Grinders.
- Transfer Precision Metal Working Machine.
- Large Precision Measuring Equipments.



## Unick Wedge Mounts.



UF - Series

				Height o		Height with U	& Load M-25	Height with UP		Heigh with U	t & Load M-15	Height with UI	& Load H-25	Height a	
Model	Length (mm)	Width (mm)	Adjust Range (mm)	Maxi. Load kg/pc	Height (H) mm										
UF-A	105	55	8	450	63	600	73	220	63	400	63	700	73	900	73
UF-B	150	75	10	1000	66	1350	76	500	66	850	66	1650	76	2200	76
UF-C	200	100	10	1700	72	2500	82	850	72	1550	72	2800	82	3200	82
UF-D	200	125	16	2400	95	2650	105	1200	95	2150	95	3750	105	8000	105
UF-E	200	150	20	2950	130	3200	140	1500	140	2650	130	4500	140	10000	140
UF-F	200	200	12	3600	74	4500	94	1600	74	3200	74	5800	84	6500	84
UF-G	200	250	18	4500	96	5800	106	2000	96	4500	96	7800	106	8500	106
UF-H	250	320	18	7500	101	9000	111	3400	101	6800	101	11500	111	13500	111
UF-I	280	170	25	4600	155	5000	165	2300	155	4100	155	6900	165	16000	165
UF-J	300	400	20	11000	101	13500	111	4700	101	10000	101	16500	111	19500	111
UF-K	400	500	20	17000	106	20000	116	6800	106	16000	106	23000	116	25000	116

<sup>\*</sup> The height (mm) shown in the table includes top (UH-8 insulation sheet).



**UB** - Series



And so on...

**UT** - Series

					Height with UH		Height with U <i>I</i>	& Load N-25	Height with US		Heigh with U	t & Load M-15	Height with UI	& Load H-25	Height a	
Model	Length (mm)	Width (mm)	Adjust Range (mm)		Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm	Maxi. Load kg/pc	Height (H) mm
UB/UT-A	115	115	8	M16	1200	67	1500	77	700	72	1100	67	2000	77	2200	77
UB/UT-B	150	150	10	M16	1950	69	2300	79	1150	74	1800	69	3200	79	3500	79
UB/UT-C	200	200	12	M20	3300	80	4150	90	1950	85	2900	80	5300	90	6500	90
UB/UT-D	200	125	16	M16	2400	95	2650	105	1200	95	2150	95	3750	105	8000	105
UB/UT-E	200	150	20	M20	2950	130	3200	140	1500	140	2650	130	4500	140	10000	140
UB/UT-F	200	250	18	M20	3600	92	4500	102	2500	97	3200	92	5800	102	8500	102
UB/UT-G	250	325	18	M24	7500	125	5800	135	4000	130	4500	125	7800	135	13500	135
UB/UT-H	300	400	20	M24	11500	148	9000	158	5600	153	6800	148	11500	158	19500	158
UB/UT-I	280	170	25	M25	4600	155	5000	165	2300	155	4100	155	6900	165	16000	165
UB/UT-J	400	500	20	M24	15000	175	13500	185	7200	180	10000	175	16500	185	25000	185

<sup>\*</sup> The height (mm) shown in the table includes top has no insulation sheet.



### **Unick Stud Mounts**

Unick Stud Mounts are rubber based isolation system. These mounts are a family of elastomeric rubber pads for protection of industrial machines against vibrations and shock.

Unick Stud Mounts are manufactured by experienced and skilled workers by making use of the supreme quality raw materials. The Unick Stud Mounts are combination of elastomeric rubber bonded between two metal.

Large amplitude vibrations needs special heavy-duty inserts and high quality lock nuts or double jam nuts to ensure your connections do not vibrate loose.

These mounts are available in all dimension with respective load range and natural frequency. These mounts can be used for load in both compression and shear.

For any kind of query, Please contact to "Unick Engineering Department".

Unick Stud Mounts are available in five categories:

- a)Male-Male
- b)Male-Female
- c)Male-Plane
- d)Female-Male
- e)Female-Plane.

#### **Applications:**

The Rugged design and the variety range of sizes and HVAC Equipment. configurations make the Unick Stud Mounts an ideal choice for wide range of applications.

Compressors

Blowers.

ID & FD Fans.

Electronic Units.

Pumps.

Relays.

Motors.

Machine Tools.

Plant Machinery.

**Engine Generator Sets.** 

Vibratory Feeders.

Air conditioners.

Measuring Equipment.

Testing Equipment.

Material Handling Equipment.

Laboratory Equipment.

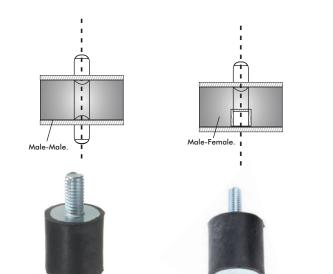
#### **Advantages:**

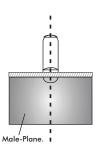
- Loaded in both compression and shear.
- Prevent damage to sensitive equipment from vibration and shock.
- Prevent transmission of structure-borne noise.
- · Reduced transmitted vibrations from reciprocating or rotating equipment.



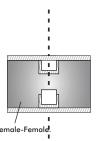
### **Unick Stud Mounts**

Model	Diameter (mm)	Height (mm)	Load Capacity (kg/pc)	Natural Frequency (Hz)	Thread Size
USTDM 1	10	10	30 to 7	13 to 15	M4
USTDM 2	15	15	6 to 17	12 to 15	M4
USTDM 3	20	15	11 to 28	12 to 15	M6
USTDM 4	20	25	9.5 to 27	10 to 12	M6
USTDM 5	25	25	15 to 42	10 to 12	M8
USTDM 6	25	30	12.to 44	9 to 12	M8
USTDM 7	30	30	20 to 65	8 to 9	M8
USTDM 8	40	30	55 to 160	7 to 8	M10
USTDM 9	40	40	45 to 120	7 to 8	M10
USTDM 10	50	45	75 to 220	7 to 8	M10
USTDM 11	60	25	120 to 315	6 to 7	M10
USTDM 12	60	45	90 to 300	6 to 7	M10
USTDM 13	75	55	175 to 520	6 to 7	M16
USTDM 14	100	55	350 to 950	7 to 8	M16
USTDM 15	150	55	530 to 1500	7 to 8	M16

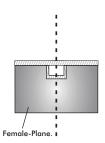
















### 🗷 Unick Heighten Mounts. 🗷

Unick Heighten Mounts are the raising or extra height version of Unick Levelling Pads and Unick Wedge Mount.

Just like wedge mount and levelling mount, these mounts are assembled with Insulation Sheet for vibration reduction. These mounts are available in standard height of 100mm and 150mm and 200mm. Unick also offers tailor-made solution to meet the specific requirement of the customer.

Due to this extra height, Unick Heighten Mounts helps in enhanced machine tool life, proper cleaning near/under the machine area, better quality and finish of the part.

\*Unick Heighten Wedge Mounts.

\*Unick Heighten Levelling Pads.

Unick Heighten Mounts is designed with precise care, using high quality material and technologically advanced. These mounts undergoes several tests during the manufacturing process. It increases the overall machinery effectiveness, improving and increasing the productivity, and quality of the product.

Models of Unick Heighten Wedge Mounts are UFHM, UBHM and UTHM. All models areavailable in total height 100mm, 150mm and 200mm (except UFHM/UBHM/UTHM-A, UFHM/UBHM/UTHM-B).

**UFHM** - Series



**UBHM** - Series



**UTHM** - Series



Models of Unick Heighten Levelling Mounts are:

USSHM: Suitable for Machine having Plain Hole in base.

USLHM: Suitable for Machine having Threaded Hole in base.

All models are available in 100mm and 150mm heights.



#### **Features:**

- Easy and Quick Installation.
- Levelling Adjustment, Vibration Reduction and height of 100mm,150mm and 200mm.
- Reasonable Prices.
- Long Life.
- High Durability.
- Supreme damping Performance.
- Strong Construction.
- Precisely designed.

- Supreme quality.
- Durable finish standard.
- Dimensional accuracy.
- Rugged structure.
- Unmatched quality.

#### **Applications:**

- CNC Machines.
- CNC Turning.
- Machining Centres.
- Cylindrical Grinding Machines.
- Centerless Grinding Machines.









### **Unick Heighten Wedge Mounts** <sup>2</sup>



**UFHM** - Series

Model	Length (mm)	Width (mm)	Adjust Range (mm)	Height (H) mm	Maxi. Load kg/pc with UH-15	Maxi. Load kg/pc with UM-25	Maxi. Load kg/pc with UP-15	Maxi. Load kg/pc with UM-15	Maxi. Load kg/pc with UH-25
UFHM-A	105	55	8	100/150	450	600	220	400	700
UFHM-B	150	75	10	100/150	1000	1350	500	850	1650
UFHM-C	200	100	10	100/150/200	1700	2500	850	1550	2800
UFHM-D	200	200	12	100/150/200	3600	4500	1600	3200	5800
UFHM-E	200	250	18	100/150/200	4500	5800	2000	4500	7800
UFHM-F	250	320	18	100/150/200	7500	9000	3400	6800	11500
UFHM-G	300	400	20	100/150/200	11000	13500	4700	10000	16500
UFHM-H	400	500	20	100/150/200	17000	20000	6800	16000	23000

<sup>\*</sup> The height (mm) shown in the table includes top (UH-8 insulation sheet).

And so on...



**UBHM** - Series



**UTHM** - Series

Model	Length (mm)	Width (mm)	Adjust Range (mm)	Bolt Size (mm)	Height (H) mm	Maxi. Load kg/pc with UM-15	Maxi. Load kg/pc with UM-25	Maxi. Load kg/pc with US-20	Maxi. Load kg/pc with UM-15	Maxi. Load kg/pc with UH-25
UBHM/UTHM-A	115	115	8	M16	100/150	1200	1500	700	1100	2000
UBHM/UTHM-B	150	150	10	M16	100/150	1950	2300	1150	1800	3200
UBHM/UTHM-C	200	200	12	M20	100/150/200	3300	4150	1950	2900	5300
UBHM/UTHM-D	200	250	18	M20	100/150/200	3600	4500	2500	3200	5800
UBHM/UTHM-E	250	325	18	M24	100/150/200	7500	5800	4000	4500	7800
UBHM/UTHM-F	300	400	20	M24	100/150/200	11500	9000	5600	6800	11500
UBHM/UTHM-G	400	500	20	M24	100/150/200	15000	13500	7200	10000	16500

<sup>\*</sup> The height (mm) shown in the table includes top has no insulation sheet.

And so on...



## Unick Heighten Levelling Mounts



**USSHM** - Series

Model	Top Dia (mm)	Bottom Dia (mm)	Adjust Range (mm)	Bolt Size (mm)	Height (H) mm	Maxi. Load kg/pc with UH-15	Maxi. Load kg/pc with UM-15	Maxi. Load kg/pc with UP-15	Maxi. Load kg/pc with UM-25	Maxi. Load kg/pc with UH-25
USSHM-A	100	125	6	12X100	100/150	550	600	300	900	1000
USSHM-B	125	150	8	12X100	100/150	800	900	500	1300	1400
USSHM-C	150	175	10	16X100	100/150	1050	1150	600	1650	1750
USSHM-D	175	200	10	16X100	100/150	1250	1400	700	1750	1850
USSHM-E	200	225	12	18X150	100/150	1500	1650	850	2100	2200
USSHM-F	225	250	12	20X150	100/150	1700	1900	950	2250	2350
USSHM-G	250	275	14	20X150	100/150	2300	2600	1320	3350	3450

And so on...



**USLHM** - Series

(Machine bolt can be use)

Model	Top Dia (mm)	Bottom Dia (mm)	Adjust Range (mm)	Bolt Size (mm)	Height (H) mm	Maxi. Load kg/pc with UH-15	Maxi. Load kg/pc with UM-15	Maxi. Load kg/pc with UP-15	Maxi. Load kg/pc with UM-25	Maxi. Load kg/pc with UH-25
USLHM-A	100	125	6	12X100	100/150	550	600	300	900	1000
USLHM-B	125	150	8	12X100	100/150	800	900	500	1300	1400
USLHM-C	150	175	10	16X100	100/150	1050	1150	600	1650	1750
USLHM-D	175	200	10	16X100	100/150	1250	1400	700	1750	1850
USLHM-E	200	225	12	18X150	100/150	1500	1650	850	2100	2200
USLHM-F	225	250	12	20X150	100/150	1700	1900	950	2250	2350
USLHM-G	250	275	14	20X150	100/150	2300	2600	1320	3350	3450

And so on...



### **Unick Rubber Cork Anti Vibration Pads >**

Unick is the manufacturer, retailer, wholesaler, supplier and exporter of rubber cork anti vibration pads.

The Cork is sandwiched between two layers of Unick insulation sheet at the top and bottom.





### f v Unick Anti Vibration Rubber Pads f v

Unick Anti Vibration Rubber Pads is a general purpose rubber pads. It is specially designed to meet the general requirements of the customer looking for economical or reasonable prices solution to control the vibration level at the shop floor.

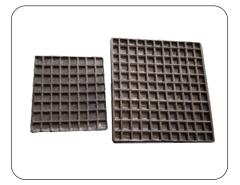
We at "UNICK" a quality driven organization ha e variety of Rubber Anti Vibration Pads for Industrial Machinery.

These are designed and engineered by our professional team. We use latest technology to produce these rubber anti vibration pads. Furthermore, it is widely demand by the users in the market at leading prices.













### **Unick Anchoring Installation**

Sometimes, Industrial Machines need to be anchored with the ground. "UNICK" provides the service for anchoring to fix the machine position.

There are two types of anchoring:

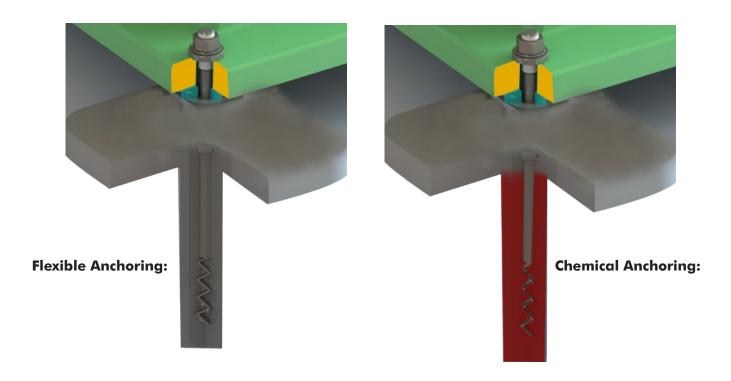
- a)Flexible Anchoring.
- b)Chemical Anchoring.

#### Flexible Anchoring:

- Drilling a Hole in the concrete floor with a Hammer Drill and a correctly sized Carbide drill bit for the required diameter of hole.
- Clean out the hole.
- Drop the anchor into the hole, slotted end first.
- Insert the setting tool into the anchor and strike with a hammer until the lip of the setting tool meets the top of the anchor.
- Set the fixture over the anchor and insert the properly sized threaded rod or machine threaded bolt through the fixture and into it.

#### **Chemical Anchoring:**

- Chemical Anchor which are bonded into substrate, usually masonary and concrete, using a resin based adhesive system.
- It is suited for high load applications.
- · High Strength.





### **Unick Elastomeric Pads**

Unick Elastomeric Pads are available in a range of compounds and some combination are with metals (MS or SS as per the requirement). Hardness of rubber according to the applications.

Unick Elastomeric Pads protection in all axis from shock and vibrations.

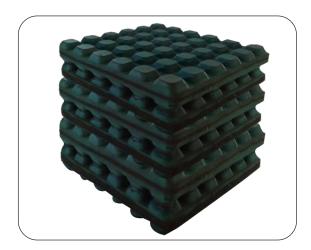
Unick Elastomeric Pads are high quality and economical.

It limits the transmission of structure-borne vibration and impacts.

Bring your issue of Industrial Vibration to us, and we can customize an elastomeric solution that matches your requiremnts.

Unick Elastomeric Pads can be placed under the machine foot directly or enclosed with the metal plates/container. The addition of more nos. of layer of Elastomeric Pads results in reduce the more vibration level (approximate 70-90% reduction in Vibration.









### Unick Vibration Insulating Disc

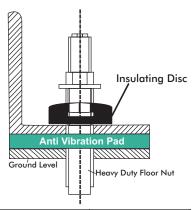
Unick Anti Vibration Insulating Disc are specially designed for the machine having anti vibration pads with anchoring. It eliminates the contact between a machine base and an anchoring bolt.

In some Industrial Machines, the machine is "walking" or "shifting" even placed on anti vibration pads. Then, Anchoring of the machine is necessary to stop the "machine walking".

But after that, there is some level of vibration is transmitted through the bolt. Unick Anti Vibration Insulating Disc helps to control that vibration transmission which comes through the bolt and achieve two-level vibration control.

#### **Features:**

- Optimum Finish.
- · Supreme Quality.
- · Robust and Reliable.
- · Longer Life.

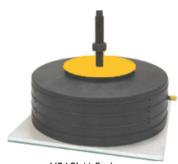


Model	Bolt Size (mm)	Outer Diameter (mm)	Inner Diameter (mm)	Thickness (mm)
UID-A	M10	32	12	12
UID-B	M12	32	14	12
UID-C	M16	40	17	25
UID-D	M18	50	18	25
UID-E	M20	50	22	25
UID-F	M25	60	28	25
UID-G	M28	75	30	30
UID-H	M30	75	30	30





## Rubber Air Spring Isolators.



**URASI-M Series** 

Models	Load Range (kg/pc)	Max.Air Pressure (bar)	Base Plate Size (lxbxh) mm	Isolator Diameter (mm)	Height (mm)	Bolt Size
URASI-M1	20-75	3	95x95x6	85	65	M10
URASI-M2	75-350	5	135x135x6	125	70	M12
URASI-M3	250-900	6	185x185x8	175	90	M16
URASI-M4	600-1700	6	255x255x8	250	108	M16
URASI-M5	1000-3700	6	380x380x8	370	115	M20
URASI-M6	2500-7500	6	500x500x8	490	155	M20
URASI-M6	2500-7500	6	500x500x8	490	155	M2

<sup>\*</sup> Depending upon the pressure required to support the load.



**URASI-AL Series** 

Models	Load Range (kg/pc)	Max.Air Pressure (bar)	Base Plate Size (lxbxh) mm	Isolator Diameter (mm)	Height (mm)	Bolt Size
URASI-AL1	20-75	3	95x145x6	85	65	M10
URASI-AL2	75-350	5	135x185x6	125	70	M12
URASI-AL3	250-900	6	185x235x8	175	90	M16
URASI-AL4	600-1700	6	255x305x8	250	108	M16
URASI-AL5	1000-3700	6	380x430x8	370	115	M20
URASI-AL6	2500-7500	6	500x550x8	490	155	M20

<sup>\*</sup> Depending upon the pressure required to support the load.



### Rubber Air Spring Isolators.

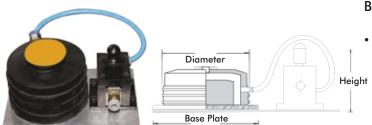
Rubber Air Spring Isolators offers low natural frequencies between 2.45 to 6.5Hz. It is designed for air pressure of 1 to 6 bar. Rubber made from high grade elastomer having steel reinforced hoops with integral heavy wall, aluminium base plate and cast iron top support plate having a tapped hole. Anti Skid is provided below the base plate for anti slip properties and no need of anchoring. Inflation is either through the moulded in-built valve or by the connection to a permanent air supply.

Highly effective insulation for the machines having low level of frequency vibration. Rubber Air Spring Isolator is well suited for both active and passive vibration control. Permissible Temperature Range is -20deg C to +70deg C.

It comes with two variants - M Series and AL Series. URASI-AL Series has Auto Levelling Sensor with  $\pm$  0.015mm/m levelling Accuracy.

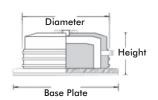
#### **Advantages of Rubber Air Spring Isolators:**

- Rubber Air Spring Isolator with integral heavy wall construction and high grade polymer.
- · Low Natural Frequency.
- Continued support and insulation even under no air pressure.
- Damage of Isolator is impossible in case of overload or even drop in pressure of compressed air.
- It offers a great combination of resiliency and air prevents high static deflection, drift and permanent down.
- · Low Maintenance.
- Extends the life of Machinery.
- Wide load range available.



URASI-AL Series





**URASI-M Series** 

#### **Applications of Rubber Air Spring Isolators:**

- It is best suited for both Active and Passive case
   Vibrations.
- Note: For Active Case, Rubber Air Spring Isolator should use with viscous damping.

#### **Active case applications-**

Power Presses., High Speed Punch Presses., Air Compressors., Generator Sets., Textile Machines., Test Rigs. Blowers., Engine Test Beds.

**Passive case applications-** Coordinate Measuring Machines (CMM)., Metrology Inspection Devices., In-Line Induction Billet Heater., Vibration Isolation Tables.



### **Vibration Isolation Tables- Anti Vibration Table.**

Unick Vibration Isolation Table is well suited in case of Passive Vibration where external vibrations are removed so that Testing & Laboratory equipments used with high accuracy.

Top Portion is "Granite Surface Plate" with high flatness accuracy, table structure is MS, there are 4 nos. of Levelling Pads in each leg of table, Vibration Isolators are inserted between the surface plate and MS structure. Each table has 4 nos. of Vibration Isolators

**Applications:** Metrology Inspection Devices., Electronic Microscope., Spectrometers., Roughness Tester., Hardness Tester., Analytical Balance., Atomic, Absorption Spectrophotometers., Roundness Tester., Microscope., Galvanometer.

#### **Unick Vibration Isolation Table has 4 Categories:**

- Vibration Isolation Table having Elastomeric Pads and Levelling Pads (UVT E Series).
- Vibration Isolation Table having Rubber Air Spring Isolator and Levelling Pads (UVT RAS Series).
- Vibration Isolation Table having Rubber Air Spring Isolator with Auto Levelling and Levelling Pads (UVT RASAL Series).
- Vibration Isolation Table having Membrane Air Spring Isolator with Auto Levelling and Levelling Pads (UVT MASAL Series).



**UVT E Series** 





**UVT RASAL Series** 



**UVT MASAL Series** 

Models	Table Dimension (LxBxH) mm	Thickness of Granite Surface Plate (mm)	Table Load Capacity (kg)	Adjustment Range (mm)
UVTE-1/ UVTRAS-1/ UVTRASAL-1/ UVTMASAL-1	450x450x1000	50	100-300	8
UVTE-2/ UVTRAS-2/ UVTRASAL-2/ UVTMASAL-2	630x630x1000	80	300-500	8
UVTE-3/ UVTRAS-3/ UVTRASAL-3/ UVTMASAL-3	900x600x1000	100	500-1250	12
UVTE-4/ UVTRAS-4/ UVTRASAL-4/ UVTMASAL-4	900x900x1000	100	700-1800	12



### Membrane Air Spring Isolators.

The Unick Membrane Air Spring Isolator is constructed in cast aluminium body. It consists of a air chamber that is sealed with a reinforced, flexible diaphragm. When compressed air inserted through the inlet valve, the isolator supports its payload using a piston which is located on the top of the diaphragm. We can calculate the load capacity of the isolator by using the pressure on the diaphragm and effective area of the diaphragm. Permissible Temperature Range is -20deg C to +90 deg C. The typical pneumatic isolator design incorporates dual air chambers. It has very low level natural frequency. It can be removed the vibration frequency below 2 Hz.

It is fully aluminium body Isolator. The inner chamber is divided into two parts- Load Volume and Damping Volume.

A thin layer of reinforced elastomeric diaphragm on the top of the isolator to support the load. A safety valve is present to protect it from over inflation.

It has two series. UMASI-A series and UMASI-B series. Both are Auto Levelling.

Levelling Accuracy is  $\pm$  0.015mm

Natural Frequency is 2Hz to 3Hz

**Applications:** Coordinate Measuring Machines (CMM), Metrology Inspection Devices., Electronic Microscope., Spectrometers., Roughness Tester., Hardness Tester., Analytical Balance., Atomic Absorption Spectrophotometers., Roundness Tester., Microscope., Galvanometer., Atomic Force Microscope., Profile Projectors etc.





**Exercise:** In case of Sensitive Equipments like Coordinate Measuring Machine (CMM), We can achieve highly effective vibration isolation by using "Cradles" or "Custom designed Rigid Frames". Cradles increase the stability of self levelling pneumatic isolation system by lowering the center of gravity. A cradle support frame is used to position the membrane air spring isolators achieve the reduction in passive vibration. Second, it is also used when a machine base cannot be modified to place the isolators and then rigid frame is required.

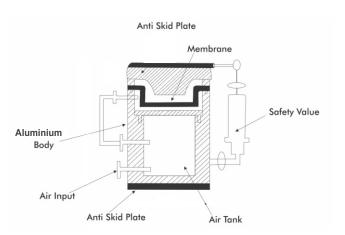






## Membrane Air Spring Isolators.





Models	Load Range (kg/pc)	Air Pressure (bar)	Base Plate Size (lxbxh) mm	Isolator Diameter (mm)	Height (mm)
UMASI-A1	110-185	4-6	120x200x4	110	100
UMASI-A2	250-450	4-6	160x250x6	150	100
UMASI-A3	700-1100	4-6	210x300x6	200	100
UMASI-A4	1300-2200	4-6	260x350x8	250	100



Models	Load Range (kg/pc)	Air Pressure (bar)	Isolator Diameter (mm)	Height (mm)
UMASI-B1	700-1200	4-6	200	155
UMASI-B2	1100-1650	4-6	225	155
UMASI-B3	1650-2500	4-6	275	155
UMASI-B4	2500-3800	4-6	350	155



### Unick Mach Levelling Mount

Unick Mach Levelling Mount is best suitable for rotational movement machine but has very low and negligible axial forces. It is a Heavy Duty Mounts.

Unick Mach Levelling Mounts are suitable for heavy machine installations.



Models	Levelling Adjustment (mm)	Bolt Size	Diameter (mm)	Height (mm)	Load Capacity (kg)	Natural Frequency (Hz)
UML-A	12	M12	90	50	1100	7
UML-B	20	M16	150	55	2500	7
UML-C	20	M20	200	60	5000	8



### **Vibration Isolated Foundation**

#### **Unick UFM Foundation Isolation Sheet**

provides low frequency vibration isolation for foundation isolation applications

#### **Construction:**

Composite rubber based elastomeric material specifically designed to provide low frequency vibration isolation

#### Creep

Permanent static loads cause a certain amount of creep (additional deflection) in all elastomeric materials. The long term creep of UFM Foundation isolation material is very low when used in the above load range. This provides life long usage under suitable conditions.

**4-6 Layers of UFM Foundation isolation plate** are ideal for foundation isolation. With increased thickness, the natural frequency is reduced, which also improves isolation.

#### **Oil & Chemical Resistance**

Resistant to fuels, lubricating oils, water etc.

#### **Working Temperature Range**

-15°C to +75°C

#### **Standard Sheet Size**

500 X 500 mm

#### **Load Range**

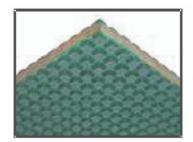
1-4Kg/cm

#### **Thickness**

15<sub>mm</sub>

#### **Applications:**

Foundation Isolation Floor

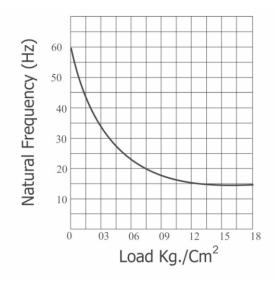


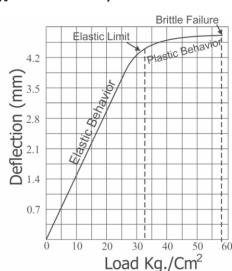
Stress Kg/cm <sup>2</sup>	1	2	3	4
f <sub>n</sub>	16	11	9.5	8
<b>f</b> <sub>d</sub>	31	22	20	17
d	1.1	2	2.8	3.75

#### **UFM SHEET**

F = Dynamic Natural Frequency for one layer (Hz); F = Static Natural Frequency (Hz); d n N = No. Of Layers; FD = for dynamic Natural Frequency for all Layers (60mm); d = static deflection

F overall = 
$$[1/(n)^{(0.5)}]$$
 x f of one Layer





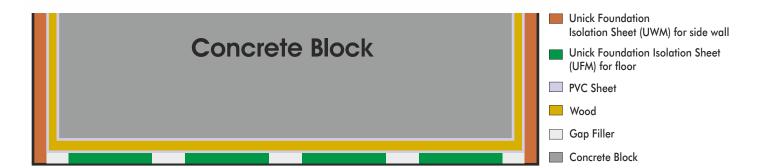


### **Vibration Isolated Foundation 3**

- The Isolated Foundation is required to reduce vibrations in both Active and Passive cases.
- **Active Vibration Isolated Foundation.**
- Forging Hammers.
- Power Pressses.
- Engine Test Rigs etc.
- Passive Vibration Isolated Foundation.
- CMM
- Measuring Equipments.
- Testing Equipments etc.
- **HOW it Works?**
- Vibration Isolated Foundation lowers the centre of gravity of the machine foundation system and adds to the stability of the machine.

#### **Material Required:**

- **CIVIL WORK.**
- Dry and Water Proof Pit.
- Concrete Block, Size depend upon the size and weight of the machine.



#### **UNICK ISOLATION MATERIALS.**

- Unick Isolation Material for Bottom (Surface) UFM
- Unick Isolation Material for Side Walls- UWM
- Air Gap Filler.
- **PVC Sheets**
- Polymeric Sealant.
- Joint Line Tapes.
- Procedure to Construct the Vibration Isolation Foundation:
- PLEASE CONSULT TO US FOR PROCEDURE AND MATERIAL GUIDELINES.



### **Vibration Isolated Foundation**

#### **Construction:**

Composite Material made from Nitrile Rubbler, Crork Particles & Synthetic fibre. (100% polyster)

#### **Applications:**

**Foundation Isolation Floor** 

#### Oil & Chemical Resistance

Resistant to fuels, lubricating oils, water etc. used the shop florr

#### **Working Temperature Range**

-15°C to +75°C

#### **Standard Sheet Size**

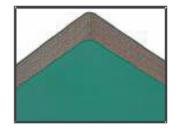
500 X 500 mm

#### **Load Range**

5-15Kg/cm

#### **Thickness**

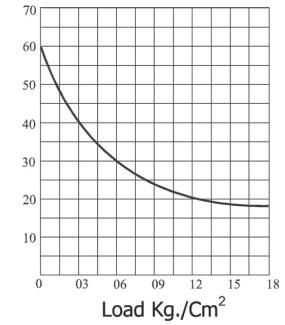
50<sub>mm</sub>

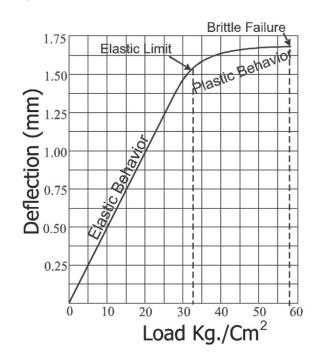


Stress Kg/cm <sup>2</sup>	03	06	09	12	15
f <sub>n</sub>	42	29	22	19	17
<b>f</b> <sub>d</sub>	63	44	34	28	26
d (mm)	0.14	0.3	0.5	0.7	0.8

 $\mathbf{f_n}$  Static Natural Frequency (Hz) ;  $\mathbf{f_d}$  Dynamic Natural Frequency (Hz) ;  $\mathbf{d}$  deflection









## Enquiry Form

Type of Vibration: Active  Passive
Name of the Machine:
Application of the Machine:
Machine Manufacturer:
Static Weight of the Machine:
RPM:
No. of Strokes:
Total No. of Foundation Pads/Mounts required:
Diameter of Foundation Hole (in mm):
Hole Length:
Hole Length:  Type of Hole:  Plain Hole   Threaded Hole
Type of Hole:  • Plain Hole □