

# UNISORB® VIBRATION ISOLATION ANCHOR PADS

## VIBRATION DAMPENING QUALITIES OF ENGINEERED FELT

For thousands of years, man has used felted fiber to absorb shock and vibration. UNISORB has chosen felt pads for use under the feet of many types of machines because of its ability to effectively isolate against transmitted shock and vibration, and because of its predictability. UNISORB RED-LINE PADS are also highly resistant or impervious to most industrial chemicals, oils and moisture. Life expectancy, in most cases, will exceed that of the machinery with which they are installed.

## UNISORB® RED-LINE™ PADS SATISFY OSHA REQUIREMENTS

UNISORB RED-LINE PADS and anchor bolts satisfy OSHA requirements for machinery installation. Proper use of these products will:

- Improve the efficiency of production equipment.
- Provide safer, more desirable environment for workers.
- Reduce down time and extend the operating life of your machinery.
- Prevent floor damage.

Harmful effects of vibration and noise may cause serious impairment to the efficiency of your workers and the overall effectiveness of your production machinery.

## RED-LINE™ ANCHOR PADS



**BONDED PAD  
ILLUSTRATED**

Reduced vibration contributes to more efficient operation and longer life of costly machinery. UNISORB's job-engineered RED-LINE ANCHOR PADS substantially reduce vibration transmission and keep light and medium-duty machines from "creeping" or "walking" without the use of anchor bolts and will materially reduce transmitted noise. Installations are fast, easy and inexpensive.

## HOW TO SPECIFY UNISORB® ISOLATING & ANCHORING PADS

UNISORB RED-LINE AND RED-LINE ANCHOR PADS Type H, HB, E, EB, D and DB have long been the standard for achieving superior results in the toughest shock/vibration applications. These pads are 100% wool fiber and are suitable for normal industrial environments being unaffected by exposure to oils, cutting fluids and coolants.

UNISORB RED-LINE AND RED-LINE ANCHOR PADS Type S, SB, F and FB are manufactured from 100% man-made fibers offering excellent performance at a lower cost. Types S, SB, F and FB pads are recommended for use in wet or "exposed to weather" applications or where strong concentrations of acids or bases will be encountered.

Both families of pad materials may be expected to outlive the machinery on which they are installed.

Use this formula to determine the proper pad material from the chart below:

$$\frac{\text{Weight (pounds per foot)}}{\text{Foot length (inches) X Width (inches)}} = \text{Pounds per square inch}$$

PAD TYPE SELECTION				
Load Range (in PSI)	0-50	50-100	100-250	Over 250
Extra Light	Neoprene H-¼, S-½	Neoprene E-½, S-½	D-½, F-½	Titan-½
Normal	H-½, S-½	E-½, F-½	D-½, F-½	Titan-½
Walking Normal	HB-½, SB-½	EB-½, FB-½	DB-½, FB-½	Titan-½
Normal Heavy Impact	E-1, S-1	E-1, F-1	D-1, F-1	Titan-1
Walking Heavy Impact	EB-1, SB-1	EB-1, FB-1	DB-1, FB-1	Titan-1
Severe Horizontal	S-½, H-½ + Adhesive	F-½, E-½ + Adhesive	F-½, D-½ + Adhesive	Titan-½ + Adhesive

# UNISORB® VIBRATION ISOLATION PAD MATERIALS VIBRATION ANALYSIS SERVICES

## RED-LINE™ ANCHOR PADS TYPE HB, EB, DB, SB & FB

The nylon-bonded surface of RED-LINE ANCHOR PADS provides a high coefficient of friction to effectively prevent machinery from "creeping" and "walking". These pads are not affected by most oils and solutions found in manufacturing plants. Available in standard sheets of 36" x 60" for wool and 36" x 72" for non-wool, consult the factory for quotations on cut-to-size prices. When properly installed, RED-LINE ANCHOR PADS conform to OSHA requirements for machine anchoring.

## RED-LINE™ PADS TYPE H, E, D, S & F

Available in a variety of densities and thicknesses to fit machine load requirements, RED-LINE PADS provide effective, low cost vibration control for machinery. Available in standard sheets of 36" x 60" for wool and 36" x 72" for non wool, consult the factory for quotations on cut-to-size prices.

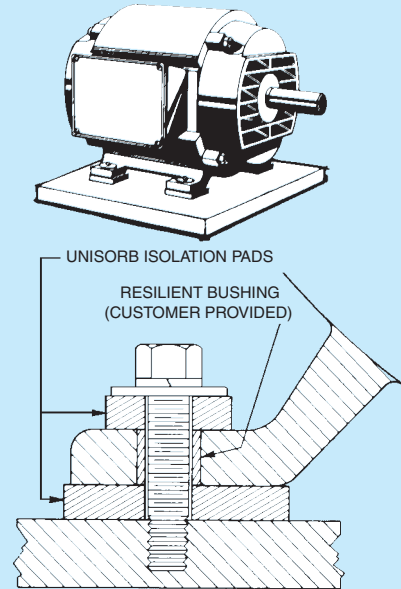
## VIBRATION ANALYSIS SERVICES

UNISORB provides vibration analyzation services as part of its overall engineering assistance program to meet every customer's machinery installation need. Our engineers are thoroughly trained in the use of state of the art vibration analyzing equipment and are experienced in analysis of technical data collected for every machinery shock and vibration installation problem. Solving difficult machinery installation problems by providing comprehensive engineered solutions is our primary mission. Contact Unisorb Engineering Department for details.



## PRODUCT APPLICATIONS

### BOLT-THROUGH ISOLATION



This basic approach has been applied satisfactorily to equipment from ¼ horsepower electric motors to 2,000 ton capacity stamping presses. The machine foot is completely isolated from contact with either the mounting structure or anchor bolt by isolation material. Elastomeric tubing (of the appropriate size) is used for the resilient bushing around the anchor bolt.

### CASE HISTORY

UNISORB was contacted by a company planning to relocate 41 assorted cold headers, bolt makers and nut forming machines from one plant to another. We recommended the use of Type D-½ RED-LINE PADS with adhesive for proper machine installation but our proposal was initially rejected by the customer as being too expensive. They selected a competitive non-felt material which was lower in cost.

Almost as soon as the machines were installed and operating the company began to experience failure in the installations. A significant number of machines had "walked" off their pads, and in some cases were stopped only by the walls of the factory.

We were again contacted and our recommendation was to reinstall at least some of the machines on RED-LINE PADS. Once our installation was completed and the results observed the company requested that all of the pads in the plant be replaced. Our approach to the correct application of pads is now the approved standard method with the company.