

Product Description

BILZ insulating plates are highly developed materials designed to solve problems caused in many industrial sectors by vibrations and structure-borne noise. Made from a precise combination of nitrile rubber, cork particles and cross-linked polyester-fibre, this high-grade compound material possesses excellent physical and mechanical properties. One major advantage of this new compound material is its resistance to modern cooling lubricants; the mountings can thus also be used in oil sumps without any loss of physical properties. Particularly worth mentioning are the superb "compression set" values. These are extremely important, for example, if modern machine tools are to be insulation-mounted while ensuring long-term geometric position. 8 different types of plates provide the technically optimal solution to almost any vibration problem. The primary aim in the development of these was to provide specific solution for a wide range of machinery for e.g. lathes, milling machines and grinding machines, as well as presses and feed presses!

Group: lubricants

Roller and friction bearing greases, gear lubricant grease

Group: synthetic lubricants

Polyalkylenglycols, ester of a carbonic acid, radiator antifreeze

Group: fuels and motor fuels

Petrol (gasoline), diesel, heating fuel, aviation gasoline, special motor fuels

Group: fire resistant pressure liquids

Oil in water emulsions, water in oil emulsions, water polymeric solutions

Resistance to Aging

The service life of these mounting plates is nearly unlimited if the load values are observed. No permanent deformation.

Resistance to Chemicals

Extremely high degree of resistance to conventional oils, grease, acids, etc.

Completely resistant to cooling emulsions, thus allowing machine mounting in oil sumps.

Resistance to Temperature

+ 120° to - 20° Celsius

Group: Mineral Oils

Cooling lubricants mixable with water, ATF (Automatic Transmission Fluid), cooling lubricants, water mixable anticorrosive oils, sliding belt oils, compressed air oils, lubricants, thermal oils, filter oils, rolling oils, gear lubricant oils for cars, brake fluids and mineral oil basis

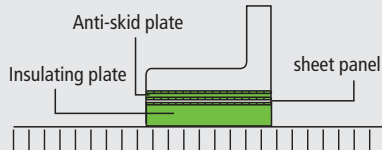
Group: purifiers

Chlorinated hydrocarbons, petroleum ether/benzine, cold purifiers

Group: purifiers (watery solutions)

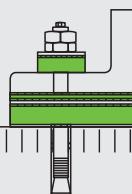
Washing and Rinsing agents, wetting agents, dilute acids, dilute alkaline solutions, salt solutions

Application Technology 1



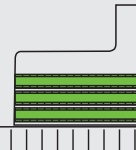
Machine mounting on BILZ insulating plates for machines that don't require a high degree of mounting precision. Floor unevenness can be compensated for by using shim plates, etc. The plates are normally geometrically positioned. Size is determined on the basis of machine weight and available contact area.

Application Technology 2



Schematic illustration of floor anchorage using insulator plate and washer. In some cases, it is necessary to anchor the object to be insulated to the floor. The use of insulator washers prevents vibrations being transmitted via the screw connection. In particularly difficult cases, it is advisable to use adjusted disc springs. Size, etc. is determined by BILZ.

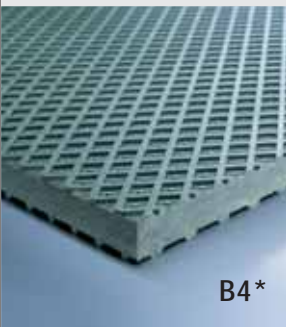
Application Technology 3



Highly effective impact and vibration insulation using BILZ insulator plate sets. When insulating pulsating forces (presses, hammers, feed presses), BILZ plates are in this case combined to form sets. This helps to achieve extremely low natural vibration frequencies. Their great advantage over steel springs in the very high attenuation capacity.

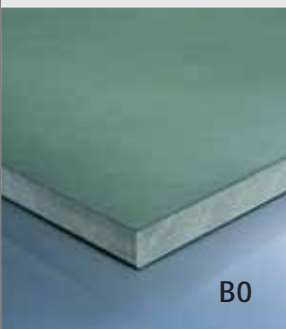
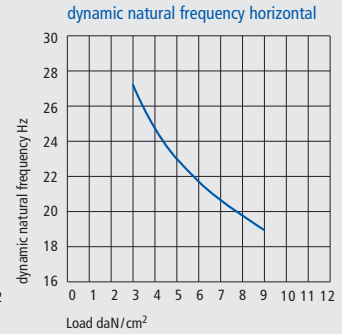
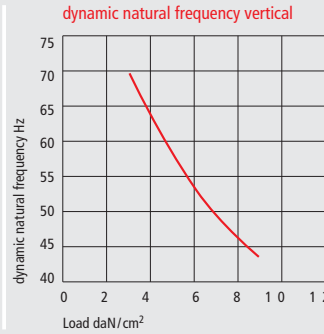
size of plates in mm	surface area in cm ²	size of plates in mm	surface area in cm ²	size of plates in mm	surface area in cm ²	size of plates in mm	surface area in cm ²
1000 x 500	5000	150 x 150	225	50 Ø	20	238 Ø	450
500 x 500	2500	150 x 100	150	75 Ø	44	300 Ø	710
500 x 250	1250	150 x 75	112	110 Ø	95		
250 x 250	625	100 x 100	100	130 Ø	133		
200 x 200	400	100 x 50	50	150 Ø	176		
200 x 100	200	75 x 75	56	200 Ø	314		
		50 x 50	25				

Important Notice:
BILZ Plates can be cut with any circular or band-saw.
If requested we shall be pleased to supply you with special dimensions.



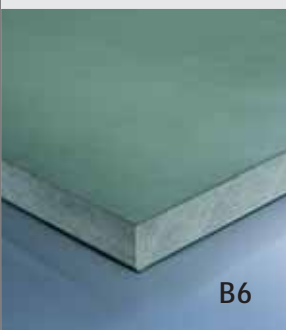
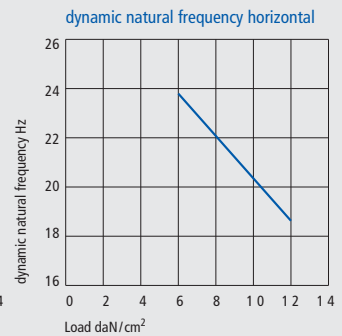
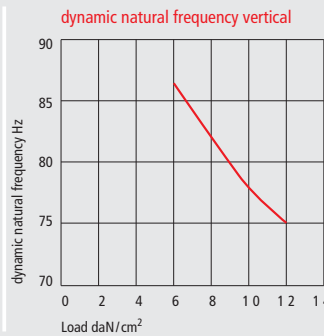
B4*

Type	Load daN/cm ²	Thickness mm	Coefficient of friction η	Range of application:
B4*	3-10	15	0,8	Very universal. Can be used for machine tools, plastic and printing machines. Extremely well suited to machines with a tendency to "migrate"



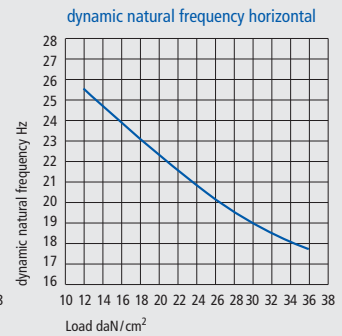
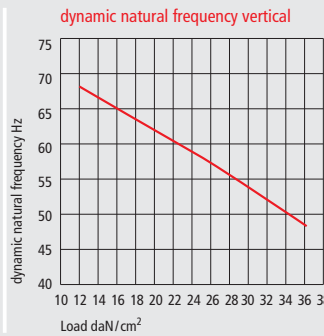
B0

Type	Load daN/cm ²	Thickness mm	Coefficient of friction η	Range of application:
B0	5-12	15	0,6	Without profile. Very high level consistency. Particularly for machines with little rigidity such as: lathes, machining centers, transfer lines etc,

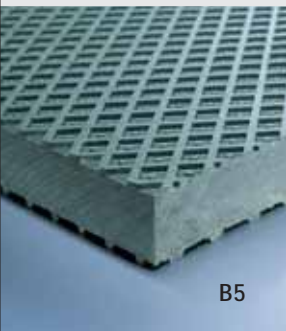
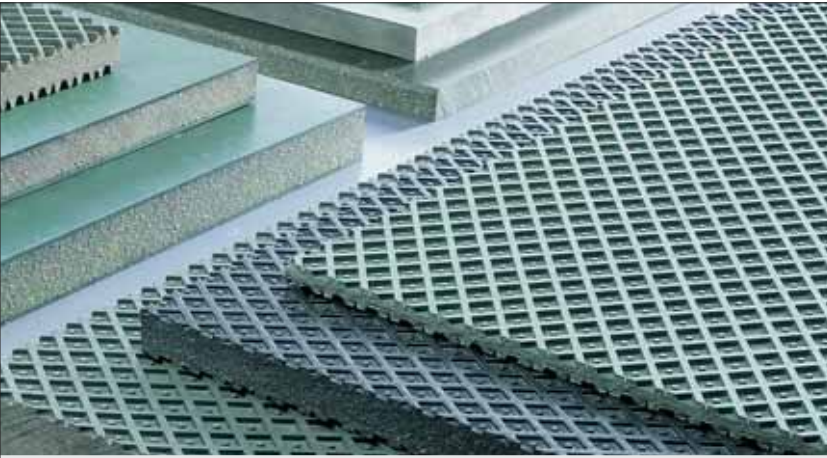


B6

Type	Load daN/cm ²	Thickness mm	Coefficient of friction η	Range of application:
B6	10-40	15	0,6	Insulating plate with extremely high loadability coupled with maximum level consistency. E.g. for very heavy and long bedded machining centers, transfer lines etc.

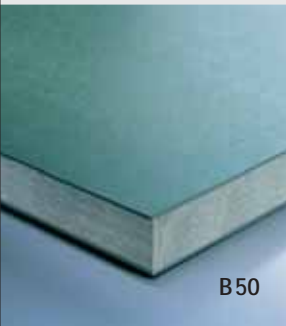
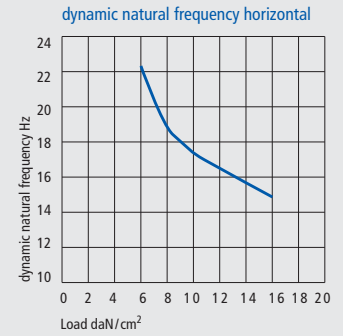
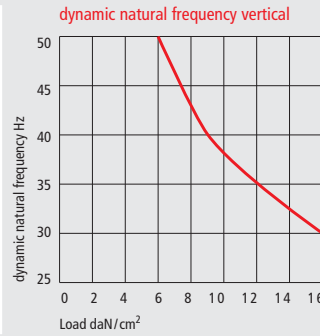


* Can be supplied also with profile on one side only! Designation e.g. B4 - 1.



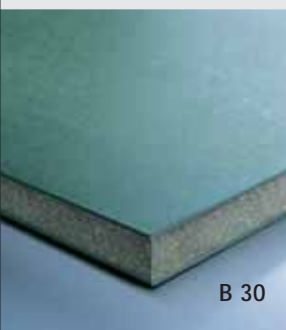
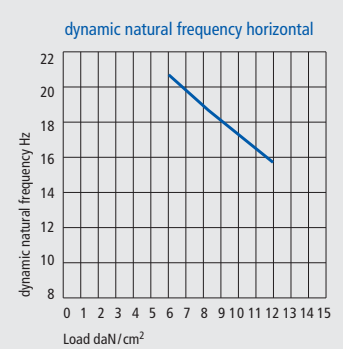
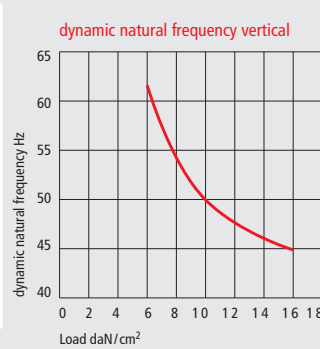
Type	Load daN/cm ²	Thickness mm	Coefficient of friction η
B5	5-16	25	0,8

Range of application:
For machines with high dynamic disturbance properties and only a small support plate, e.g. presses, stamping presses, shears etc.



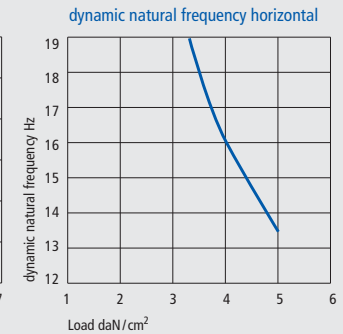
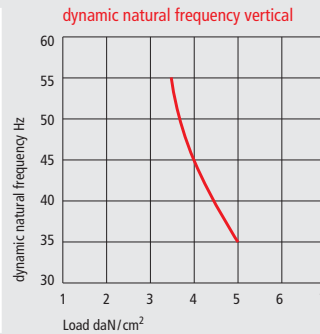
Type	Load daN/cm ²	Thickness mm	Coefficient of friction η
B50	5-16	25	0,8

Range of application:
For machines with high dynamic disturbance properties and only a small support plate, e.g. presses, stamping presses, shears etc.

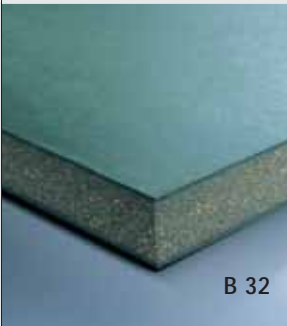


Type	Load daN/cm ²	Thickness mm	Coefficient of friction η
B30	2-5	18	0,8

Range of application:
Soft kind without any profile.
Specially suited for effective insulation of lighter presses, punching machines etc. on upper floors.

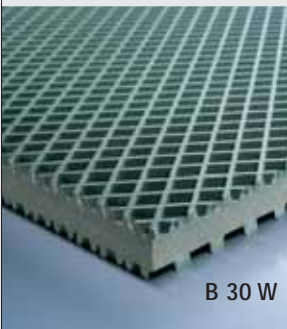
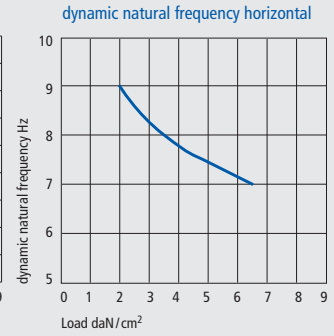
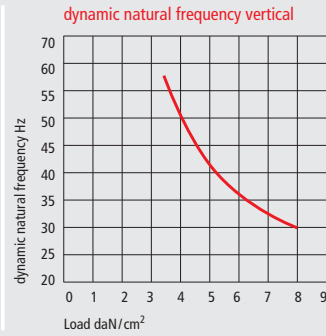


for vibration and structure-borne noise isolation



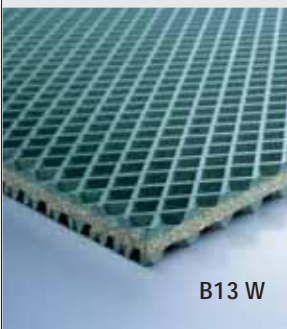
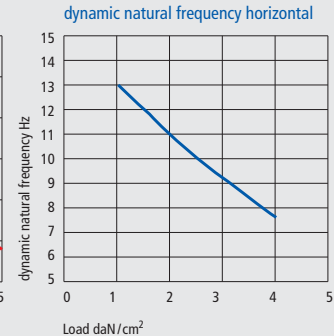
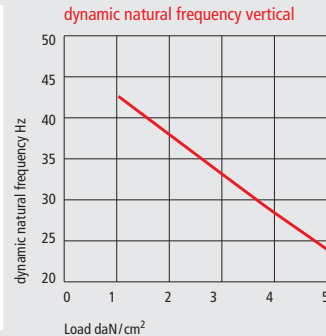
Type	Load daN/cm ²	Thickness mm	Coefficient of friction η
B32	2-8	25	0,8

Range of application:
Soft kind similar to B30, but with higher load capability.
For medium to big presses, punching presses etc. Very high insulation!



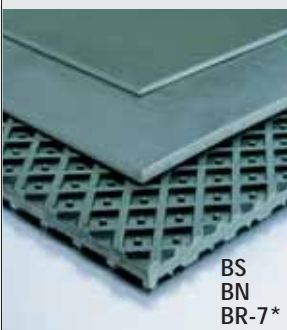
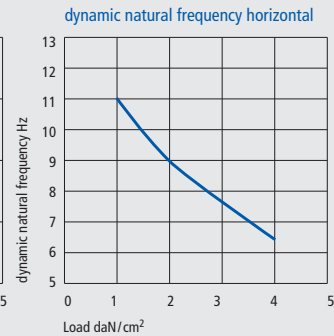
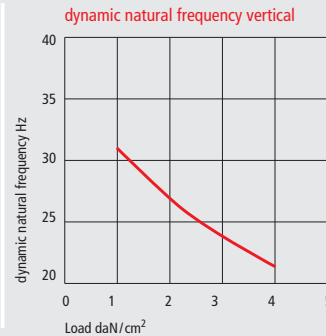
Type	Load daN/cm ²	Thickness mm	Coefficient of friction η
B30 W*	0,5-4	18	0,8

Range of application:
Very soft kind for mainly passive insulation. High insulation effect due to low frequency tuning. E.g. for measuring and testing machines, scales, microscopes and grinders.



Type	Load daN/cm ²	Thickness mm	Coefficient of friction η
B13 W	0,5-3,5	13	0,8

Range of application:
Special kind for highest insulation values, can be stacked up to 5 times. Tuning up to approx. 8 Hz. Recommended as so-called plate-set for foundation insulations.



Type	Load daN/cm ²	Thickness mm	Coefficient of friction η
BS	1-20	2	0,9
BN	1-20	5	0,6
BR-7*	2-10	7	0,8

Range of application:
BILZ anti-skid and spacer plates.
No vibration insulation!

* Can be supplied also with profile on one side only! Designation e.g. B4 - 1.