

Regupol®

Vibration 1000



Vibratec®

akustikprodukter

www.vibratec.se

Standard forms of delivery, ex warehouse

Rolls

Thickness: 10 mm
 Length: 8,000 mm, special length available
 Width: 1,250 mm

Stripping/Plates

On request
 Die-cutting, water-jet cutting, self-adhesive versions possible

Continuous static load

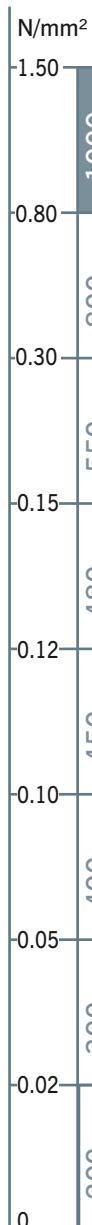
1.50 N/mm²

Peak loads (rare, short-term loads)

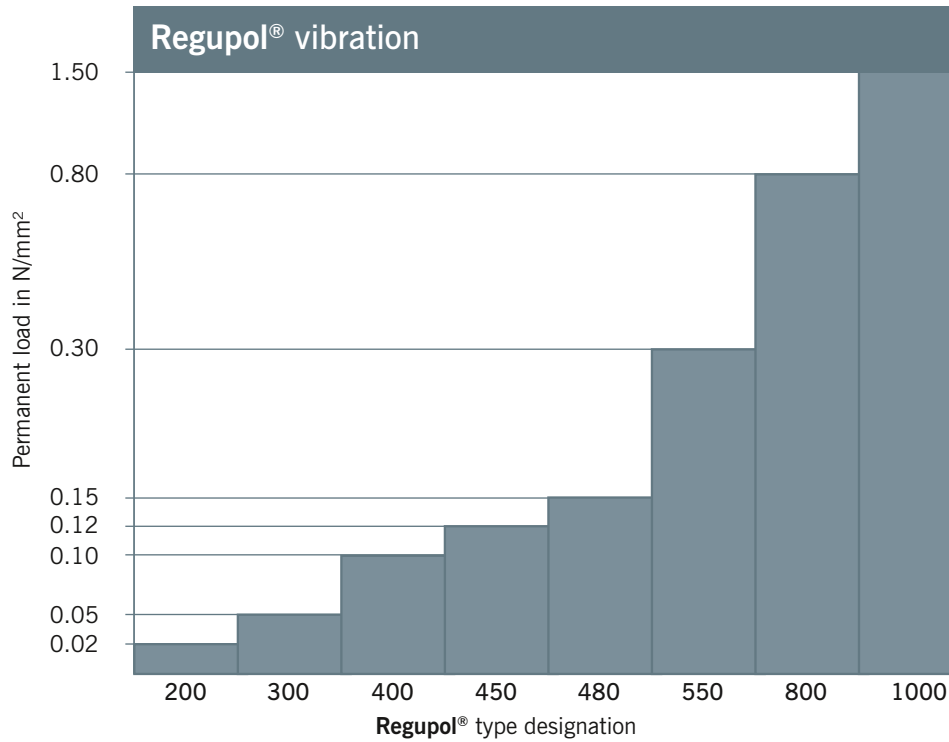
1.75 N/mm²



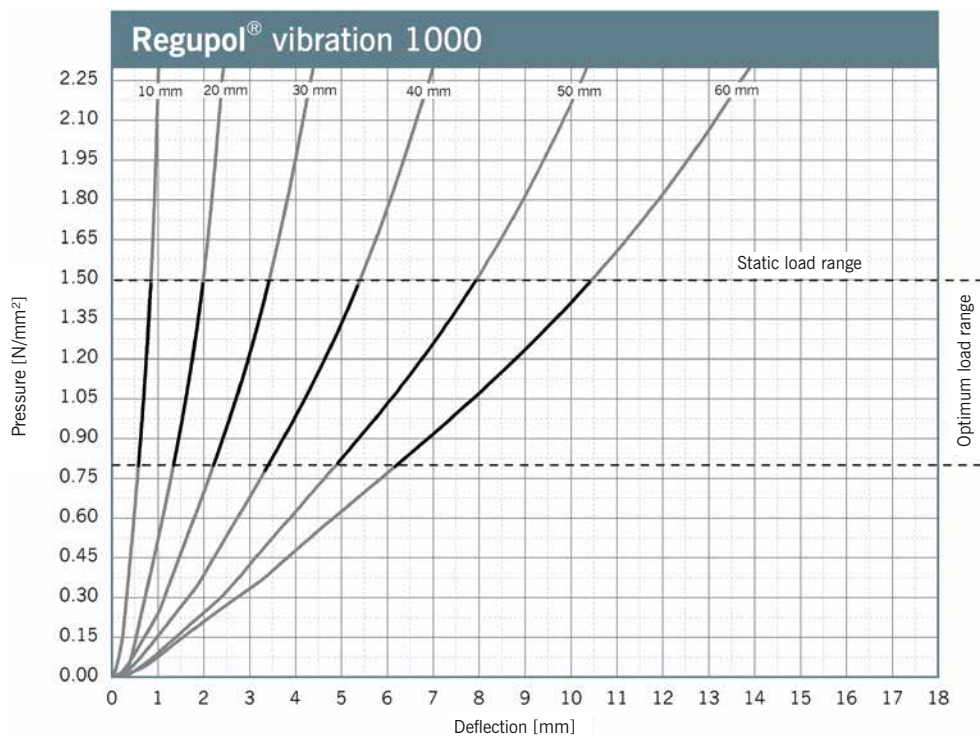
Static modulus of elasticity	Based on EN 826	4.0 - 11.0	N/mm ²	Tangential modulus, see figure "Modulus of elasticity"
Dynamic modulus of elasticity	Based on DIN 53513	15.0 - 45.0	N/mm ²	Depending on frequency, load and thickness, see figure "dynamic stiffness"
Mechanical loss factor	DIN 53513	0.16	[-]	Load-, amplitude- and frequency-dependent
Compression set	Based on DIN EN ISO 1856	4.9	%	Measured 30 minutes after decompression with 50% deformation / 23 °C after 72 hrs
Tensile strength	Based on DIN EN ISO 1798	2.3	N/mm ²	
Elongation at break	Based on DIN EN ISO 1798	110	%	
Tear resistance	Based on DIN ISO 34-1	15.0	N/mm	
Fire behaviour	DIN 4102 DIN EN 13501	B2 E	[-] [-]	Normal flammability
Sliding friction	BSW-laboratory BSW-laboratory	0.6 0.7	[-] [-]	Steel (dry) Concrete (dry)
Compression hardness	Based on DIN EN ISO 3386-2	1650	kPa	Compressive stress at 25 % deformation test specimen h = 60 mm
Rebound elasticity	Based on DIN EN ISO 8307	37	%	dependent on thickness, test specimen h = 60 mm
Force reduction	DIN EN 14904	45	%	dependent on thickness, test specimen h = 60 mm
Ozone resistance	DIN EN ISO 17025	Cracking stage 0	[-]	



Load Ranges



Load Deflection



Examination of deflection in accordance to DIN EN 826 between two stiff panels. Illustration based on the third loading. Velocity of loading and unloading 20 seconds. Tested at room temperature. Dimensions of test specimens 200 mm x 200 mm.

Vibration Isolation

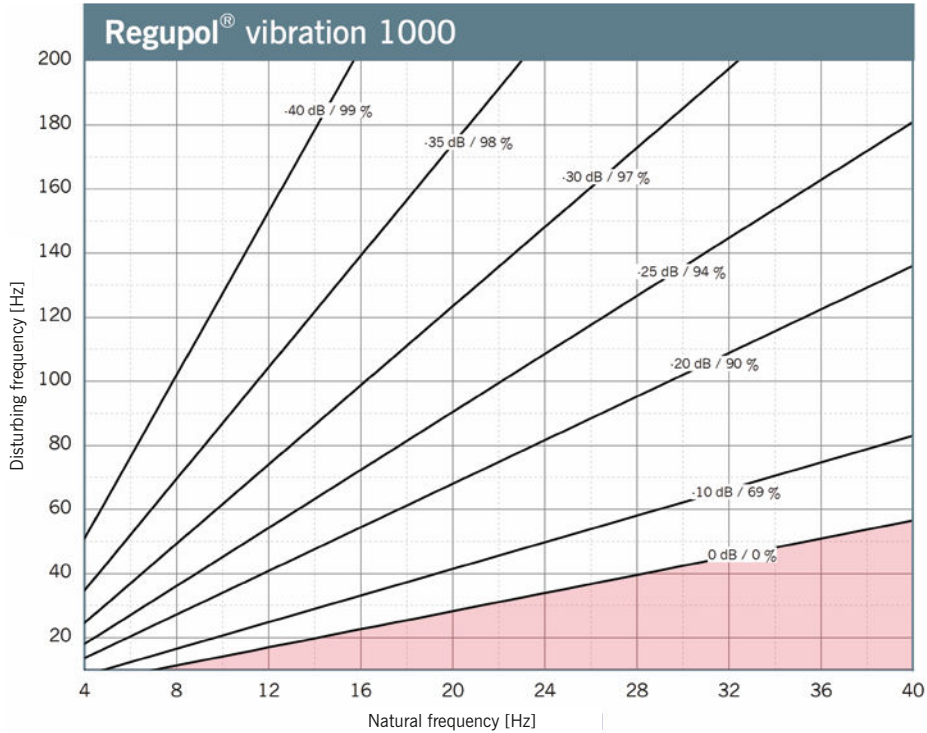
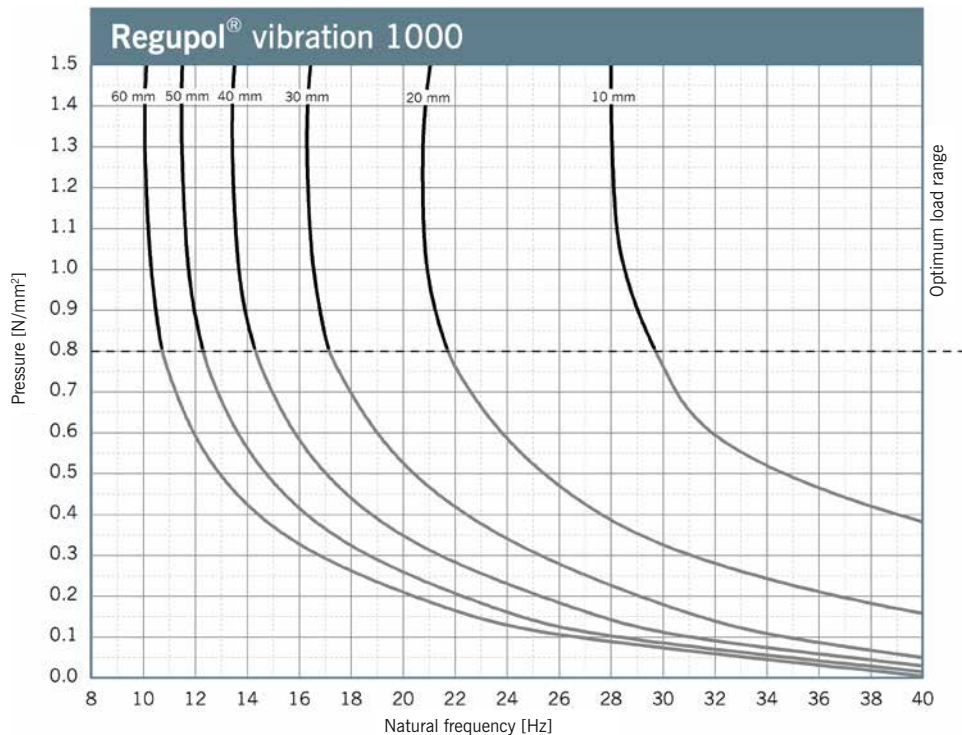


Illustration of the isolation efficiency of a single-degree-of-freedom system (SDOF system) on a rigid base with **Regupol® vibration 1000**. Parameter: power transmission (insertion loss) in dB, isolation factor in %.

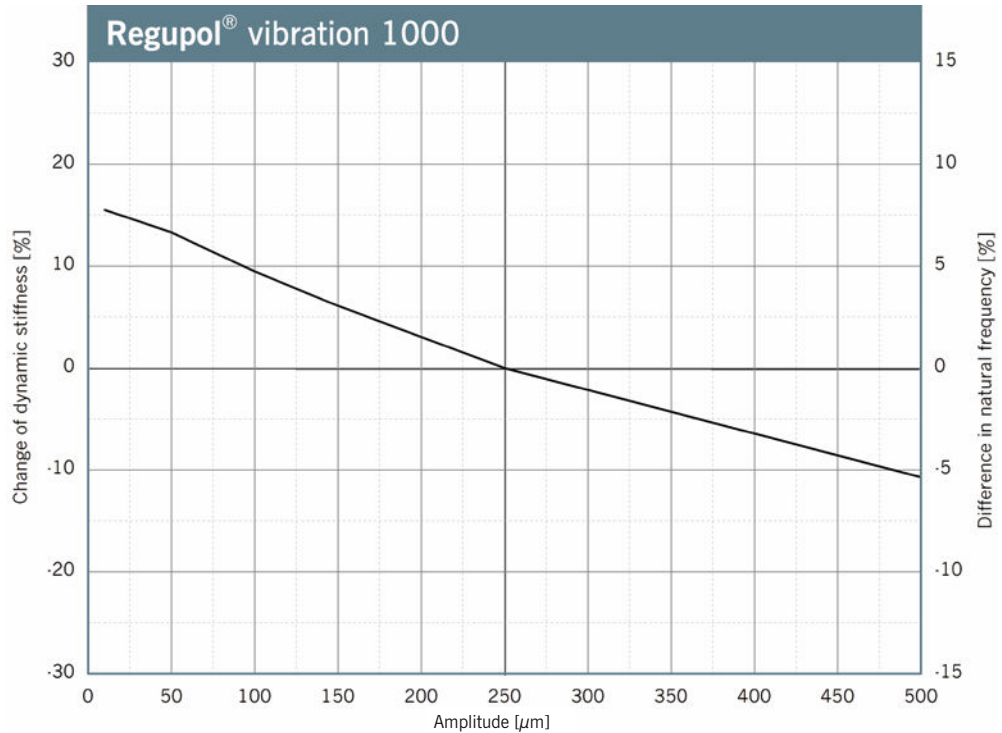
Natural Frequency



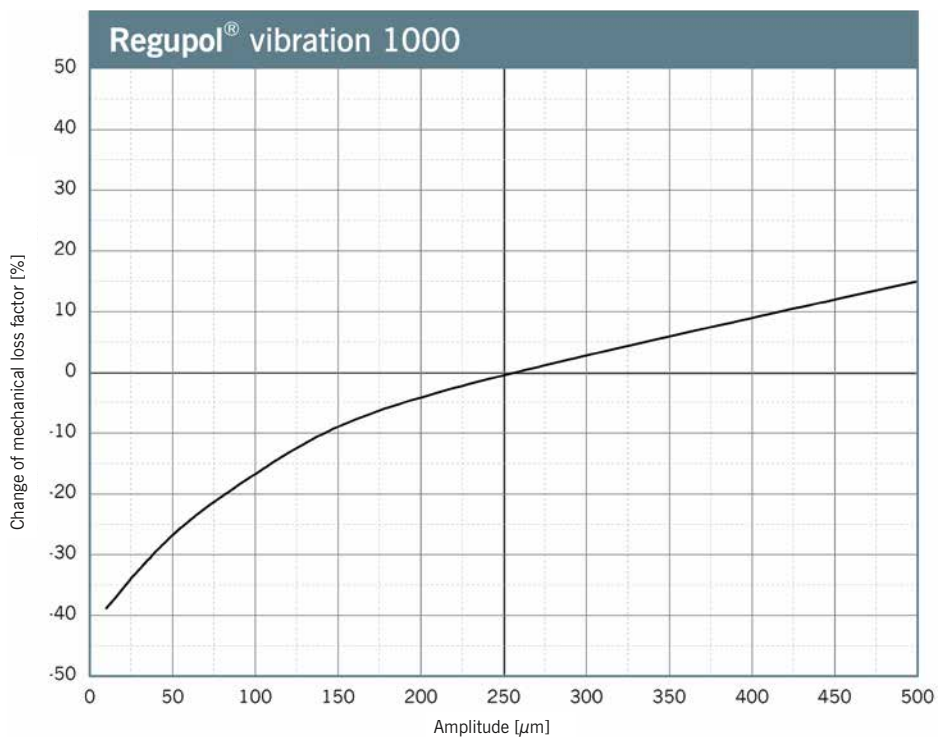
Natural frequency of a single-degree-of-freedom system (SDOF system) considering the dynamic stiffness of **Regupol® vibration 1000** on a rigid base. Dimensions of test specimens 200 mm x 200 mm.



Influence of Amplitude



Change of the dynamic stiffness due to changes in amplitudes. Average for 5 Hz, 10 Hz and 40 Hz excitation. Sinusoidal excitation at a constant mean load of 1.50 N/mm², dimensions of the specimens 200 mm x 200 mm x 60 mm. Natural frequency of a single-degree-of-freedom system (SDOF system) on a rigid base.



Change of the mechanical loss factor due to changes in amplitudes. Sinusoidal excitation at a constant mean load of 1.50 N/mm², dimensions of the specimens 200 mm x 200 mm x 60 mm.



Modulus of Elasticity

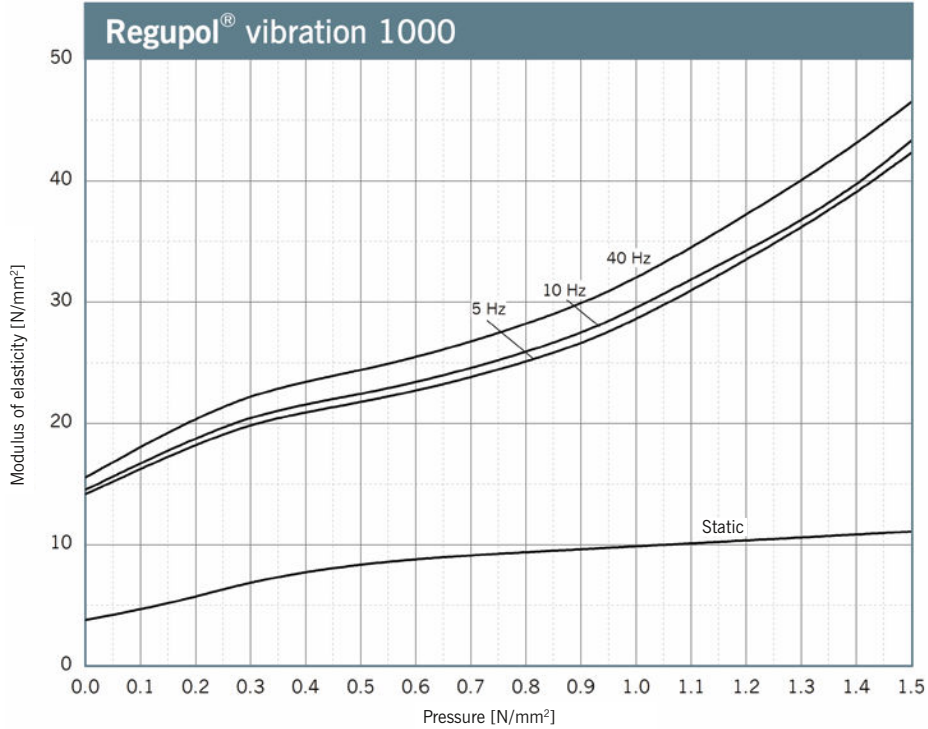


Illustration of the dynamic modulus of elasticity for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 200 mm x 200 mm x 40 mm; static modulus of elasticity as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.

Dynamic Stiffness

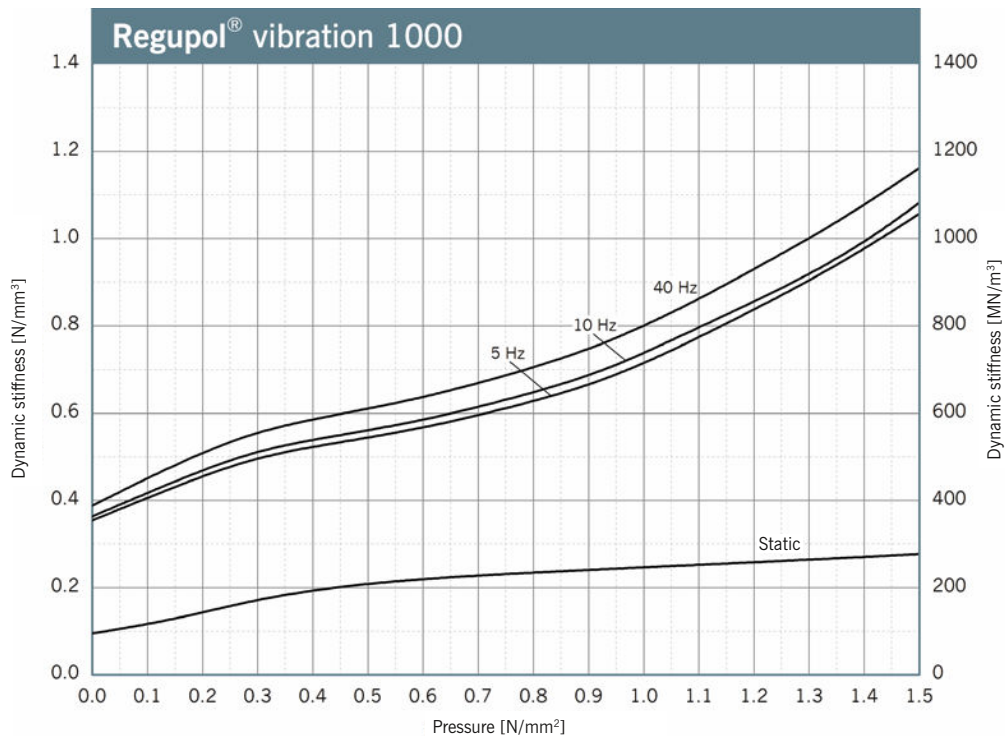
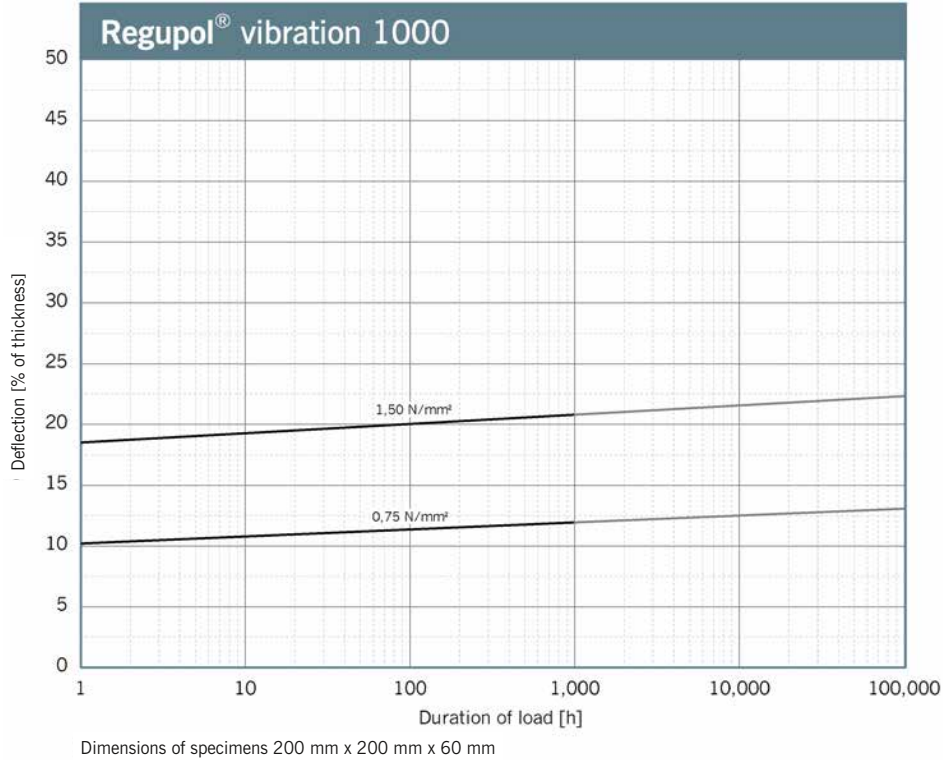


Illustration of the dynamic stiffness for sinusoidal excitation at a constant mean load and an amplitude of ± 0.25 mm. Dimensions of specimens 200 mm x 200 mm x 40 mm; static stiffness as a result of the tangent modulus of the spring characteristic. Tested in accordance with DIN 53513.



Long-Term Creep Test



Sweden
Tel: +46 176 20 78 80
e-mail: info@vibratec.se

Norway
Tel: +47 33 07 07 50
e-mail: info@vibratec.no

Denmark
Tel: +45 49 13 22 44
e-mail: info@vibratec.dk

Estonia
Tel: +372 56 66 29 93
e-mail: info@vibratec.ee