# Anti-vibration mats CONIRAP

Using its own manufacturing formulas and modern technologies, INTERTECH PLUS has created the product series of CONIRAP antivibration mats which is protected by the same trademark. CONIRAP mats are installed to reduced harmful effects of vibrations and noise which are potential effects caused by the operation of machine equipment, public transport etc. Produced vibrations can be significantly eliminated by using products from the series of CONIRAP anti-vibration mats which can be used for low and high static and dynamic loads.

Vibrations and structural noise can lead to substantial problems in buildings or while working on machines. Both the phenomena can be reduced directly at the source. If it is impossible to prevent the generation of structural noise at the existing source of vibrations, this source has to be strictly separated from surrounding structures, which is usually performed by flexible seating. The absorption of vibrations and the reduction of noise results in better working conditions at the workplace and also in prolonging the lifetime and reliability of machines.

To achieve required parameters of static and dynamic stiffness, we use rubber fibres and granulate for the production of anti-vibration mats. Both the materials have unique characteristics in the field of acoustics. All that is conducted in strict compliance with certification procedures and measurements which are performed in five independent laboratories. These laboratories provide perfect overview of the parameters of products, thus contributing to further development of new materials and their placement on the market.

### Material characteristics

- Wide range of loads
- Long-term preservation of declared characteristics
- Resistance against slightly aggressive substances
- Water-permeable, anti-freeze product

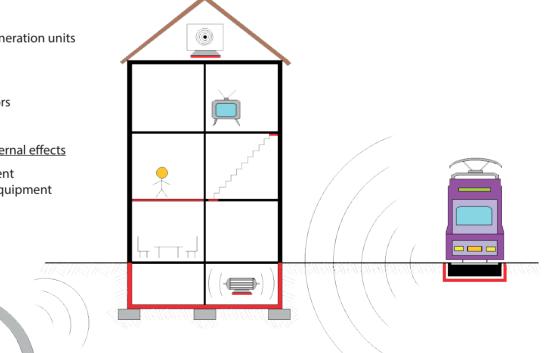
#### Environment protection from sources of vibrations and noise

- Rail transport carriages
- Machine tools
- moulding machines and hydraulic equipment
- Compressors
- Air-conditioning units
- Ventilation machinery
- Diesel generating units
- Combined heat and power generation units
- Heat pumps
- Elevator hatchways
- Machine rooms
- Precast staircases and escalators
- Theatre and scene machinery

## Equipment protection from external effects

- Precise CNC machine equipment
- Laboratory instruments and equipment
- IT technologies

CONIRAP



	Deformability Static	Dynamic stiffness				E dynamic			
	modulus [Mpa]	stiffness [N/mm³]	10 Hz	40 Hz	80Hz	E static	10 Hz	40 Hz	80 HZ
Conirap 0,1 modification 550	12,14	0,0162	0,0624	0,0685	0,0773	0,4536	1,7472	1,9180	2,1644
Conirap 0,1 modification 670	12,14	0,0460	0,1010	0,1200	0,1150	1,1040	2,4240	2,8800	2,7600
Conirap 0,4	22,3	0,1710	0,4610	0,5480	0,5800	4,1040	11,0640	13,1520	13,9200
Conirap 0,7	35,81	0,3070	0,9110	1,0590	1,2350	7,3680	21,8640	25,4160	29,6400
Conirap 1,0	68,18	0,6320	5,5400	6,2300	6,9100	15,8000	138,5000	155,7500	172,7500

# CONIRAP 0,1

The CONIRAP 0.1 S50 anti-vibration mat is a sandwich-type product. It joins two different materials. The upper component is a CONIRAP 0.1 anti-vibration mat made of a rubber granulate, the lower component is a STERED ID 250 insulation board made of recycled synthetic textiles used in the automotive industry.

Structure-borne sound reduction	Min. 22 dB according to ČSN ISO 10140-1 Annex H		
Improvement sound insulation rate	Min. 27 dB according to ČSN EN ISO 140 – 3[2]		
Static stiffness	0,0110 N/mm <sup>3</sup>		
Dynamic stiffness	10 Hz = 0,0526 N/mm <sup>3</sup>		
	40 Hz = 0,0552N/mm <sup>3</sup>		
	80 Hz = 0,0623 N/mm <sup>3</sup>		

Fatigue strength: 12,500,000 cycles	at the beginning	0,01 – 0,05 N/mm² 10 000 000 cycles	0,01 – 0,066 N/mm <sup>2</sup> 2 500 000 cycles
Static stiffness c <sub>st</sub> :	0,0118 N/mm <sup>3</sup>	0,0168 N/mm <sup>3</sup>	0,0182 N/mm <sup>3</sup>
Dynamic stiffness (5 Hz) c <sub>dyn</sub> :	0,0162 N/mm <sup>3</sup>		0,0229 N/mm³













