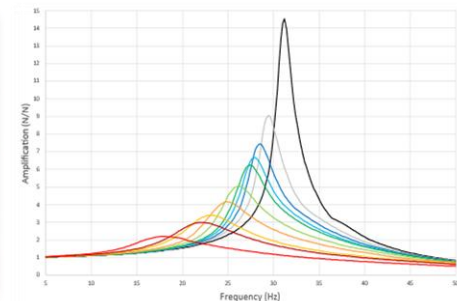
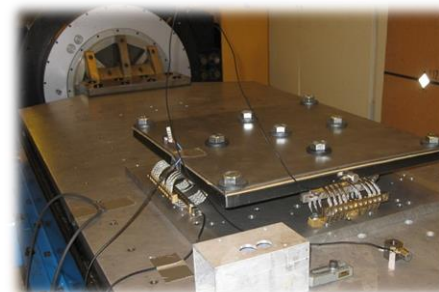
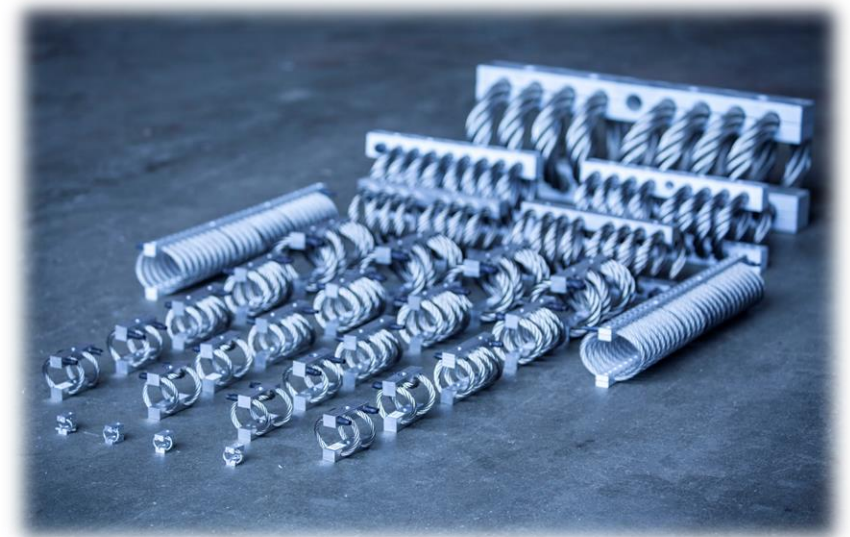


Wire Rope Isolators

Robust vibration and shock isolation

- Wire rope isolator is a **robust solution for mechanical isolation**
 - Works in challenging environments
 - Reduces disturbing high frequency vibrations while being ready to isolate extreme shock-like excitations caused by transportation, transients and explosions
 - All-metal structure - Works in 3 directions - High temperature range
- Wire rope isolator is used in **industry and military applications**
 - Used in machines and structures to the smallest of electronics
 - Isolator payload can be varied from 0.1 kg to more than 1 000 kg
 - Manufactured in EU
 - Tailored made solutions for special cases
 - Standard stock isolators for mass products



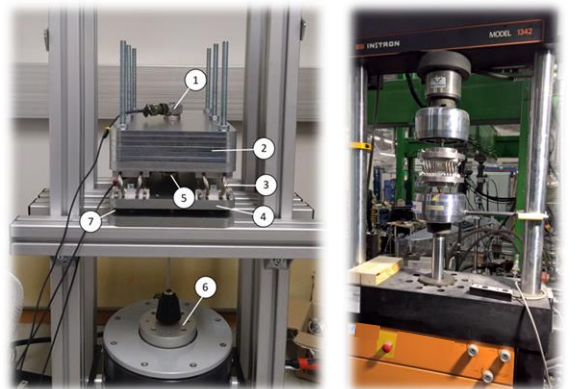
ROBUST • AFFORDABLE • RELIABLE

Wire Rope Isolators

Robust vibration and shock isolation

Wire Rope Isolator - Offering

- ✓ Robust isolation for challenging environment
 - Shock / transient loading
 - Civil application – impacts, transport
 - Military usage – UNDEX, IED, explosions
 - Enables the use of COTS products
 - Vibration isolation
 - Robust environments
 - High damping -> low resonance peak (see test results)
- ✓ Laboratory tests
 - Modern dynamic laboratory for dynamic isolator studies
 - Modal analysis of structures
 - Field measurements – application studies if needed
 - Hydraulic tests for high loading studies
 - Electromagnetic shaker for high frequency studies
- ✓ Design phase tool
 - Solution for challenging dynamics during design phase
 - Mathematical models of wire rope isolators available
 - Finite element analysis for special cases
- ✓ ADDI is an improvement tool for wire rope isolator
 - Removes the tension challenge of wire rope isolator during shock



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Wire Rope Isolators

Robust vibration and shock isolation

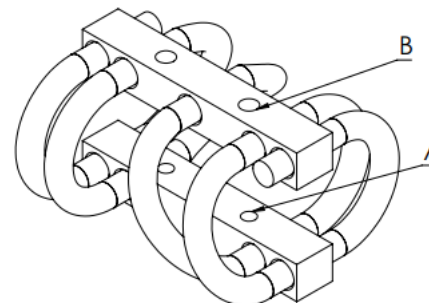
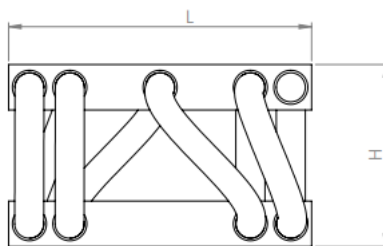
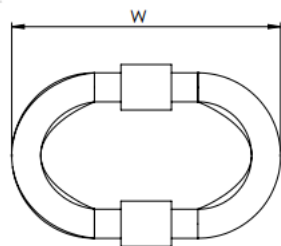
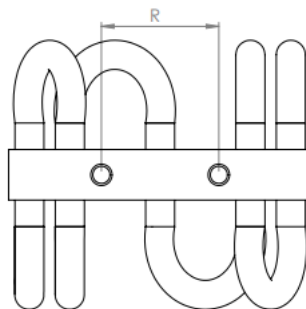
Wire Rope Isolator Technical Example & Info

Identifier Height Width Length - 1 - 32 mm Bolt / thread fixture - -

MODEL / ORDER CODE	H [mm]	W [mm]	L [mm]	R [mm]	WIRE THICKNESS [mm]	A	B	UNIT WEIGHT [kg]	NOTE
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MANUFACTURER / REPRESENTATIVE

Vibrol Oy
Sulantie 18
04300 TUUSULA
Finland
VAT:2699985-2
www.vibrol.fi



VIBROL
VIBRATION IN CONTROL

Properties

Robust maintenance free solution
3D isolation (all axes)
Temperature range: - 100 C to + 250 C
Excellent corrosion resistance
High damping: loss factor from 0.3 to 0.5
(low resonance peaks)
Tailored and standard stock isolators
Payload: 0.1kg – 1 000 kg

Materials

Wire: stainless steel
Bars: aluminium alloy
Coating standards/method: MIL-DTL-5541F /
Surtec650
MIL-A-8625F
Fixture options: threads or countersunk bolt
Special cases: contact Vibrol

Test standards

ISO 10846
MIL901
BV0230

A	9.4.2021	Vehviläinen	First Revision	Kinnunen	Keinänen
Rev.	Date	Prepared	Details of Revision	Checked	Approved

Scale 1:1,5	Size A3	Page 1/1	Rev. A made 9.4.2021
			Drawing ID: xxxxxx
Contact at Vibrol: + 358 40 520 6633 jarkko@vibrol.fi			

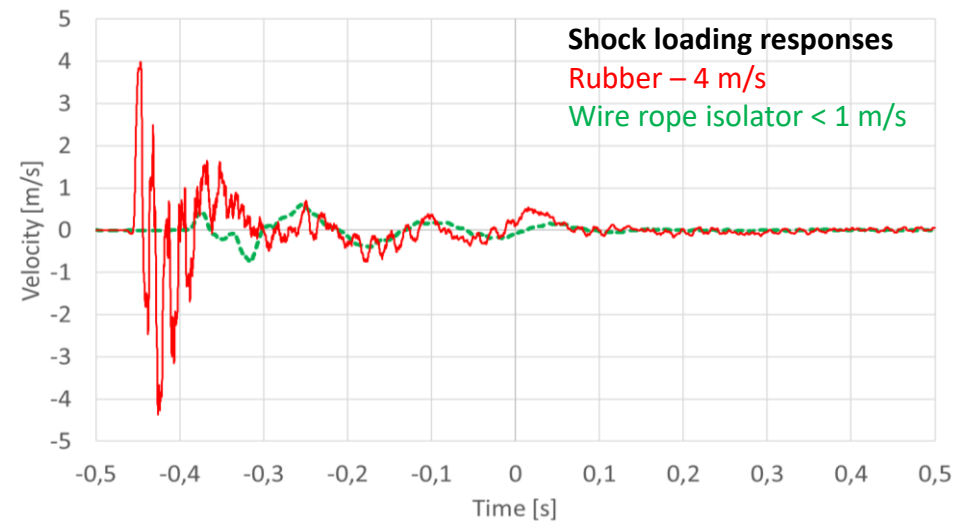
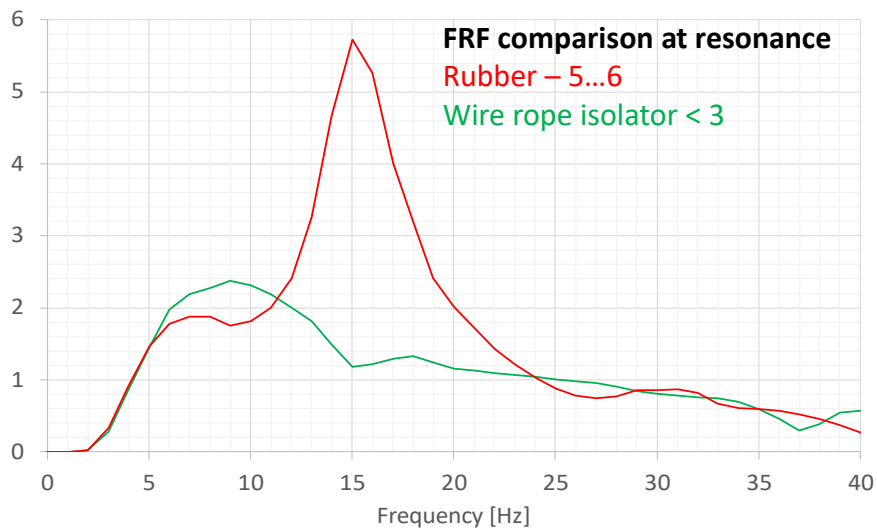
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Wire Rope Isolators

Robust vibration and shock isolation

Case example: wire rope vs rubber isolation



Customer's Challenges :

Isolation target has a broadband vibration excitation and occasionally shock loading

Rubber isolator gives high vibration level at resonance and during shock loads

Our solution :

Wire rope isolator was tested

Benefit :

Customer can run the target without limitations

Wire Rope Isolators

Robust vibration and shock isolation

Vibrol is your partner in vibration and shock control

- More than 20 years of experience working with wire rope isolator
 - Tested using ISO-10846 standard / MIL901 / BV0230 ...
- State of the art solutions
 - ReKi™ broadband mass damper
 - ADDI for wire rope isolators
- Dynamic measurements and FEA
 - Structures, laboratory studies for components
 - Strain gauge, modal analysis
 - Drop test method for navy qualifications and pre-tests



Premises in Tuusula, Finland
15 minutes from the airport
Founded 2015, Turnover 1.5 M€
www.vibrol.fi

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Interested?

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