

CONSTRUCTION Catalogue

HYBRID HANGER WITH
DIRECT FASTENING TO **C** PROFILES or **STUD**

Ref. SE-MSN-90 V 45

PATENTED

SEÑOR

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MSN-90 V 45 is more than a hanger.

It is an acoustic hanger with fast adjustment to first profile **C** o **STUD**. The profile is fixed with a simple gesture making him an **innovative** and **unique product**.

We use the latest technology in the production such as: renovated polymers (**KRAIBURG-TPE**) tested according to **UNE-EN ISO 10846-1:2009** and placed in the sides on the steel spiral. The steel spring is manufactured according to **DIN 2095 UNE EN 10270**, with **GREEN EPOXY** treatment.

Introduction

A **DIFFERENT** and **PROFESSIONAL** hanger.

Higher performance in the least space. They are **HYBRID** hangers with locking stops (**ID**) and a perfect installation to profiles **C** or **STUD**.

MSN-90 V 45 is manufactured with high performance and renovated raw material providing improvements in the vibro-acoustic field.





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ACOUSTIC / HYBRID Ceiling

STEEL SPRING: it provides a high level of isolation to vibrations in the range of **low/medium** frequencies (Hz).

RENOVATED POLYMERS: they have a better damping factor and a higher degree of isolation to vibration in the range of **medium/high frequencies** (Hz).

COMBINATION: the combination makes possible launch onto the market the best hanger of the moment and reduce the vibrations in the range of **exciter frequencies**.

It is available in several metrics: 6, 8 and 10.

LOAD RANGE (KG)

It is recommended to loads between **15 kg** and **45 kg** of maximum load.
(Strongly recommended not to exceed this limit in order to prevent overstressing the polymer).

RESONANCE frequency: 3-7 Hz.

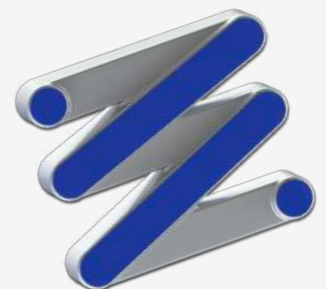
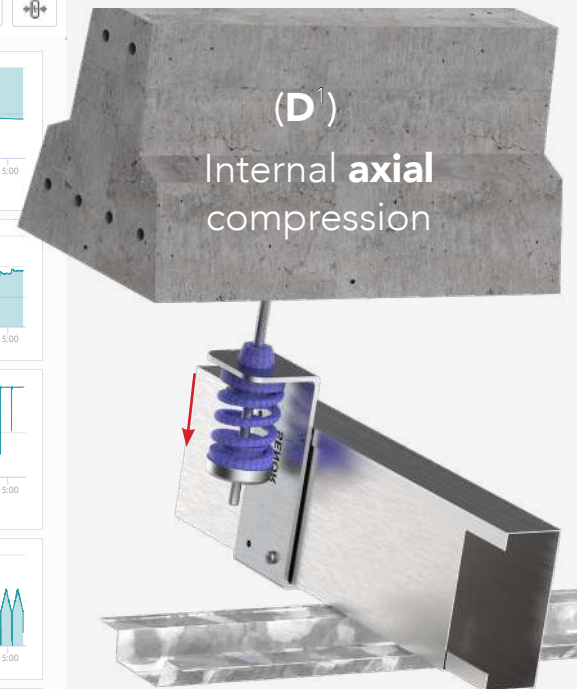
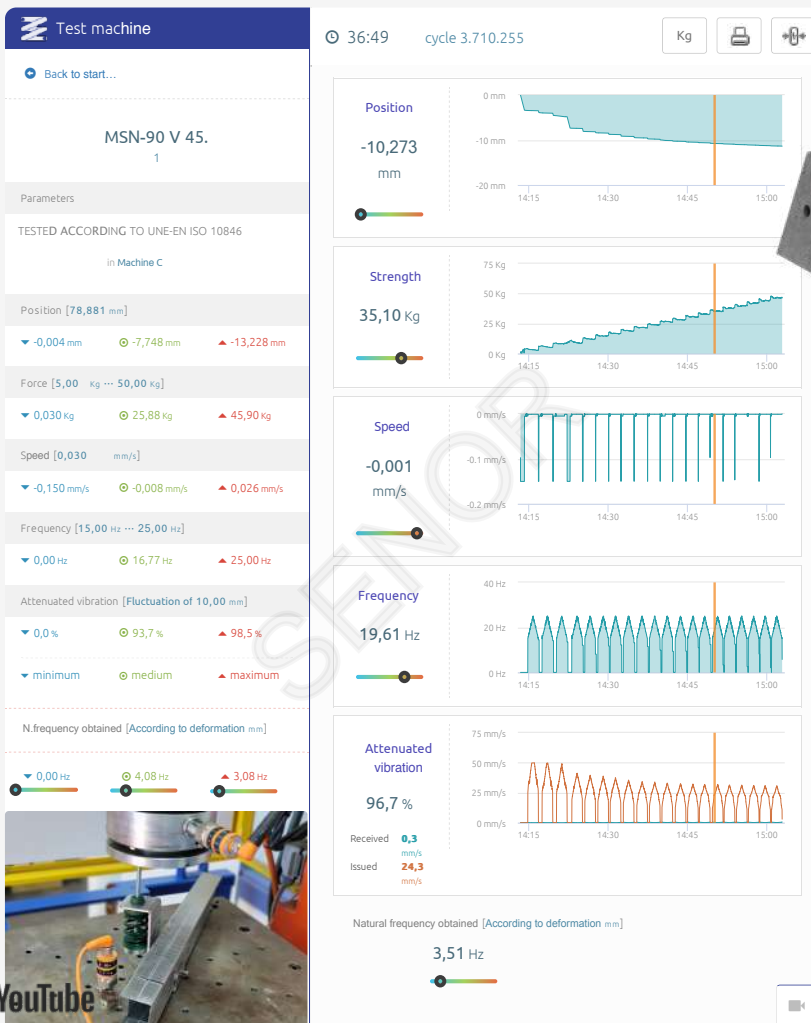
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LABORATORY Test. UNE-EN ISO 10846-1:2009

Acoustic and vibration. Measurement in the laboratory of vibro-acoustic transfer properties of elastic elements.

Manufacturer of **ANTIVIBRATION** systems





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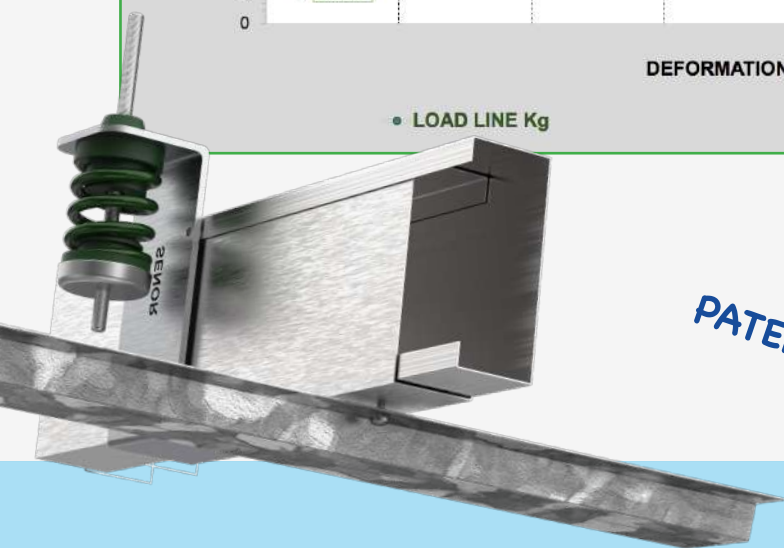
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LABORATORY RESULTS

Chart 1

ACOUSTIC / HYBRID Ceiling



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GREEN RUBBER & SPRING:
Available references

- 1º- SE-MSN-90 V 45/M6.
- 2º- SE-MSN-90 V 45/M8.
- 3º- SE-MSN-90 V 45/M10.

CONSTRUCTION Catalogue

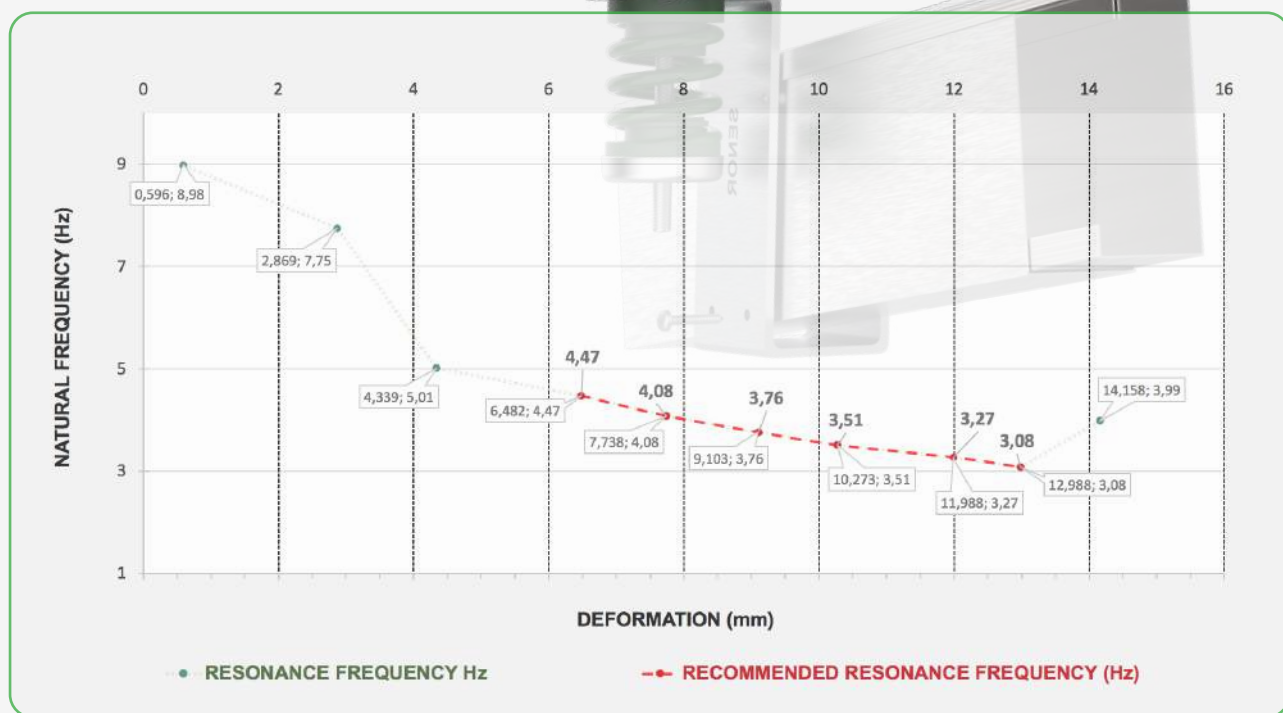
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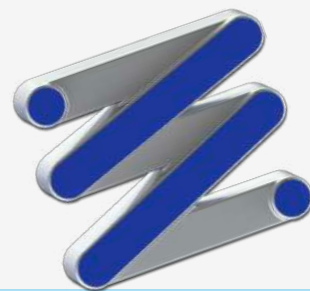
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ACOUSTIC / HYBRID Ceiling

Chart 2



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LABORATORY RESULTS

Chart 3

ACOUSTIC / HYBRID Ceiling



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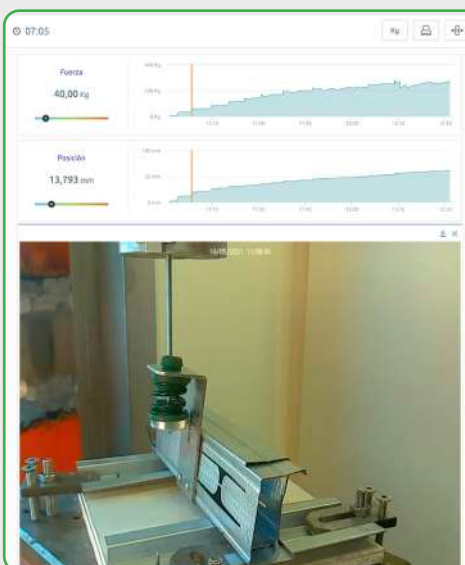


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Mechanical test LABORATORY



Test layout: 40 kg

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In this test, the hanger is subjected to load inside the parameters designed to the product.

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Test layout: 154,6 kg

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In this test, the hanger is subjected to load out of the parameters designed to the product.

We can see steel spring and polymers very compressed.



Test layout: 268,3 kg

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Failure mode.
The components are deformed and the profiles are twisted reaching its elastic limit.

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Failure mode.

The elastic limit of the component is reached at **268 kg**.

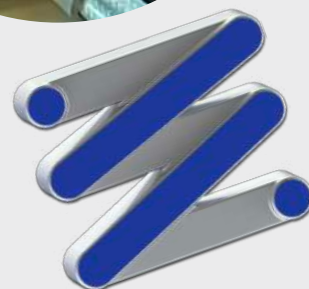
The burst test is concluded.



Manufacturer of **ANTIVIBRATION** systems



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Certificate of Compliance



SENOR certifies:

The **MSN-90 model** in the construction range for the suspension of low acoustic false ceilings under slab has an **optimal lifespan of 10 years** provided that the installation is carried out under **ordinary environmental conditions** and are not exposed to chemical components that could degrade the product. The MSN-90 model strictly complies with **UNE** (Spanish Association for Standardization) **UNE 100-153-88**: air conditioning: vibration insulators: design criteria.

SENOR declares under its responsibility that the following components for suspended ceiling in buildings strictly complies with the technical sections of installation mentioned in the technical documentation of the product.

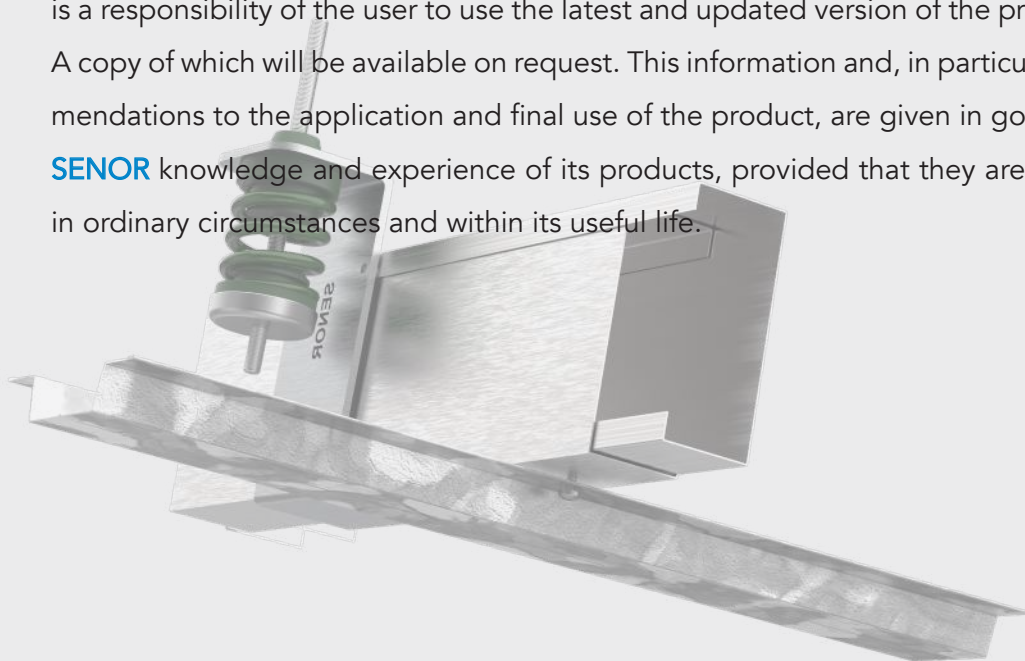
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Warning

Relevant information

SENOR reserves the right to make changes in specifications at any time without prior notice. It is a responsibility of the user to use the latest and updated version of the product data sheets. A copy of which will be available on request. This information and, in particular, relative recommendations to the application and final use of the product, are given in good faith, based on **SENOR** knowledge and experience of its products, provided that they are correctly installed in ordinary circumstances and within its useful life.



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