

Decrease the negative effect of vibrations

Industry	Machining, milling, micromechanics, many production methods suffer from vibrations
Sports	In motorsports, golf, tennis, ski, bike and so many others vibrations distract the athlete from his skills and waste his energy

AXS Sensor System

The AXS Sensor System is a revolutionary, innovative system. It's easy to use and widely applicable in all domains. It is marketed by Axxios Technology SA, Delémont-Switzerland

www.axxios-tech.com

The goal

Reduce the amplitude of vibratory waves

Origin & principle

The AXS is as an optimization technology. Its roots lie in racing. At first was born a multilayer condenser allowing a substantial increase of energy in the ignition system by improving the combustion phase. Later unexpected effects have been noticed, in particular a reduction of the vibratory field of the materials and their components could be seen. The condenser's weight (1 gr) and its dimensions (15x10x2 mm), in addition to its flexible way of mounting by simply sticking it onto the designated part opens a wide area of application of the today called AXS Sensor System.

The sensor works directly in the material, be it liquid, solid or gaseous. It does not need any external energy input, since the resonance of the material, upon which it is applied, is enough to make it work. This feature is the results of the potential for interaction between the sensor and its support. A number of laws and physical principles are the basis for the AXS System. Here are the most important ones: Coulomb's law, Elastic modulus (Young), Fermi level. The Couette flow allows to confirm the laminar effect of liquid and gaseous flows.



Industry, machining & micromechanics

Short term findings

- Reduction of vibrations on the whole machine
- Global improvement of machining
- Better homogeneity of surface finishes

Medium & long-term findings

- Decrease of scrap rate
- Improvement of rolling & cutting tools lifetime
- Bigger gap between sharpening
- Less machine maintenance and stoppage

On the very short-term the effects are not always directly visible since the AXS System needs a certain time applied to machine in order to improve its functioning. Thus the positive results are sometimes measured only after a few days/weeks of application.

Sports & Automotive/Transports

In the field of sports like biking, skiing, golf, tennis, etc. the AXS System leads to a higher comfort and a better performance. Also for motorsports, Moto GP, motocross, kart racing, automotive, 4X4, etc.

Practically speaking, what are the benefits?

- More user comfort
- More stability and speed
- Race performance improved up to 10%
- Less physical pain, less fatigue
- Better ranking, so better visibility for sponsors
- And globally, more pleasure in sport

The AXS System can reduce fuel consumption, a key asset for road transportation. Also with regards to the environment, the AXS System allows not only to save money but also to reduce pollution.

- Decrease of fuel consumption to 10%
- Improvement of ignition system, injection and carburetor for old vehicles
- More driving efficiency and comfort, the vehicle drives one gear higher

