

Personal Protective Equipment

Everything You Should Know about Anti-Vibration Gloves

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Specialized protective gloves are a requirement for different kinds of workplace tasks and for various industrial activities. Until recently, when working with power tools, vibrating machinery or pneumatically driven impact tools, general foam cell padded palm anti-vibration gloves have been considered to be the best Hand Arm Vibration (HAV) protection you can provide. However, the very latest scientific research is uncovering the 'one glove fixes all' misconception.

PIP Aus, a wholesale glove designer and importer, has established a partnership with Swedish specialized textile manufacturer Eureka Safety AB for distribution of their unique Frequency Tuned Vibration Reducing glove range.

The unique 'Eureka' impact-vibration reducing gloves are specifically designed to absorb the exact 'wave band oscillations' emitting from each tool or machine being operated. These emissions are measured in frequency (Hertz) and are linked to the revolutions (RPM) each piece of equipment is operating at.

It is important to note the current global Workplace Vibration Standards guidelines are based on studies from the 1970s. During this time, tool/machinery and material/manufacturing technologies have advanced dramatically. Exhaustive studies throughout the last three years have confirmed that each type of "vibration-reducing" material and its specific construction method will provide a vastly different range of vibration-absorbing effectiveness.

If you frequently operate equipment and tools with very high impact or very high frequency vibration (400+ Hertz), then you'll need to protect yourself with a different vibration-absorbing material glove in order to avoid the risk of developing a serious condition known as HAVS (hand-arm vibration syndrome). HAVS is also known as *white finger syndrome*. It is categorized as a secondary form of Raynaud's phenomenon.

In lower-impact or lower-revving (<400 Hertz) tools and machinery, the vibration-absorbing material must provide differing characteristics and so a different glove will be required to protect your arms and hands from HAVS.

It is now becoming understood that, at very low frequencies (below 200 Hertz), having any vibration-absorption material in the fingers of the glove will actually increase the potential for damage to the wearer's fingers over time. This occurs due to the amplification of the vibration via the action of the padding material at the fingers.

Anti-vibration gloves are an essential piece of your PPE kit if you work with power, air tools or any kind of vibrating machinery. Below you can find some examples of equipment and power tools which may cause HAVS:

- Grinders
- Chainsaws
- Sanders
- Power drills
- Pneumatic drills
- Impact wrenches
- Jackhammers and more

Anti-vibration gloves should be used by workers in industries such as:

- Auto repair
- Quarrying
- Construction
- Engineering
- Agriculture and more

Hand-arm syndrome is a very serious condition which affects the muscles, blood vessels, joints and nerves in the arms, wrists and hands. Injuries usually occur at frequencies between 5-2000 Hz.

How to reduce risks?

If you operate high-revving air tools or heavy vibrating machinery, you should make sure to keep wearing the correct frequency-reducing gloves. This can be a great help in reducing HAV damage, so take the time to understand the RPM and/or the Hertz output of each tool to be used and match this with the correct glove. Wear them every time you operate any kind of vibrating machinery. These gloves are used to block the amount of damaging frequency vibration transmission from impact-powered tools and protect you from the negative health consequences which are associated with exposure to vibration.

An interesting point for our cold-weather states—Anti-vibration gloves that keep your hands warm in cold environments will improve your blood flow, which is very beneficial when operating heavy vibrating machinery. Ensuring a healthy blood circulation is crucial in this kind of work, in order to avoid any kind of health issues.

Anti-vibration gloves in combination with high-quality, reduced-vibration emission tools will make your work experience much more comfortable and, more importantly, safer than ever.

Now that you know a little more about anti-vibration science, selecting the correct work gloves and all the risks which may occur if you don't use them wisely, it's time to take the next step and look up more information. Go to ***PIP Aus*** to ensure that you get the latest scientifically proven, high-quality 'frequency tuned' safety gloves for you and your employees.

Previously Featured on PIP's website.

Browse PIP's line of safety gloves to protect your workers at MSCDirect.com.

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