

Tailgate—High Speed Wire Wheels

High speed wire wheels of various types are used to remove rust, old paint and other unwanted materials from surfaces. Some wire wheels are hand held while others are usually paired with grinding wheels on bench grinders. They can often also be found in home toolboxes in the form of dremel and drill attachments because they can be handy to use on home projects.

High speed wire wheels are relatively safe to use if simple precautions are taken by the person using them. However, since the wheels are deceptively safe in appearance, safety precautions can sometimes be overlooked.



Please see below for one recent example of an injury experienced in our industry (reenactment pictured above) that I don't believe most of us would have ever predicted could happen. However, it does drive home the idea that the injury could have been avoided had certain safety precautions been taken.



Wire embedded under skin in arm

Injury Details

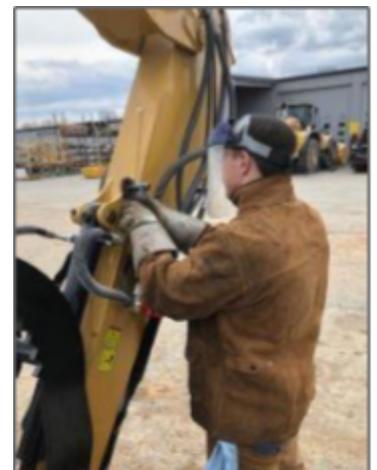
A technician was removing paint in preparation to weld a thumb bracket onto an excavator stick. The technician was using a worn wire wheel attached to a die grinder to remove the paint. The technician believed that since he was not welding, he didn't need to wear his welding jacket. A piece of wire from the wire wheel came off and completely embedded itself into the technician's arm. Surgery was required for removal.

Safety Precautions

Personal Protective Equipment (PPE) - Wear a leather jacket, face shield, safety glasses and welding or other protective gloves when using a high speed wire wheel.

Tool Condition – Only use tools or accessories that are in good condition. For an example related to this incident, wire wheels can become damaged over time and heavy use and come apart unexpectedly.

Line of Fire – The direction that the wheel is rotating is the direction that debris, sparks and parts of the wheel itself will be thrown. Position yourself away from the line of fire. It's also a smart idea to set up a screen (such as a welding screen) in the direction of the line of fire to shield passers-by from the debris.



Appropriate PPE and body is positioned away from line of fire.