

## TOOLBOX TALK #12

### WORKING SAFELY WITH TUNGSTEN CARBIDE

Tungsten carbide is a metal alloy commonly used on cutting edges of equipment because of its hardness and resistance to wear and high temperatures. According to some governmental safety and health people, exposure to tungsten carbide may result in lung issues, as it often contains nickel and chromium, which can trigger asthma. Experts caution that even low-level exposure can cause health problems, including skin that can become sensitized to the alloy and break out in a rash.

The first step to mitigating the hazard is knowing where exposure can occur. According to the experts, job tasks that often use tools with hard, metal tips and parts containing tungsten carbide include:

- Grinding
- Polishing
- Sharpening
- Brazing
- Welding
- Spraying



Most worker exposures occur by breathing in dust, mist or fumes containing tungsten carbide; allowing skin to come in contact with dust or a solution that contains it; or eating, drinking or smoking in areas containing it. To prevent exposure, many safety professionals recommend that workers:

- Use local exhaust ventilation control measures correctly
- Use respirators that are approved for dust and mist if ventilation systems are not available.
- Wash hands and exposed skin thoroughly before eating.
- Wear protective gloves, safety glasses or full-body protective clothing, if necessary. Work clothes should be changed daily if they are contaminated with tungsten carbide.
- Use wet methods or a vacuum with HEPA filters to prevent dust buildup.