



Tailgate Safety Talk

Information You Can Use to Prevent Accidents & Injuries

Abrasive Blasting Safety

WHAT'S THE PROBLEM?

Sand blasting operations are generally part of a larger project such as cleaning and refinishing or painting. As a result, many workers are exposed to the hazards of sandblasting without adequate protection. Even if all sandblasting equipment is properly designed and regularly inspected, workers must always be alert to the hazards of these operations and take precautions against harmful exposures.

HAZARDS TO LOOK FOR

Airborne Dust. This is one of the most serious hazards associated with blasting operations. When evaluating this hazard, it's important to consider the concentration of dust and the size of particles.

Larger particles, considered "nuisance" dust, are normally filtered out in the nose and throat. Smaller particles (10 microns or smaller) can bypass the lung's filtering system and penetrate deep into the respiratory system, where they may cause serious damage. Safeguards are needed when smaller particles are present in the working environment.

Metal Dust. In addition to the abrasive being used, paint and finishes contributes to the generation of airborne dust. Metals such as lead, cadmium, and manganese, can be extremely toxic when inhaled. Many existing paints have a lead base. Regulations require special handling, trained personnel, and medical monitoring when lead is present. If in doubt, check it out. Don't guess.

Silica Sand. This product is a potentially serious health hazard and should not be used as an abrasive. If silica containing (quartz) materials are selected for any reason, workers must wear a positive pressure or pressure demand respirator with an assigned protection factor (APF) of either 1000 or 2000.

Silica must be contained and disposed of properly. Even if a wet blasting method is selected, silica that is allowed to migrate by either wind or water will eventually become an airborne contaminant.

PPE REQUIRED

Air-Supplied Respirators. Air-supplied respirators must be used (1) when working inside of blast cleaning rooms, (2) when using portable units in areas without enclosure, and (3) under any circumstances where the operator is not physically separated from the abrasive material by an exhausted enclosure.

ALWAYS

If airline respirators and compressors are used, make sure the intake hose is placed in an area that provides clean air. An attendant should be in the area at all times, monitoring breathing air and assuring the blaster's safety.

Users of this tailgate talk are advised to determine the suitability of the information as it applies to local situations and work practices and its conformance with applicable laws and regulations.