



MSHA's Accident Prevention Program Safety Idea

**SAFETY
IS A
VALUE!**

Fall Arrest Systems

Category : Fall Protection
Mine Type: All Surface Mills/Plants

Slips and falls of mining personnel are a major cause of accidents in the mining industry. Since 1983, an average of 6.9 workers per year have been killed while 3,191 workers per year have required medical attention for non-fatal injuries due to slips and falls at mine sites. Using proper fall protection equipment will contribute to reducing these types of accidents.

All mineworkers exposed to fall hazards should be protected from falling to lower levels by adequate fall protection systems. A basic body belt and line system may not be sufficient. One of the primary fall protection systems is classified as a "fall arrest system".

A "fall arrest system" provides a means to "arrest" a person's fall. The full body harness fall arrest system is preferred because a person is suspended from multiple body points and impact forces are distributed, whereas a safety belt provides suspension from one part of the body. The full body system provides for freedom of movement while minimizing injury during a fall and suspending the wearer until rescued by rescue personnel.



Fall arrest systems include a full body harness and connecting devices between the harness and the anchorage or anchorage connector. Connecting devices may consist of a lanyard, energy (shock) absorber or shock absorbing lanyard, fall arrester or deceleration device (i.e. rope grab), lifelines (horizontal or vertical), or a self-retracting lanyard or lifeline. All devices must meet applicable regulations and standards (i.e. ANSI Z359.1 and A10.32), and personnel should be properly trained. Suitable combinations of these devices may be used to provide a complete system. The picture depicts the use of a typical personal fall arrest system.

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Remember – Safety is a Value that you can LIVE with!