Eye Protection Basics

Safety Glasses

**Protection** – Protection from flying particulates. Glasses must be stamped with Z87.1 to be considered safety glasses. If safety glasses do not wrap around your face then side shields are required.

**Use** – Machining, wood-cutting (or lathe work), chemical work, cleaning slag from welds, etc.

**Limitations** - Protective eyewear, especially plastic, can become scratched and scuffed to the point where it interferes with vision; dispose of equipment when this is the case and get new safety eyewear.

Goggles

**Protection** – Goggles are necessary for any task which could result in an impact/splash to the eye that might not be prevented by safety glasses (even with side shields).

**Use** – Chemicals, hazards that safety glasses cannot mitigate (e.g. - removing ceiling tiles), etc.

**Limitations** – Goggles are typically not ventilated and may cause fogging. Goggles will not protect against "explosions" of liquids. "Explosion" of liquid should be taken to mean any eruption or violent splash of a quantity of liquid having enough force to penetrate the face/goggle interface or the breather vents. A full face shield is the minimum requirement for work presenting the possibility of such explosions.

Face Shields

**Protection** – Full face (and possibly throat) protection from splashes and/or impacts.

**Use** – Some chemicals, explosion hazards, heavy grinding and spraying or splashing, and with large (> .5 gal.) quantities of dangerous liquids such as acids, bases, and many organic liquids.

**Limitations** – If the face shield is the type which has a wide opening on the sides or bottom, and when quantities of dangerous liquids are very large (>1 gal.), protective eyewear must be worn along with the face shield.

Welding

**Protection** – Shades in the form of goggles, hand-held shields, or helmets are necessary when you are welding, brazing, or torch-cutting, or when such work is being performed near you.

**Use** – For hazard specific protection please contact Safety & Compliance.

**Limitations** – Filter lenses will only protect your eyes if you use the proper minimum shade and if you only view the radiant energy source through the filter. Keep your eyes covered!