

# FAQ

## **Should I choose a fixed or variable shade?**

If you are always using the same arc welding process on the same material, a fixed shade is sufficient. But if - like most welders - you are welding using a variety of processes, amperages or materials, your best bet is a variable shade helmet, which can be adjusted to the correct shade level for your particular need. For instance, when you are Tig welding at lower amperages, you may need to lighten up the lens to see what you are doing. A variable shade will permit this while a fixed shade will not

## **What type of helmet is better: solar-powered or battery-operated?**

Solar-powered helmets offer the following advantages: Since solar-powered helmets do not have an "on-off" switch, the helmet is always auto-activated when an arc is struck, therefore shielding the eyes from uncomfortable high-intensity visible light. On the other hand, battery-operated auto-darkening helmets typically have an "on-off" switch or an "auto-off" feature to conserve battery life. In either case, the operator must remember to turn the helmet on to activate the auto-darkening capability...

## **Why is the number of Arc Sensors Important**

The number of sensors ranges from two for a hobby level helmet to four for an industrial grade helmet. More sensors mean better coverage, especially for out-of-position welding where a sensor could be obstructed. Three may be sufficient for production work or when you will have a clear line of sight to your work. Four is optimal for most fabrication and out-of-position work.

## **Why Should I have Adjustable Delay Controls.**

A delay control is another useful feature. This control enables you to set how long the lens stays dark after the welding arc stops. When tack welding on a large project, a short delay helps get the job done faster as you reposition for the next weld. A longer delay time is helpful when welding at very high amperages, since molten metal may still emit harmful rays until it cools.

## **What Does Lens reaction or delay time do?**

This indicates how quickly the lens will switch from its natural light state to the darkened shade when welding begins. . Entry-level lenses are often rated at 1/3,600 of a second, while industrial or professional grade helmets can be rated as high as 1/20,000 of a second. The more arcs you start in a day, the more you'll appreciate the quicker speed. If you spend all day welding with a lens rated at 1/3,600, the cumulative effect of the increased exposure to the arc light may lead to eye fatigue at the end of the day. With faster switching speeds, these effects are reduced.

## Optical Class standard

The reason for difference in darkness between brands of helmets is the use of an inferior optical product. Tecmen helmets are approved to the highest EN 379 standard, suitable for CE approval

Low numbers (1) are the highest standard

### TECMEN Auto darkening welding helmet ADF710S

|                                                  |   |   |   |   |    |        |   |   |   |   |   |   |   |     |
|--------------------------------------------------|---|---|---|---|----|--------|---|---|---|---|---|---|---|-----|
|                                                  | 4 | / | 9 | - | 13 | TECMEN | 1 | / | 1 | / | 1 | / | 1 | 379 |
| Light state scale no                             |   |   |   |   |    |        |   |   |   |   |   |   |   |     |
| Lightest dark state scale no                     |   |   |   |   |    |        |   |   |   |   |   |   |   |     |
| Darkest state scale no                           |   |   |   |   |    |        |   |   |   |   |   |   |   |     |
| Manufacturer's identification                    |   |   |   |   |    |        |   |   |   |   |   |   |   |     |
| Optical class                                    |   |   |   |   |    |        |   |   |   |   |   |   |   |     |
| Diffusion of light class                         |   |   |   |   |    |        |   |   |   |   |   |   |   |     |
| Variations in luminous transmittance class       |   |   |   |   |    |        |   |   |   |   |   |   |   |     |
| Angle dependence of luminous transmittance class |   |   |   |   |    |        |   |   |   |   |   |   |   |     |
| Number of this standard                          |   |   |   |   |    |        |   |   |   |   |   |   |   |     |

## What is the correct lens shade to use in my welding helmet

Many people mistakenly think the lens shade number corresponds to the amount of protection provided to the eyes and hence the higher the number, the better the protection. But in reality, since all helmets that comply with ANSI standards filter out a vast majority of the harmful UV and IR emissions to protect the eyes, the choice is simply a matter of comfort. Always select a shade that allows you to see the weld puddle clearly and that most aids your welding ability.

The shade number just denotes the level of shading provided by that particular lens and should be used by operators as a guide to select the one that is most comfortable and yet provides good visibility for the particular application.