

The lense makes the difference!

Lifetime of BSD arc protection lense technology



Protective Properties of PPE

Once the aging of personal protective equipment has an influence on the protective properties, the lifetime of PPE shall be limited by the manufacturer. After reaching the maximum lifetime the PPE have to be excluded from the further use by the user.

Aging by direct sunlight

Especially products consisting of plastic parts are natural aging by long lasting direct sunlight. From that reason it is necessary to know how big is the impact of direct sunlight (and its harmful UV radiation) on the protection properties of BSD arc protection lenses.

To find out the influence of UV radiation on BSD lense technology the following aging test (among other tests) was carried out with the BSD arc protection lenses.

1. 1000 hours radiation treatment with UVA-340-lamps

UVA-340-lamps provide the best simulation of direct sunlight and its UV fraction. Therefore it is very suitable for an artificial aging test.

2. Electric Arc Test with appropriate arc rating

After artificial aging by UV radiation treatment the BSD arc protection lenses were tested in electric arc test arrangement.

As a result, the same protective properties of the BSD arc protection lenses against the thermal hazards of electric arc flash could be determined (Same protection level than new lenses!). Simultaneous verification of the optical properties of the artificially aged arc protection lense also showed no significant changes.

1000 hours of artificial UV radiation of electric arc face protection devices correspond to a real

lifetime of more than 10 years *!

If the BSD face protection device will be more used in indoor installations, these guaranteed lifetime of the product is increased by a multiple.

By using BSD arc protection face shields or hoods you have products with proven durability of electric arc protective properties.



* correspond to daily use with 90 minutes direct sunlight