Hands at work are extremely vulnerable to a wide range of hazards which include cuts, blows, chemical attack and temperature extremes. With industry’s increasingly complex and sensitive manufacturing and handling processes, there is a growing insistence on the use of “job fitted” gloves that meet each user’s specific requirements; hence our offering of a wider and more comprehensive range of gloves in this section – in excess of 200 different types and styles from which to choose.

**Maintenance**

Contaminated and worn gloves may fail to protect the hands from the very hazard they were designed for. Effective protection is maintained by regular replacement of the gloves. Check the condition of the gloves, inside and out.

### European Standards

- **EN 388** – This standard applies to all kinds of protective gloves giving protection from mechanical risks, in respect of physical problems caused by abrasion, blade cut, puncture or tearing. This standard also covers risk of electrostatic discharge.

- **EN 407** – This standard specifies thermal performance for protective gloves against heat and/or fire.

- **EN 421** – This standard lays down test methods and performance criteria for gloves offering protection against ionising radiation and radioactive contamination.

- **EN 455** – Medical gloves for single use

- **EN 511** – This standard applies to gloves which protect the hands against convective and contact cold.

- **EN 511: Cold**

- **EN 407 –** Performance Level

- **EN 421 –** Performance Level

- **EN 455 –** Performance Level

### Mechanical Hazards: EN 388

- **Abrasion resistance**
- **Blade-cut resistance**
- **Tear resistance**
- **Puncture resistance**

**EN 511: Cold**

- **Convective cold**
- **Contact cold**
- **Water proofness**

**Thermal Hazards: EN 407**

- **Burning behaviour**
- **Contact heat**
- **Convective heat**
- **Radiant heat**
- **Small splashes of molten metal**
- **Large splashes of molten metal**

### Contact Heat

A sample is taken from the palm area of a glove. The outside of the glove is put on a hot surface and the temperature of the inside of the glove is then monitored. The temperature on the inside of the glove must take 15 seconds or more to rise by 10°C from room temperature.

<table>
<thead>
<tr>
<th>Performance Level</th>
<th>Contact Temperature °C</th>
<th>Threshold Time Seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>&gt;15</td>
</tr>
<tr>
<td>2</td>
<td>250</td>
<td>&gt;15</td>
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<tr>
<td>3</td>
<td>350</td>
<td>&gt;15</td>
</tr>
<tr>
<td>4</td>
<td>500</td>
<td>&gt;15</td>
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