Enhanced Strength:
Chemical Tempering

EuropTec use chemical tempering for glasses to increase the strength. A special salt bath creates an ion exchange with high compressive stress on the glass surface. This increases the breaking strength and scratch resistance. Using a special aluminum silicate glass like Gorilla® by Corning®, Schott Xensation or Dragontrail™ by AGC, extremely high breaking strength and scratch resistance can be realized.

Technical Data

Glass thickness: 0.2-3 mm, other thicknesses on request
Max. dimensions: 1.400 x 617 mm
Glass types:
glass with large percentage of sodium like float glass,
aluminum silicate glass, bent glass and many others

<table>
<thead>
<tr>
<th></th>
<th>chemical tempered glass</th>
<th>untreated glass</th>
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</thead>
<tbody>
<tr>
<td>impact strength with metal ball</td>
<td>4 - 10 Joule</td>
<td>1 - 2 Joule</td>
</tr>
<tr>
<td>bending strength</td>
<td>150 N/mm²</td>
<td>50 N/mm²</td>
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<tr>
<td>thermal shock resistance (with glass thickness 1 - 3 mm)</td>
<td>ca. 200 K</td>
<td>ca. 40 K</td>
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<tr>
<td>operating temperature</td>
<td>up to 300° C, lost of pre-tension</td>
<td>max. 450° C</td>
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</table>

*Tempering according to DIN EN 12337; edge working before chemical tempering
Advantages

- increased impact strength
- increased bending strength
- increased thermal shock resistance
- increased scratch resistance
- low glass thicknesses and small-sized glasses can be processed
- printing is possible after chemical tempering
- no optical distortion

Typical Applications

- automotive industry
- cover glasses for displays and touches
- information screens
- copy machines

Ion Exchange

Do you have any question or do you need an advice concerning the varied possible applications of technical glass? Do not hesitate to contact us!