

Annealing Instructions

Maximum Temperatures

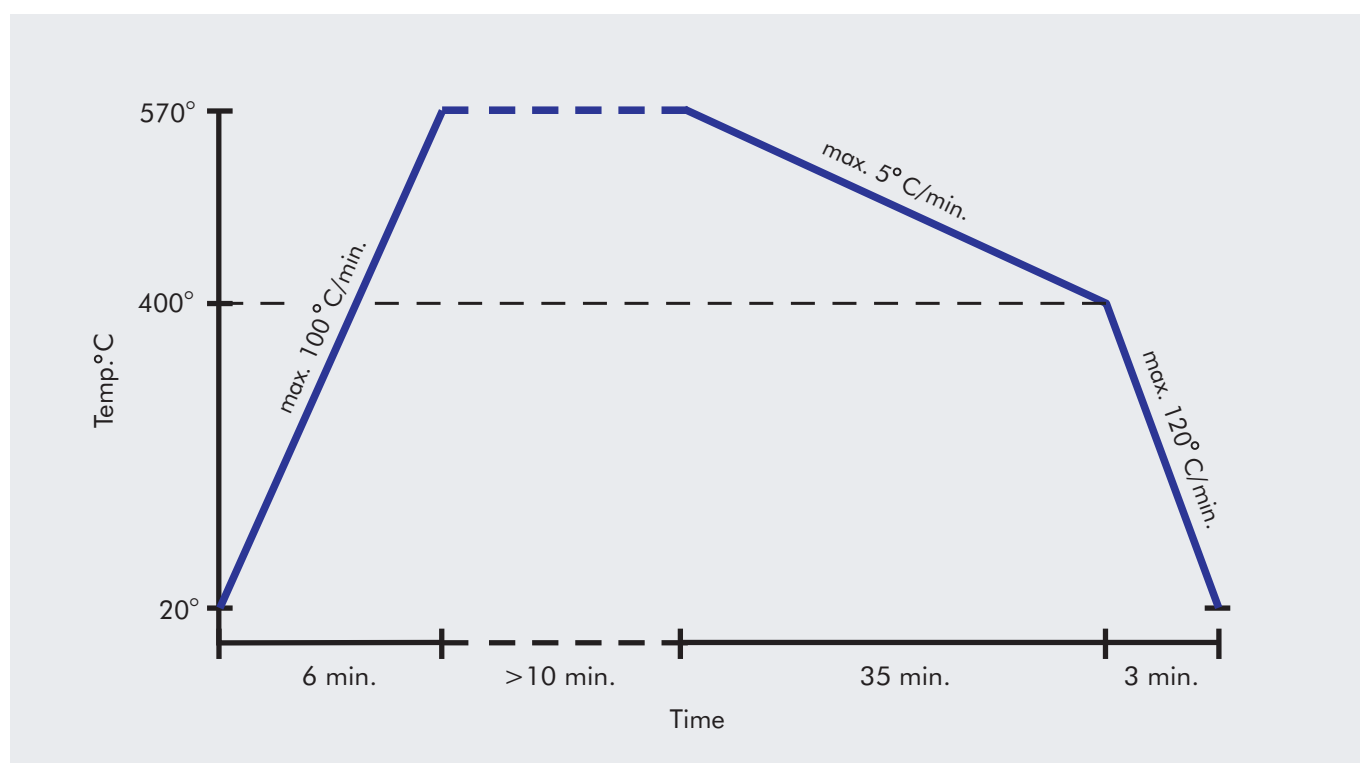
In general it is recommended, that the strain point (515 °C) be regarded as the maximum safe operating temperature of borosilicate glassware 3.3. For some shapes and for a relatively time this limit can be exceeded, but at 580 °C there is danger of deformation and in case of sintered glassware the porous structure may be changed. At high temperatures the glass may acquire permanent stress on cooling and this may result in subsequent breakage. If it is suspected that permanent stress has occurred, the article should be annealed making references to the annealing process explained below. Permanent stress can greatly reduce the mechanical and thermal resistance!

Annealing

The annealing of glass is the process by which it is heated to and held at a controlled temperature for a defined period to relieve internal stresses. Careful cooling under controlled conditions is essential to ensure, that no stresses are reintroduced by chilling.

Annealing Schedule

for glass with a wall thickness of ~ 3.0 mm



Warning!

Permanent stress can greatly reduce the mechanical and thermal resistance of the glass!