

## Product information NEOCERAM® N-0

### Technical datas

Expansion coefficient $\alpha$	$\cdot 10^7 / K$	(30 – 380° C) – 6 (30 – 750° C) – 3
Thermal shock resistance	°C	800
Maximum service temperature	°C	long term 700 short term 800
Thermal conductivity	W/m · K (25° C)	1,51
Specific heat	J/kg · K	712
Density	g/cm <sup>3</sup>	2,51
Bending and impact strength	correspondent to the datas of casting glass	

### Surface quality of the glass ceramics NEOCERAM N-0

Different surface qualities can arise because of the manufacturing process of the glasses.

Normal window glasses are produced by a floating process and therefore an absolute smooth surface can be achieved, whereas the Neoceram glass is in the first place a rolled glass.

During the manufacturing process the very viscous glass-melt is transformed by rolls to the requested thickness. These rolls consist of heat-resistant materials with optimised surfaces. Nevertheless during the rolling process inevitable unevenness arise. Moreover the Neoceram glass is subject to a crystallizing process in order to achieve its extreme heat resistance.

After the annealing of the glass it is heat treated again according to a determined temperature curve. During this process the glass is pla-

ced on forms or on flat plates, which have to be coated with a magnesium powder in order to avoid an adhesion of the glass. Although this powder is very fine it can leave some traces on the glass.

The Neoceram glass is a glass with a very high technical standard but at the present state of the technology, the same smooth surface as known from the floating process cannot be realised.

The glass ceramics has its focus on the unbeatable thermal shock resistance and its very high strength with different temperatures which on the other hand has to admit compromises in the optical brilliance and the clarity of the glass.

### Flat NEOCERAM glasses

Besides shaping NEOCERAM-panels we can also carry out customer specific cuttings and other finishes. Upon request we can give you further information on special sizes and other technical details.

### Coated glass ceramics

In case of combustibles which contain oil or when using gas or carbon we recommend to use coated glass ceramics.

The Neoceram glass has a silicon coating, which is affixed by plunging it under water. The coating offers a special protection of the surface of the glass against aggressive gases or steams which can arise from the combustion of oil, gas or other materials and which could corrode the surface of non-coated glass.

### Installation instuctions

The installation and the treatment of the Neoceram-glasses are subject to the general instructions for products of glass ceramics or glass. The different thermal material expansions of NEOCERAM and the applied frame materials have to be considered upon the installation.

The direct contact of the glass ceramic and the metal frame has to be strictly avoided.

