



NobleLight®

Infrared Heat Enables Efficient Cutting of Laminated Glass

The manufacture and processing of laminated glass require several heating stages, that can be performed very efficiently with infrared emitters. Laminated glass consists of multiple sheets of glass, which are bonded together with a PVB (polyvinyl butyral) interlayer. This process requires several heating steps that can be done by infrared radiation very efficiently.

Laminated glass made in very large sheets often needs to be cut into smaller sections.

A method currently used is to score the glass, break it and then separate the foils. The foils can be separated significantly improved with the use of infrared radiation. A fast response medium wave infrared emitter, with a gold reflector, selectively heats the interlayer film only in the narrow crack created during glass breakage. The foils can then be easily separated by pulling them apart or with cutting tools.

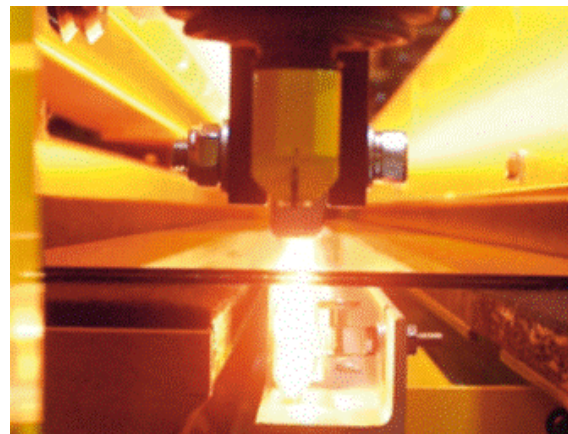
Excelitas twin-tubes can be manufactured in lengths of up to 5m and allowing large glass sheets to be cut in a single operation.

The Correct Wavelength

The wavelength has a significant influence on the heating process.

- medium wave radiation is absorbed very well by many plastics, glass and especially water and is converted directly into heat
- short wave radiation can penetrate deep into some solid materials and ensure a uniform through heating

Medium wave Carbon emitters use less energy, compared to short wave, while drying water-based coatings. Thus, Carbon emitters can save significant amounts of energy costs.



FEATURES

- Medium-wave infrared radiation matches the absorption spectrum of glass very effectively
- Fast-response medium-wave heaters can be manufactured in lengths matching the size of the glass

TECHNICAL DATA

- Medium-wave Infrared heaters
- Fast response
- Twin-tube emitters with high stability
- Special gold reflectors

