Heat Soak Furnace

Why tempered glass break?

Tempered glass could have spontaneous breakage without receiving any external force, which is the nature of tempered glass. The reason comes from nickel sulfide inside the glass. Nickel sulfide is α ~ Nis in high temperature during the heating section. When cooled rapidly, α ~ Nis can not change correspondingly to β ~ Nis of low temperature. The morphic transformation will last for ten of years which lead to spontaneous breakage.

What is Heat Soaking?

Heat Soaking is a destructive process in which a pane of tempered glass is subjected to temperatures up to 280° C for several hours over a specific temperature gradient to induce fracture. This test insures that if there is probability of breakage then the infected panes break inside the furnace at the factory itself. Up to 95 % Nis infested panes are usually destroyed inside the heat soak chamber at the factory premises and hence reduce the chances of onsite breakages. The machine is characteristic of computer in-process monitoring and controlling, multi curve display, data storage, record check and curve printing. Extended functions like low temperature frit drying and pre-pressing of bending lamination glass. Customized machines are available.