

Thermoforming KYDEX® T Sheet on Flash Heating Systems

For information applicable to KYDEX® FST please refer to 300 series technical briefs.

TB - 135

Introduction

“Flash” heaters are a relatively new form of heating systems on single station vacuum forming machines. They have been developed to significantly decrease cycle times and increase productivity of single station thermoforming machines.

The wavelengths used by “Flash” heating machines allow deep penetration of the radiation and excellent heating of all materials – thick as well as thin.

KYDEX® sheet works well on “Flash” heating systems.

As on “conventional” heating systems, 60 - 70% of heat should be applied to the bottom surface and 40 – 30% to the top surface. This is as recommended for conventional heating systems in the Kleerdex “KYDEX sheet thermoforming guide”.

The nature of Flash heating does require slightly different processing of heavily textured materials (This applies to all materials, not just KYDEX® sheet). Due to the nature of heavy textures there is more variation of sheet thickness. Given the speed of heating involved on “Flash” machines this can result in different levels of heating on one sheet if it is heavily textured.

1. Increase the heating on the non-textured surface up to 90 or even 100% (i.e. very little or no heating to the textured surface).
2. Allow 5 – 10 seconds time gap after heating prior to “pulling the part”. This allows heat to dissipate evenly over the surface.

With Flash heating systems, lighter colors take longer to heat than darker colors.

For more technical advice we would recommend contacting:

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Two techniques are recommended to overcome this issue:

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