

Hot-Stamping KYDEX® Thermoplastic Sheet

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

TB - 151-C

General Information

Hot-stamping is a good alternative to silk screening or screen printing. The Hot-stamping process can be used to imprint an image on to the KYDEX® sheet or to imprint and “inked” image onto the material. Unlike other plastics, there should be no cracking or chipping when working with KYDEX® sheet.

The finished appearance of the imprint depends on three factors: force, temperature, and time. Material gauge does not effect the imprinted results. Most stamping machines are operated by hand, and therefore, force is difficult to measure and control. Temperature is easier to measure and adjust. KYDEX® sheet can be imprinted in the temperature range of 121 to 177°C (250 to 350°F). At the lower temperatures: 121 to 135°C (250 to 275°F), heavy force for 5-8 seconds will result in a satisfactory imprint. At higher temperatures, use light force for only 1-2 seconds.

Optimum settings: 149°C (300°F), moderate force, 2 seconds.

Allow for variation among hot-stamping machines; it is best to experiment on a sample before stamping the final product. If you do not have a sample of KYDEX® sheet, you can practice on paper if you are stamping with ink.

General Guidelines:

- If KYDEX® sheet is sticking to your equipment, lower the temperature. If there is no imprint, increase temperature.
- KYDEX® sheet should not be exposed to temperatures exceeding 204°C (400°F).
- When using a hand-operated machine, do not ‘jerk’ handle down. Bring the handle down until it touches the surface of the KYDEX® sheet, then do a quick and firm press.
- KYDEX® sheet should be imprinted on its secondary surface, or on a ‘smoother’ pattern for best visual results.

KYDEX, LLC

ISO 9001 and 14001 Certified

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