

Advanced Application Notes

SOLARA™ UV2

FastFact #7033



User Notes 3.0

Printing 1/2" MDO (aka Crezon)

MDO is still a very common substrate in the sign industry for outdoor durable graphics. Unfortunately, surface quality of MDO, as well as overall flatness can vary greatly. Here are some pointers and observations to help you overcome potential problem areas.

- 1) Inspect MDO for surface quality. Obvious flaws (holes, pock marks, paint bubbles) will affect print quality.
- 2) MDO boards should be stored flat (horizontally) if intended for digital printing.
- 3) Inspect MDO for overall flatness before trying to load printer. Variations in flatness over .1" could mean that the SOLARA will not be able to feed the material properly or accurately.
- 4) As with any substrate, clean and prep the surface properly with IPA and a lint-free cloth.

Step 1: Load the SOLARA in the prescribed manner for rigid printing.

Hint; Check that the SOLARA is able to effectively feed the material forward and back when going through its material scan and load procedure.

Step 2: With heavy substrates, the levelness of the SOLARA tables becomes more important. If you have moved your SOLARA at all, or if the tables have been off the machine a few times, you may want to check for overall level before loading.

Step 3: If it appears that the MDO is flat enough and should feed properly but just won't, lift the far end (tail end) of the sheet slightly (1-1.5") when going through the load procedure. This can be done quite simply by placing a wedge of some sort under the sheet near the far end of the feed table.

Hint: Remember that the SOLARA works with 6 grit wheels on the bottom surface of the substrate. If the bottom of the sheet is dusty or too soft, it can affect the "grip" of the grit wheels. Also, as with many heavy objects, the first push is the hardest. By putting this wedge under the far end of the sheet, it appears to lessen the overall drag (surface contact with the feed table) of the board, allowing the sheet to get going and develop some movement momentum.

General MDO FYI:

Most MDO is manufactured in a less than scientific manner. Consistent white levels are very important when looking at color consistency. If you find that your MDO supply tends to vary slightly on whiteness from sheet to sheet, then your color consistency (or panel matching) may suffer. You may want to consider coating boards yourself with the same base coat prior to printing.