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The changing face of ejection material products



For many years, the go-to product for ejection material on flat bed cutting dies has always been Open Cell rubber. Now with advances in technology aiding faster machine speeds, ejection of board from the cutting die and sheet balance on press are in focus more than ever. Packaging manufacturers are spending vast amounts of money on conversion machines and so now require superior tooling to support their machine investment.

Up until the last few years the importance of ejection of board from the cutting die has often been overlooked and perceived as adequate, but the type of ejection material used on a cutting die has an impact on the number of sheets per hour converted.

Traditional Open Cell product

Without doubt Open Cell rubber has been the go-to product for many years, but it does have some distinct disadvantages:

- size and inconsistency of holes
- poor tolerances
- rubber breaks down over time



The inconsistency in the holes along a strip of rubber lead to varying degrees of recovery rate from the ejection material across the press, which in turn, means you have an unbalanced sheet.

At greater speeds, if the sheets are unbalanced, there is potential for them to break up in the platen. It has also been known, over time, for the printing ink from the board to transfer onto the surface of the ejection material causing the rubbers to go hard and break down.



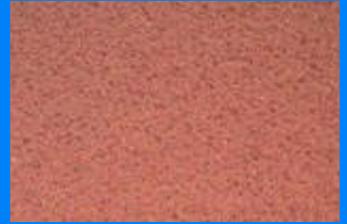


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New Microcellular Polyurethane ejection material

Over the last few years as Technology has improved we have seen a distinct move away from the typical Open Cell rubber ejection products towards Microcellular Polyurethane type ejection materials which:

- have a smaller, more consistent cell structure
- offer a consistent ejection force across the die
- offer improved sheet balance
- have improved thickness tolerances
- do not break down over time



The smaller more consistent structure to the air pockets in the microcellular product helps to give a more even ejection force and greater balance across the sheet during die cutting.

The polyurethane material doesn't break down over time and holds much tighter thickness tolerances. This ejection material can easily be cut by the tool manufacturer using either water jet or knife blade.

Microcellular Polyurethane ejection products are available in varying degrees of thickness and hardness and are suitable for use in both Flatbed Carton and Corrugated and Rotary Corrugated applications.

