Dumor!

TECNICAL BULLETIN 12

Technical info

Here are supplemental instructions on how best to use the different accessories

Use of the cross perforating tool

What it does:
The cross perforation makes slit indentation across the paper.
It is not a paper punch and is not designed to fully pierce the paper.

If you force the mechanism to fully pierce the paper you may:
- Cut the perfing stick, in which case it will swell up with injected paper fragments and catch on the next fed sheet resulting in a paper feed jam.
- Strain the pressing mechanism in which case damage to the mechanism may occur which will invalidate the warranty.

A good perf is when the paper is part folded and then straightened it can be torn apart at the perf line with a clean edge.
Note that the paper grain direction will have an effect on the tear apart result.
A cross grain paper will tear better than a length ways grain paper.

Note the perfing will not be good if a blotting type (loose fibre) or supercalendered paper is used.

- The u shaped handle allows the tool can be slid in only one way.
  If you try to slide it in any other way you will damage/ cut the infeed deflector.
  If the deflector or the foam rubber ejection pad is damaged the paper will catch and jam at infeed.

- The tool is about 1 mm thicker (higher) than the crease tool.
  If you were using the crease tool earlier you will need to equally unscrew the 4 height adjustment screws by about 1 turn to have adequate clearance.

- There are several perf combs available
  Each perf comb is suitable for a limited range of papers, as there are 1000's of types of paper on the market;

NTIL NV Geelseweg, 80 | 2250 | Olen | BELGIUM | Tel. +32 (0) 14 25 92 83 | henry.dumor@hotmail.com | www.dumor.be

The following guide is an approximation.

12 tpi, suitable for paper of approx 130 to 220 gsm, note that cross perfing is generally limited to paper of 220 gsm max due to the perfing force required becoming too high.

24 tpi, suitable for papers of approx 70 to 140 gsm

48 tpi, suitable for light papers of approx 60 to 90 gsm

Note that the penetration of rock hard supercalendered paper may not be possible

Note that the outfeed rollers should be evenly set fairly tight to pull the sheet out of the comb (eg roller contact + 1/2-3/4 turn of the screw).
If they are loose the paper will not pull out of the comb and cause a jam.

The outfeed rollers will press back the perf line and it may look like its not perfed where the paper rolled under the wheel, but it is perfed correctly.

- When using the cross perf the lower feed speed should be used to avoid jamming of the paper.

When using a wider sheet a little more perfing pressure may be needed than when using a narrow sheet; but don't overdo it!
=> *We recommend that you set a mark on the 4 pressure screws to indicate the correct setting once you have found it.*

Use of linear tools

What they do
The linear tools will make a linear effect on the paper , if only the linear tools are used the machine can be set to constant feed (eg no setting for crease line)

Linear tools available:

Slitting
The blade is flat on one side
The flat side of the blade is set to kiss the side of the counter roller and set about 1 mm deeper than the surface of the counter roller

Perfing 12 or 24 tpi
The blade is set lightly against the black nylon roller so that it fully perfs the paper without cutting into the roller.
Note=> that the roller grub screw should be only lightly tight in the flat on the shaft or the roller will deflect and become oval, the sign of this is a intermittent perf line.

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The blade should be set in the middle of the counter roll to avoid skewing.

Kiss cutting

The double sided blade is set lightly against the steel counter roller so that when the sticker passes through only the top part will be cut and the backing will be intact.
Note => that the grub screw should be lightly done up or the roller will deflect and a intermittent kiss cut line will occur.

Scoring (creasing using a roll)
The tool set needs to be **perfectly centered/ aligned** or the edge of the lower tool will cut into the paper.
Note => the lower tool has to be lightly tight against the shaft of the crease line will be intermittent due to ovality.

Edge perfing tool

This is a special tool for perfing a tear line from about 6 to 10 mm from the edge of the sheet.
This tool needs careful alignment in order that the paper doesn't skew on the outfeed.
It may be needed to use 2 or more helper plain rollers to help grip the paper.

Setting the tools across the sheet width

For the paper to exit unskewed the tools generally need to be set evenly across the sheet;
or in the case of a single tool; in the centre of the sheet.
It may be needed to add a set of helper plain rollers for guidance.
The sheet register at infeed needs to be perfectly straight if a good result is to be obtained.

To get a good result from the machine and tools you will need to practice and get familiar with the settings, don't just fit the tools and hope for a perfect demo without practicing beforehand!

If you have questions let me know.

Dumor Crew

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