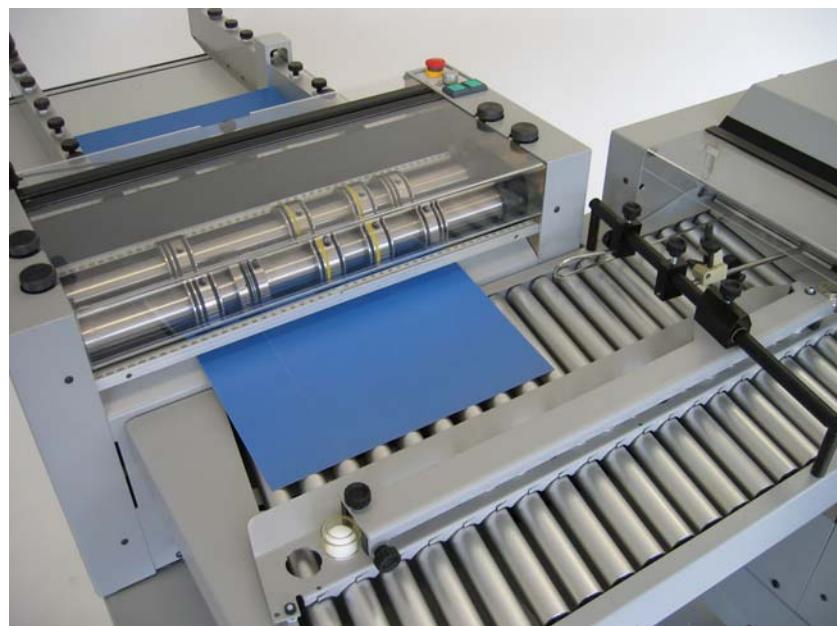


Sales documentation DCM 45 & 75
(« Double Creasing Machine »)

The new Scoring & Perforating Machines DCM 45 & 75

- General presentation and concept
- Description of machine parts
- Technical data
- Scheme of MKF 35 and functions
- Samples of applications



Multigraf AG, CH-5630 Muri

Sales documentation DCM-45 & DCM-75

Consists of:

- | | |
|------------------------------------|--------|
| • General presentation and concept | page 2 |
| • Description of machine parts | page 4 |
| • Technical data | page 6 |
| • Scheme of MKF 35 and functions | page 6 |
| • Samples of applications | page 7 |
-

General description and concept

Description of the scoring and perforating machine DCM 45/75

More and more Eurofold-distributors have asked us whether we were capable to produce a scoring machine. In addition to that, the English company Tech-ni-Fold has contacted us if we were able to produce a heavy duty scoring and perforating machine which can be used together with their tools and accessories.

Up to now it was not possible to score any digitally printed paper on a rotary system to avoid cracking. Tech-ni-Fold is the only company in the world which is capable to provide scoring tools which can handle digitally printed jobs on a rotary system in a way that the paper is not cracking during the folding process. But this was not the only requirement for the development of this machine.

Cam scoring machines as they are provided by different manufacturers (Morgana, Nagel, OMM, Bacchiotini etc.) are very slow. The requirement for machines running at a higher speed than just 2000 sheets/h has increased in some major markets. The answer to this is this new scoring machine DCM-45/75 which can also micro-perforate and slit in a precise way, all in combination with the tools from TechniFold. It is unique in the market that two leading manufacturers are deciding to create a solution together with each other's know how. Multigraf manufactures the machine, TechniFold the tools.

The key feature on this machine is that it is equipped with two pair of shafts, each independent from the other. Difficult papers und materials can be double-scored, with little pressure on the first shaft, with more pressure on the second. The shafts can be adjusted individually to the different jobs. If more pressure on one side is requested, it can be adjusted. The use of micro-perforating and slitting tools is also possible at any time. The new DCM-45/75 is an industrial solution for long run applications. The following combinations are possible:

- as a stand alone solution in two versions, 450 and 750 mm
- in an on-line combination with a folding machine (plate or knife folder)
- in an on-line combination with other machines (digital print, packaging etc.)
- to run single sheets
- to run products from web-applications

The infeed width allows 450 mm (DCM 45) and 750 mm (DCM 75). All standard sheet feeders and paper transfers from Multigraf are compatible and interchangeable.

Possible combinations with Eurofold-feeders and transfers:

- Bottom fed vacuum feeder 245.201 (DCM-45)
- Side lay register table 245.253 with pile feeder 245.230
- Roller conveyor left 245.251 and right 245.252
- Sheet feeder BA-75 with side lay register table 275.254 and pile feeder 275.230

Depending on the application, the DCM-45/75 can be equipped with a stand. There are two different stands available – the standard table 235.460 and the height adjustable stand 195.451/452. Mainly for special application the height adjustable stand is recommended. (see also description of machine parts, page 5).

Materials and products to be handled

The products and materials that can be handled are various:

- Cardboard
- Greeting cards
- Laminated sheets
- Digitally printed paper
- Plastic and PVC sheets
- etc.

On-line with other machines

The scoring machine DCM-45/75 has been developed in a way that it fits on-line to various other machines without any problems. The following applications may be possible and are worth to think about:

- Digital printing machines
- Folding machines, also competitor's products
- Endless form cutters
- Sheet feeding systems
- Integration into packing machines
- Applications with infeed from web-feeders

Standard equipment

As a standard, the machine is equipped with scoring tools and guide wheels form TechniFold as follows:

4 pairs	guide wheels (DCM-45)
8 pairs	guide wheels (DCM-75)
2 pairs	TriCreaser tools (as per 7 th October 2004)

Additional tools for scoring, micro-perforating and slitting may be ordered at any time, if required.

Basic information

Over all, the new scoring and perforating machine DCM-45/75 can be compared to a standard Eurofold folding device. All feeders and sheet transfers are compatible and interchangeable. Existing machines may be upgraded or used in combination with (own and competitor's products).

There are certainly more applications which we will be asked for in the future. Multigraf has tried to develop a most versatile and flexible system which is not only capable to run on Eurofold folding machines but also on most other applications. Our activities focus always onto the end user who requires a flexible solution to obtain a real benefit. The machine can be adapted to his requirements at any time and whenever it is needed.

Description of machine parts

Infeed side, driving shaft

Like the folders, the new scoring machine is equipped with a driving shaft to drive the different feeders and paper transfers. The width of a DCM-45 corresponds with a Euro-fold 245.122 and the one of a DCM-75 with a Multigraf BA-75 sheet feeder.



Scoring and perforating shafts

The DCM 45/75 is equipped with two pairs of perforating shafts of a diameter of 36 mm. This avoids a bending of the shafts while sheets are passing through the machines.

Compared to some other scoring machines on the market, the new DCM-45/75 offers remarkable advantages in regards of scoring and perforating difficult products and materials.



Adjustable shafts

The pressure of the shafts is individually adjustable. They can be adjusted easily to the job running on the machine. A difficult job can be pre-scored on the first shaft and than, with more pressure, be scored again to get the best quality score. The grain will in this case not be treated as hard as in one go. A sheet of paper can be folded without cracking.



Mounting of the perforating shafts

The shafts are equipped with a quick release mechanism which allows to take them off quickly. Tools can be changed and the machine will be ready for production within just a few minutes.

One Allan key only is necessary for all adjustments which needed to be done on the machine.



Scale for positioning of the tools

Several millimeter-scales were applied to the machine in order to simplify the positioning of the different tools and accessories.



Deliveries

A simple reception tray is supplied with the machine.

In order to increase the delivery capacity, Multigraf supplies two different deliveries of 850 and 1250 mm length (including height adjustable stand). Please feel free to ask for more details.



Height adjustable stand

For a most flexible use on different applications, the height adjustable stand is mostly recommended.

Order numbers:

- 195.451 height adjustable stand 501-856 mm
- 195.452 height adjustable stand 571-926 mm
- 245.100.039 table plate kit A2



Ceasing and Micro-Perforating Tools

All Tri-Creaser tools will be supplied by Tech-ni-Fold UK or its distributors around the world. Please see therefore the separate order form.

Multigraf will be pleased to help you with your first orders and will be able to advise you what kind of tools you might require.

Please find more information under the following web-address:

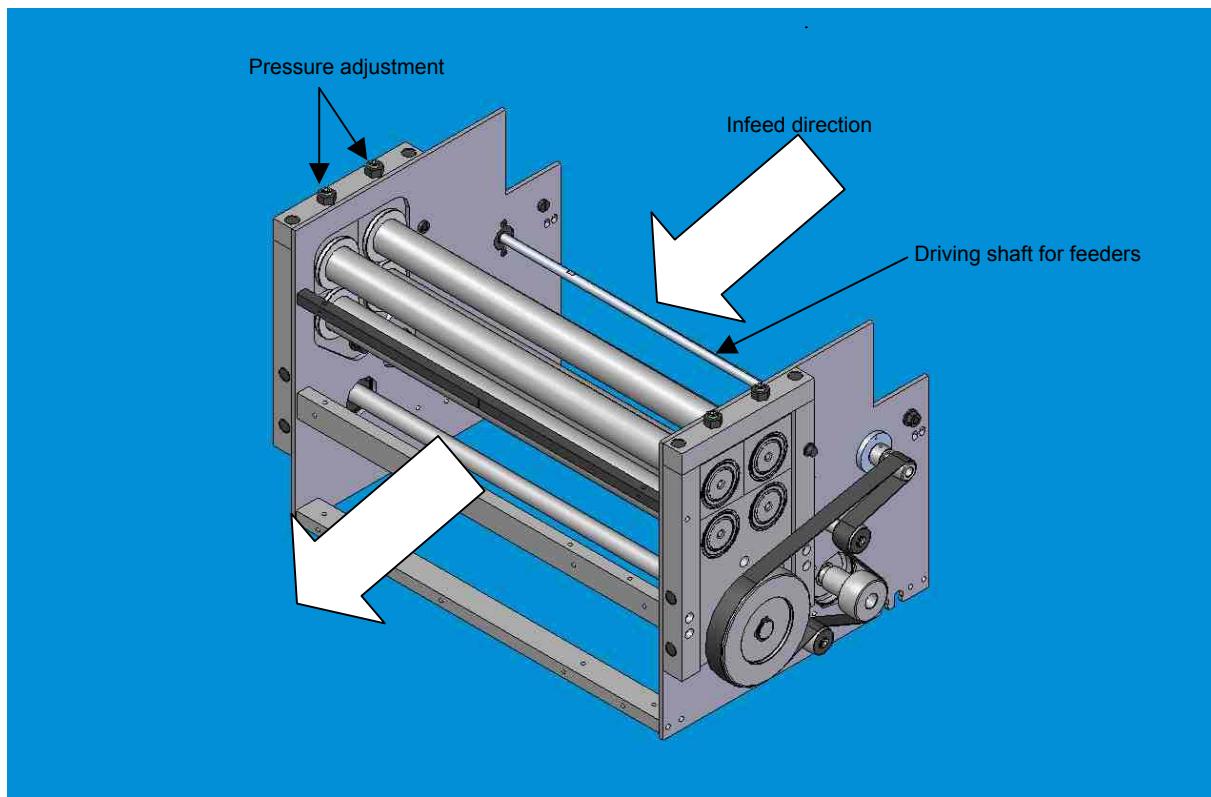
www.technifold.co.uk.



Technical data:

Maximum infeed width Model DCM 45	450 mm
Maximum infeed width Model DCM 75	750 mm
Minimum infeed width	80 mm
Diameter of the shafts	36 mm
Number of perforating/scoring shafts	4 (2 pairs of shafts), pressure is adjustable
Speed	Up to 30'000 sheets A4 / h
Delivery	Reception tray (standard)
Weight	DCM-45: ca. 110 kg, including the stand DCM-75: ca. 130 kg, including the stand
Dimension	DCM-45: 610 x 360 mm (without feeder & delivery) DCM-75: 910 x 360 mm (without feeder & delivery)
Power Consumption	230V / 50/60 Hz

Scheme of the DCM 45/75:



Samples of applications:

