

Two powerful die-cutters with high productivity for larger formats, equipped with light barrier activation of the cutting stroke. The machines are used for medium and large-scale jobs and process materials and articles of all types. The maximum cutting size for model BL is up to 220 x 260 mm, for model BLS is up to 230 x 320 mm.



Sliding door on the rear



Control panel

Die-cutting machine BL and BLS

The robust machine design reflects the increased punching power. The hydraulic equipment is integrated within the machine body. The construction and function of both models are identical except for the size of the machine body – due to the variations in cutting size.

Activation of the cutting stroke:

By activating the electronic light barrier. The cutting stroke is activated automatically after the operator has inserted the stack of material and his/her hand has been withdrawn from the punching section. The machine stops if the operator breaks the light barrier during the cutting process.

The machines are supplied with 5 (BL) or 6 (BLS) adjustable clamping arms, waste slitters and holders which are fitted into the clamping arms, thus being able to reach any required position for slitting the waste. The number of waste slitters needed is determined by the material, size and contour of the product to be die-cut.

The sliding door on the rear of the machine facilitates fitting of the die and the waste slitters. This offers access to the cutting section from both the control and rear side.

The die-cutters are most commonly used for cutting contours of large-sized labels, brochures, children's booklets, credit and loyalty cards, for die-cutting in a two-up system (see *production methods page 8-9*), and for counter-pressure cutting with special material for in mould labels. The machines process high volumes of all types of products.



Die-cutting machine BL

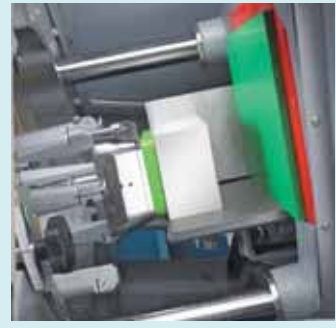
The pneumatic mobile counter-pressure unit for model BL or BLS is easy to fit to the die-cutter in place of the delivery tray. The trolley facilitates the removal and storage of the delivery tray which can be refitted again quickly for jobs without counter-pressure. Changeover time approx. 20 minutes.

The die is especially manufactured for counter-pressure cutting with a movable matrix of plastic or aluminium inside the die. The counter-pressure unit is connected to a compressed air supply. The material is placed in front of the die with the projecting matrix and is held vertically in the die for stabilization during the hydraulic cut. When the ram reaches the end of its stroke, the finished material is pushed back into the feeding tray by the pneumatic counter-pressure cylinder, from where it is removed. This reduces the throughput of the machine by approx. half.

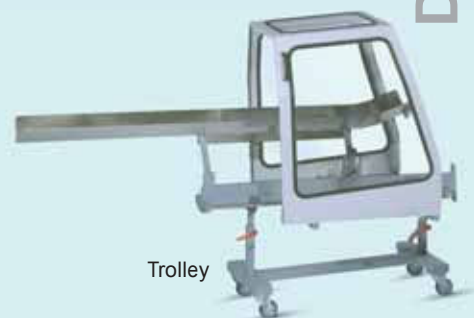
See also page 7
(Description of die-cutting with counter-pressure)



BLS with counter-pressure unit



Feeding tray with stack of material



Trolley

Die-cutting machine BL, BLS

Model		BL	BLS
Max. die-cut size	mm	220 x 260	230 x 320
Min. die-cut size	mm	15 x 15 ¹⁾	20 x 20 ¹⁾
Min. die-cut size with counter-pressure	mm	30 x 30	30 x 30
Max. diameter for circular products	mm	250	260
Max. stack height (height of cutting die 60 mm)	mm	190	190
Die-cutting pressure	kg	5.700	5.700
Die-cutting strokes ²⁾	per min	18	16
Machine output ²⁾ (inserting 1.000 sheets/80gsm)	sheets/h	1.080.000	960.000
Weight	kg	1.350	1.450

¹⁾ One measure can be reduced to 10 mm with reinforced die back
²⁾ Max. achievable output. Die-cutting with counter-pressure reduces the output approx. by half

Counter-pressure unit GD-2

Model for die-cutting machines BL, BLS		GD-2
Pneumatic connection:		
Max. compressed air requirements	nl/min	55
Counter-pressure, adjustable	bar	0-8 (630 kg)
Measurements:: Length x width x height	mm	1.114 x 680 x 1.300
Weight	kg	288

The use of a counter-pressure unit is recommended

- when die-cutting embossed paper and plastics (PP or PE foil) for inmould labels and similar articles to minimise stretching or movement of the material during the cutting process
- when cutting tempered and varnished aluminium foil
- for large-sized labels of difficult material
- for 4-sided cutting of folded sheets (e.g. sheet separating for diaries)
- where tight tolerances are required