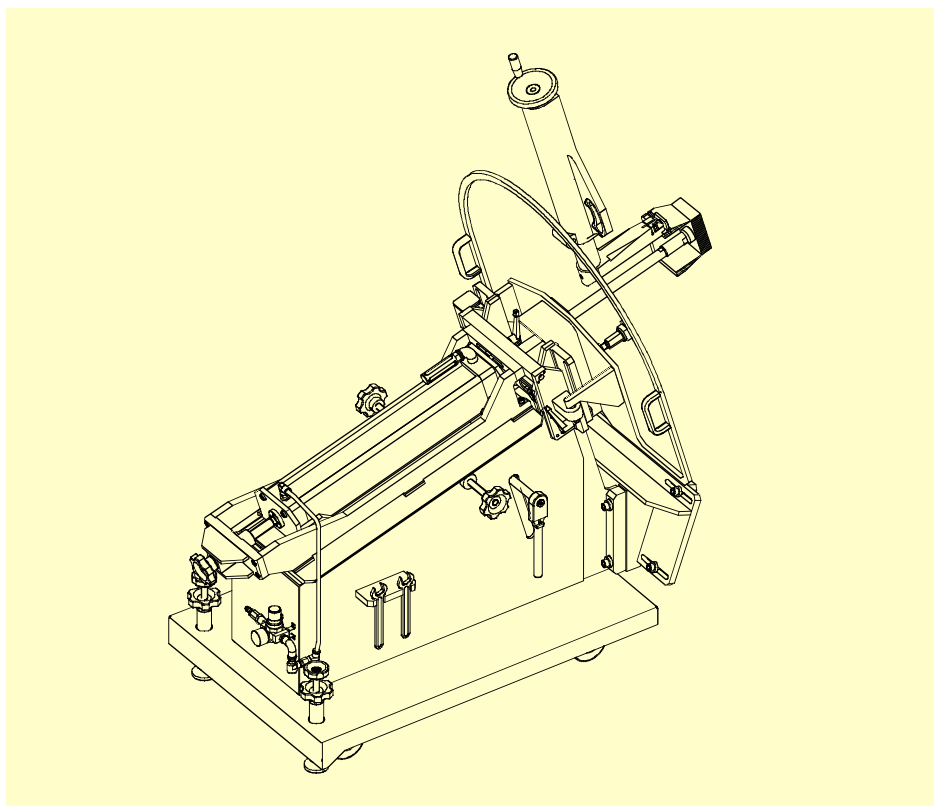


**Counterpressure Device GD 3
for
BUSCH Automatic Punching Machine
Model CL**

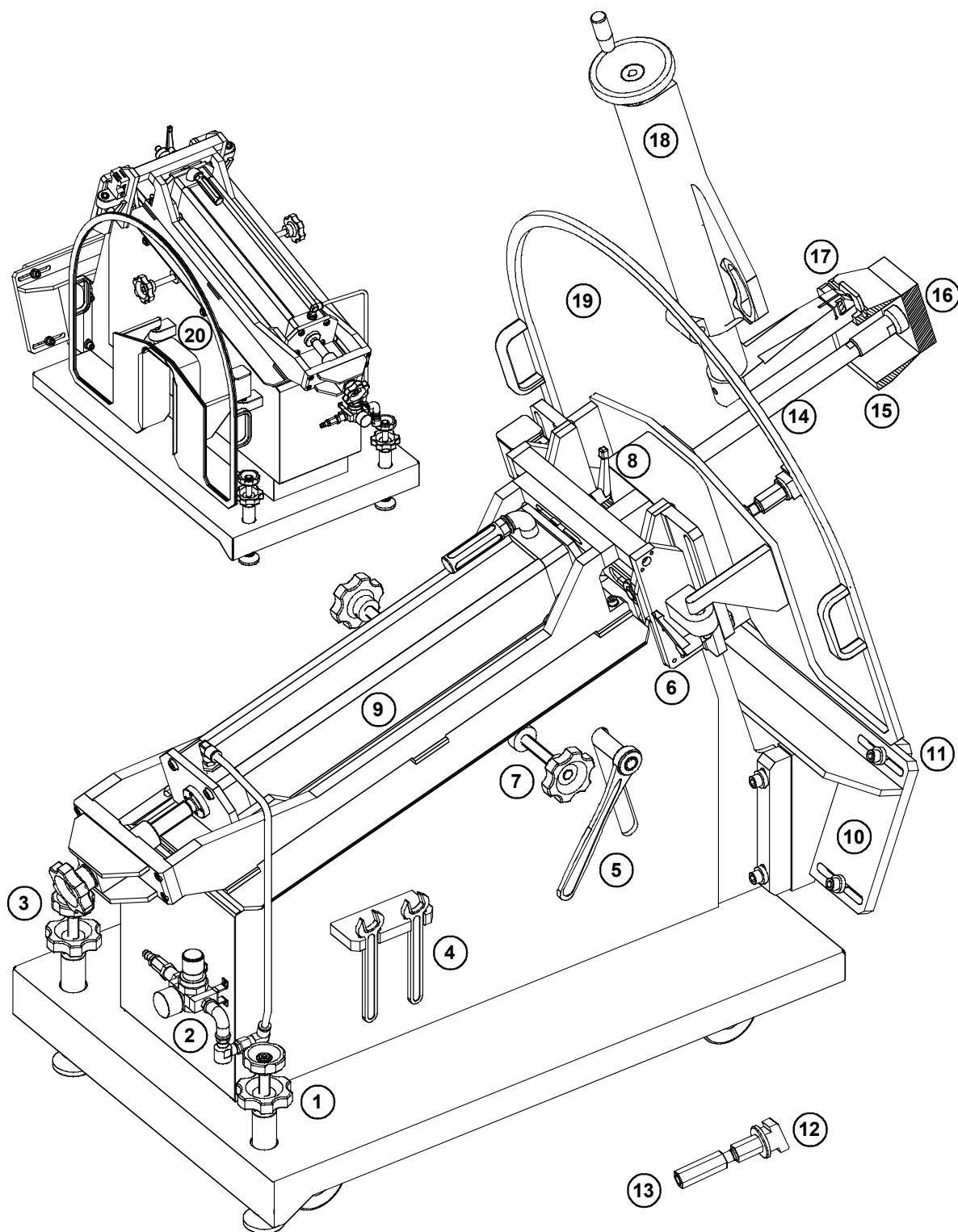


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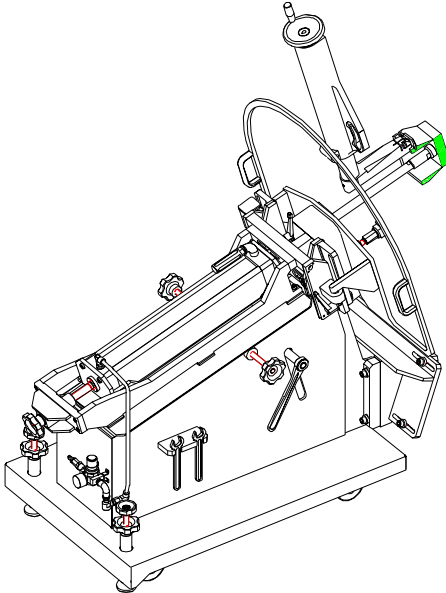
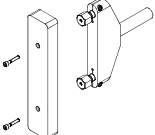
1. Product Description

1.1. General view



pos.	designation
1	foot
2	pneumatic connection
3	handwheel for the pneumatic cylinder (forwards - backwards adjustment)
4	tools for set-up
5	ratchet for the pneumatic cylinder (up - down adjustment)
6	locking lever (up - down adjustment)
7	handwheel (left - right adjustment) is located on both sides
8	locking lever (left - right adjustment)
9	pneumatic cylinder
10	flange plate
11	adapter plate
12	sliding block (fastening on the clamp ring of the punching machine)
13	turnbuckle
14	piston rod
15	punching die
16	matrix
17	retention pin for the punching die
18	clamping arm of the punching machine
19	protective cover (controlled by limit switch)
20	Support for protective cover

1.2. Technical data

	
Counterpressure device	GD 3
for BUSCH punching machines	CL
Max. punching size with counterpressure Min. punching size with counterpressure	See technical data of punching machine 140 x 80 mm with piston rod extension \varnothing 40mm
Option 	A special piston rod extension is offered with double support of the matrix for elongated shapes, or if matrix intends to bend during the punching process.
Pneumatic connection Max. air requirement Max. working pressure Counterpressure adjustable by control valve	65 litre/min. 8 bar 0 - 8 bar
Safety device Connection of the limit switch for the protective cover	by plug contact at the delivery side of the punching machine
Dimensions and weight Length / width / height Length including punching machine Net weight	1335/830/1280 mm 3215 mm 400 kg

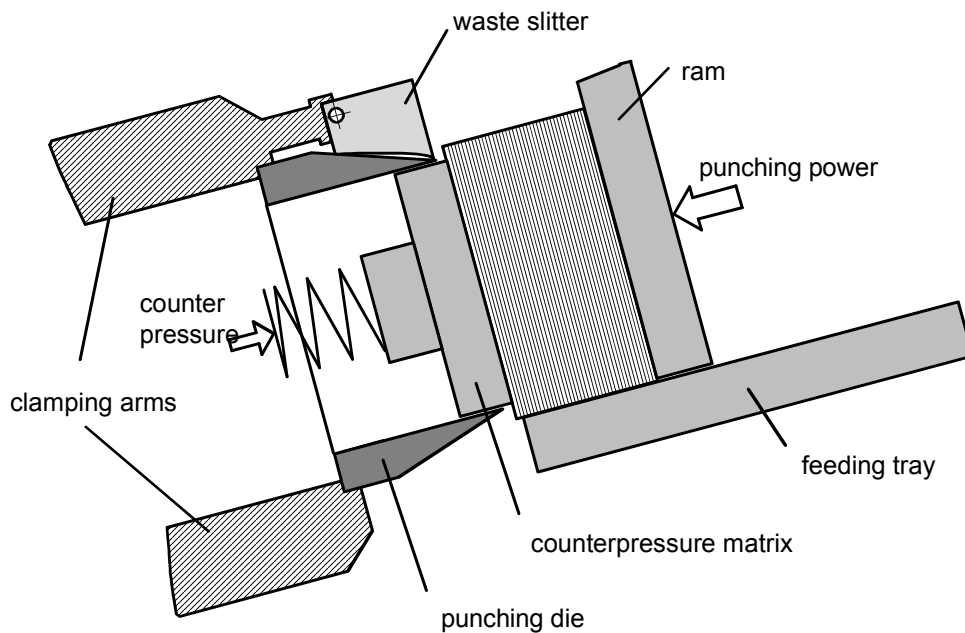
1.3. Functional description

It is advisable to utilize a counterpressure device, when it comes to extreme accuracy, or when large size labels are punched, which might collapse in front of the die due to the nature of the material. It is also used for punching plastic foils (PE or PP), especially for inmould labels.

The movable pneumatic counterpressure device is fitted to the punching machine instead of the delivery tray and is connected to the central compressed air supply.

The punching process runs as follows:

A matrix is located in the punching die. The material inserted into the feeding tray is straightened and pressed against the matrix loaded with pneumatic pressure, before the hydraulic driven ram pushes the stack of sheets through the punching die. Then the punched product is pushed back into the feeding tray for removal by the operator. The performance slows down the output by about 50%.



Dies for counterpressure jobs require a very smooth inside polishing without any steps, and grooves at the back for the holding pins. A plastic or aluminium matrix, slightly smaller dimensioned than the die shape, is to be fixed onto the counterpressure cylinder.