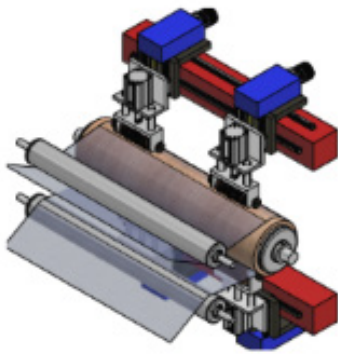


COLD MICRO-PERFORATOR MODEL CNMC



The **CNMC MICRO-PERFORATOR** is a lightweight and versatile device that occupies little space. It is designed to punch **MICRO HOLES** of various diameters in **MOVING FILM**. It has to be inserted into existing machinery such as slitters, extruders, printing machines, bag machines or any other film processing lines. This device is suitable for punching micro holes in bags for vegetables and fruit, thermal and acoustic insulation, packaging of electronic products, breathable film, etc.

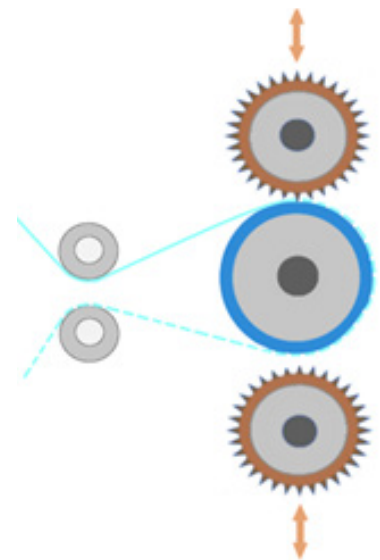
HOLES OF

∅ 50μ → ∅ 1,8mm

How it works

The moving film arrives at the device and passes through **THE NEEDLE SHAFT** and **THE COUNTER ROLLER** which, when approaching, perforate the material. The approach of the rollers takes place through a pneumatic system and the adjustment of the perforation is carried out by two micrometric screws. **PERFORATION IS CARRIED OUT WITHOUT INTERRUPTION.**

The CNMC moves thanks to the motion of the film, adapting perfectly to the speed of the processing line.



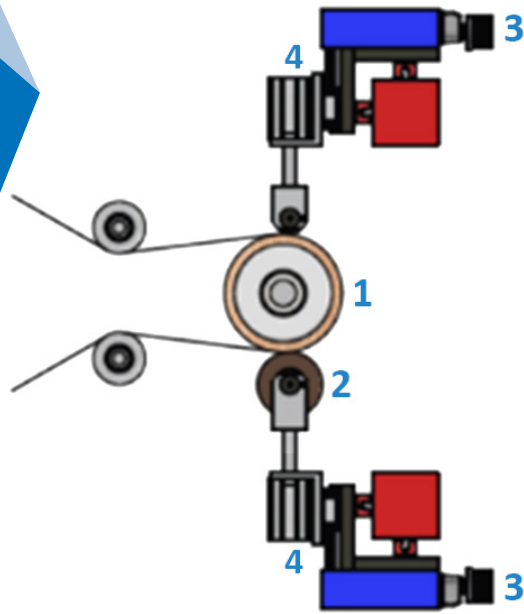
DATA SHEET

Needle roller ∅	200mm
Needles ∅	Min. ∅50μ - Max. ∅1,8mm
Movement	Movement by asynchronous motor 400 V+N+T - 50Hz
Penetration regulation	Micrometric screws with graduated knobs
Maximum working speed	500* meters per minute
Counter roller movement	Pneumatic movement
Air pressure	6 Bar
*	This value depends on the type of material to be processed

OPTIONALS

- Trolley on wheels
- Trolley on rails
- Table to change needle sleeves rapidly
- Idler rolls

TECHNICAL DESCRIPTION AND COMPONENTS



The supporting structure houses the **COUNTER ROLLER (1)**, which can be made of rubber or rectified bristles and in the upper and lower parts of it there are **CLAMPS (4)**, in which the **NEEDLE ROLLERS (2)** are inserted.

These clamps have the function to bring the needle rollers closer to the central counter roller thanks to a pneumatic system. As soon as they come into contact, they perforate the film.

To adjust perforation and to obtain maximum precision of the hole

diameter, it is possible to use two graduated knobs inserted into **2 MICROMETRIC SCREWS (3)**.

The **CLAMPS (4)** that hold the **NEEDLE ROLLERS (2)** have **RECIRCULATING BALL BEARING GUIDES** that move on rails along the entire length of the structure and they allow the operator to decide the point in which to position the needle rollers.

The CNMC allows the moving film to be perforated **WITHOUT HAVING TO INTERRUPT PRODUCTION TO CHANGE THE NEEDLE ROLLERS** because while the counter roller works with the needle cylinders of the upper part, the operator can replace the needle rollers of the lower part while the machine is working. Subsequently, it will be sufficient to enable the perforation of the lower needle unit and disable the upper unit to continue punching the film seamlessly, saving all the machine downtime required with other less efficient models.

These **NEEDLE ROLLERS** can punch holes with a minimum \varnothing of 50 μ and a maximum \varnothing of 1,8mm, while the maximum density of needles is 48 per cm². Depending on the material to be micro-perforated, it is possible to request a **COUNTER ROLLER (1)** made of rubber or rectified bristles.



MATERIALS PROCESSED BY CN PERFORATORS

PE - LDPE - HDPE - LAMINATED - FOOD PVC - ALUMINIUM - PAPER



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