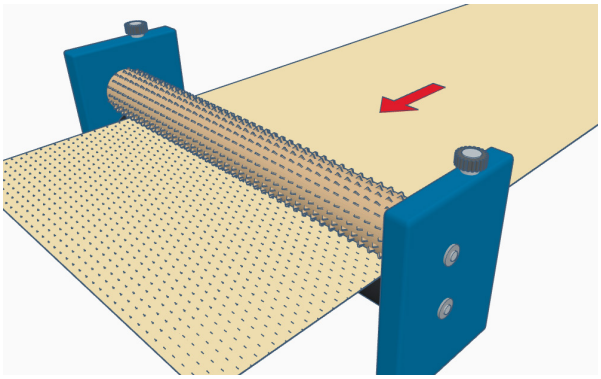
COLD MICRO PERFORATORS
MODEL CN

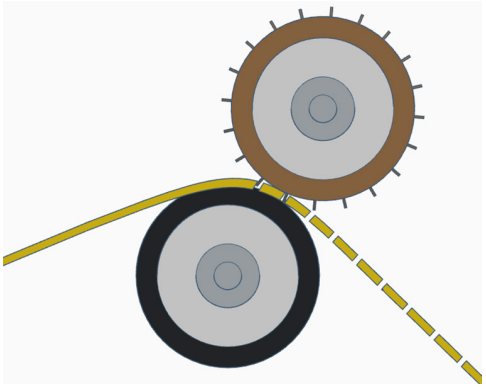


THE CN MICRO-PERFORATORS are lightweight and versatile devices that occupy little space. They are designed to punch **MICRO HOLES** of various diameters in **MOVING FILM**. They have to be inserted into existing machinery such as slitters, extruders, printing machines, bag machines or any other film processing lines. They are suitable for punching micro holes in bags for fruits and vegetables, thermal and acoustic insulation, packaging of electronic products, breathable film, etc.

HOLES OF
Ø 50µ → Ø 1,8mm

How it works

Perforation takes place thanks to a perforation group, which consists of a needle shaft and a counter roller. The film passes through the two rollers which, by coming into contact, perforate the material. The approach of the rollers takes place through two manually adjustable micrometric screws. **The CN micro-perforators move thanks to the motion of the film, adapting perfectly to the speed of the processing line.**

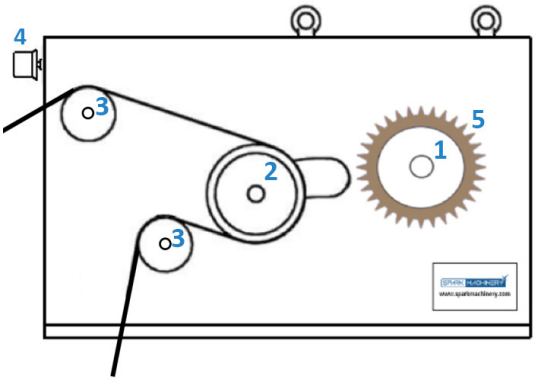


DATA SHEET	
Needle roller Ø	60mm – 100mm – 150mm – 200mm
Needles Ø	Min. Ø50µ - Max. Ø1,8mm
Movement Mode	The 2 rollers move thanks to the motion of the film
Penetration regulation	Micrometric screws with graduated knobs
Maximum working speed	500 meters per minute*
Counter roller movement	Pneumatic movement
*	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

1: Needle shaft



It consists of a roller made of **STEEL** on which **INTERCHANGEABLE CYLINDERS (5)** are mounted. The cylinders can be spaced from each other so as to microperforate only some parts of the film or they can be adjacent to perforate the entire surface of the material.

It is designed to change cylinders in a quick and easy way when needed.

2: Counter roller

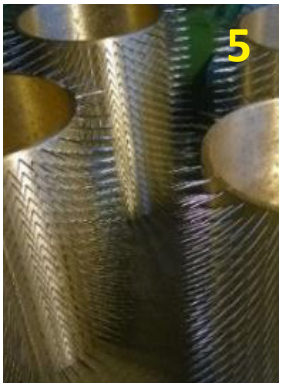
It has a **PERFECTLY UNIFORM SURFACE** that allows the homogeneity of the holes made and can consist of rubber or rectified natural bristles or plastic bristles. The counter roller is moved by a **PNEUMATIC SYSTEM**, which allows it to approach or move away from the needle shaft, thus deciding whether to enable or disable punching.

3: Idler rolls

As a further guarantee to control the tension of the film to be processed, it is possible to accessorise the device with a **REFERRAL GROUP** consisting of two or more aluminum idler rolls. The position and number of rollers can be agreed upon when ordering.

4: Micrometric screws

They are used to adjust the distance between the counter roller and the needle roller, so that they create the **PLUNGING ADJUSTMENT SYSTEM**.



5: Interchangeable cylinders

They are rollers in bronze, aluminum or nylon with needles fixed. They are mounted on the **NEEDLE SHAFT(1)**. This machine can punch holes with a minimum Ø of 50µ and a maximum Ø of 1,8mm, while the maximum density of needles per perforation roller is 48 per cm^2.

MATERIALS PROCESSED BY CN PERFORATORS

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

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