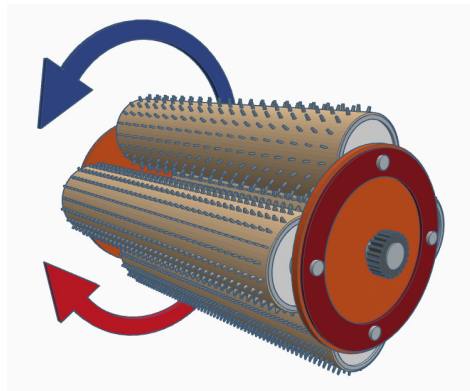


## COLD MICRO-PERFORATOR MODEL CNEC



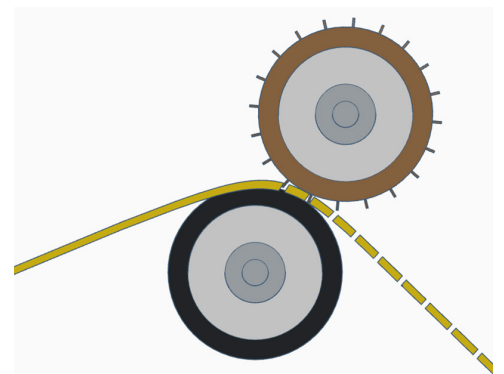
This perforator is designed to punch **MICRO HOLES** in **MOVING FILMS** of various materials and thicknesses and has to be inserted into existing machinery such as slitters, extruders, printing machines or bag machines. The CNEC is ideal for those people or companies that often have to vary production and regularly face changes in perforation designs.

**HOLES OF**  
 $\varnothing 50\mu$    $\varnothing 1,8\text{mm}$

### How it works

Perforation takes place as follows: the material is supported and approached to the **NEEDLE SHAFT** by a **RUBBER OR BRUSH COUNTER ROLLER** that uses pneumatic movement. Punching depth can be adjusted by manual control using the micrometric screws.

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



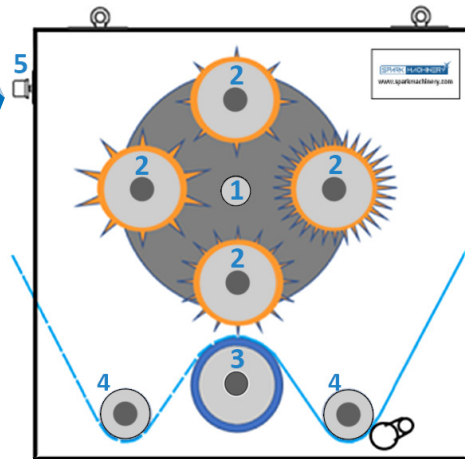
### DATA SHEET

<b>Needle roller <math>\varnothing</math></b>	60mm
<b>Needles <math>\varnothing</math></b>	Min. $\varnothing 50\mu$ - Max. $\varnothing 1,8\text{mm}$
<b>Number of interchangeable rollers</b>	Max. 4
<b>Equipment of the needle shaft</b>	Needle cylinders, embossing cylinders, fibrillating cylinders and blade cylinders for pre-cutting
<b>Needle roller change system</b>	Hand-operated revolver system
<b>Perforation rollers movement</b>	Rollers move thanks to the movement of the film
<b>Penetration regulation</b>	Micrometric screws with graduated knobs
<b>Maximum working speed</b>	500* meters per minute
<b>Air pressure</b>	6 BAR
<b>Counter roller movement</b>	Pneumatic movement
<b>*</b>	This value depends on the type of material to be processed

### OPTIONALS

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

## TECHNICAL DESCRIPTION AND COMPONENTS



### 1: Revolver system to change needle shafts

The **PERFORATING SYSTEM** consists of the **NEEDLE SHAFTS (2)** and the **COUNTER ROLLER (3)**.

In order to eliminate machine downtime and facilitate changeovers, this unit can be fitted with up to 4 rollers on rotating plates which allow the needle shafts to be quickly exchanged (**REVOLVER SYSTEM**). The exchange of the rollers and the

adjustment of the perforation can take place both when the machine is stopped and when it is moving, thus guaranteeing the maximum versatility of the system.

### 2: Needle shafts

These are **STEEL ROLLERS** on which **INTERCHANGEABLE CYLINDERS (6)** are mounted. These cylinders can consist of bronze, aluminum or nylon.

### 3: Counter roller

It has a **PERFECTLY UNIFORM SURFACE** which allows holes to be homogeneous. It can be supplied in rectified natural bristles, plastic bristles or rubber. This counter roller supports the material during perforation, thus, ensuring excellent results.

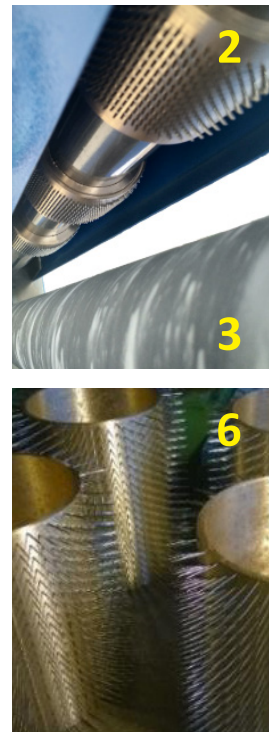
It is moved by means of a **PNEUMATIC SYSTEM**, which allows it to be brought closer to or further away from the needle shaft, thus, deciding whether to enable or disable perforation.

### 4: Idler rolls

As a further guarantee for optimal control of the tension of the film to be punched, a **TRANSFER GROUP** consisting of 2 **ALUMINUM IDLER ROLLS (4)** is provided.

### 5: 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**. The adjustment can be made both with the machine stopped and with the perforator in operation, ensuring versatility and maximum precision of penetration into the material.



## MATERIALS PROCESSED BY CN PERFORATORS

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



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