



MACHINES À PERFORER "OPTIMA"

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## "OPTIMA" PERFORATING MACHINES

The fixity of the films depends in large as part of the quality of their perforations, it is essential that the film be perforated with rigorous precision. This applies to both negative emulsions - for shooting - and positive emulsions - for printing and projection

For this purpose, a punching machine must be absolutely foolproof and ensure a perfect cut and have easily interchangeable punching (dies and punches).

Our different types of "OPTIMA" machines fully meet our requirements for both film and 35mm that for those of 17.5mm and 16mm and 9.5mm and 8mm.

With the OPTIMA 35 mm, for example, perforation is ensured by a pair of punches simultaneously performing a punch on each side of the film. This method ensures perfect accuracy and repeatability. It is made against each hole, in the same row. It is always mandatory.

The film is perfectly guided in a fully integrated double roller channel to avoid any sticking. The receiver and delivery sides are adjustable for 400mm rolls to avoid any sticking. This feature is especially interesting for negatively charged films.

The constant consistency of our machine.

Their optimality, ease of maintenance, and ease of maintenance make them the best and most sought-after U-shaped perforators on the market.

## SHIPPING

The "OPTIMA" punching machines are shipped in 3 internally lined maritime crates which are themselves protected by a slatted counter crate to prevent any damage.

## INSTALLATION.

DURING RECONSTRUCTION – Un-nail the lids marked "TOP". Remove the inner case from each counter case

- Remove the cover and carefully remove the shims from inside the boxes.

FOR THE ENGINEER OR ELECTRICIAN - Regardless of the type of machine:

Wipe the machine thoroughly.

Put the base in place.

Connect the connector to the motor.

Start the motor using the switch to ensure that the connection is correct.

- Mount the film supports

(A) on the drill. Space the two housings using the flange

(B) Fit the hose

(C) which controls the winding

(D) Install the sign brush using the 4 screws

(E) and connect the power to the printing lamp (on machines equipped with this component).

Install the punch belt.

Install the brewer belt.

LUBRICATION - Before starting, carefully lubricate the machine through the greased holes on the F.G.H.L.J.K. with "Mobile Artic" oil.

## SETTINGS

CENTERING CHANNEL ADJUSTMENT - This is done using 3 buttons:

L - Pitch adjustment button.

M - Hole centering button.

N - Button for adjusting the squareness of the perforation.

PITCH ADJUSTMENT - To achieve perfect results, it is necessary to punch the positive and negative papers at different pitches; this adjustment is quickly and easily done using the "L" button, which holds the indications Plus "longer" Plus "shorter". Just

Turn this knob in the appropriate direction to lengthen or shorten the pitch, and this operation can be done while the machine is running or stopped. Since a fairly large knob movement is required to change the pitch, the machine is therefore very easy to adjust and very precise.

## GETTING STARTED

The machine is started using the "0" button.

Before loading the punch for the first time, we recommend letting the machine run for about an hour and then wiping it down thoroughly.

Lift the two channel flaps and release the punches from the dies by acting on the nickel-plated face of the machine. Then load the feed casing so that the film is placed in the "top emulsion" channel.

Pass the film under the deflector rollers according to the attached engraving. Make a loop. Pass it into the centering channel. Engage the film between the and the Gus of the matrix. Leave the axis of the film about 5 centimetres. Close the claw channel flap.

Start the punch using the (0) button. Punch about one meter of film. Stop the machine. Make a loop between the film and the feed drum. Pass the film over the winder hub, then over the mixer shaft, through the mixer, and onto the feed drum. Place the film over the winder hub and close the feed drum shutter.

LOCK NUT - To prevent any adjustment of the pitch, a safety nut locks the knob (L) and prevents it from turning. To turn this knob, you need a special key supplied with the machine, which is usually left between the service pins. This precaution ensures that the machine's setting cannot be changed accidentally.

This cup nut combination was also used for the adjustment (L), centering (M), and squaring (N) knobs, as well as for locking the channels. The same key therefore locks the entire machine, making it ABSOLUTELY INDEFINABLE.

The production schedule of the OPTIMA company in film of 35mm is from 220 meters approximately

## "OPTIMA" MACHINES FOR STRAIGHT FILMS

Machines for processing narrow film are generally supplied to simultaneously perforate multiple strips of the same length.

Examples: a 35mm wide unperforated strip simultaneously produces two 17.5mm perforated strips.

- an 32mm wide unperforated strip will yield two 16mm strips
- an unperforated strip 28.5mm wide will give three strips of 9.5mm: and
- an unperforated strip of 16mm will yield two strips of 8 mm.

This procedure multiplied the hourly output by the number of narrow bands obtained.

In the case of negative emulsions, the narrow strips are separated by a cutter (mounted on the punch or by a separate cutting machine) for use in the cameras. However, for positive emulsions, the strips are generally used as is, before cutting, to simplify printing and developing and increase yield.

Take, for example, the "OPTIMA" machine for 16 mm film, as other sub-standard perforating machine models are designed on the same basis.

As mentioned above, 16mm film is perforated either starting from the 32 mm film or starting from the 35 mm film.

If the machine is intended for a film manufacturer, the OPTIMA 32 mm is recommended; this punch comes in two models: either with a cutter to obtain two 16 mm films, or without a cutter to produce 32 mm strips prepared for double printing on printing machines MATIPO or TIPRO Debric.

Note

The use of 32 mm film, two 16 mm films side by side, allows for a 50% reduction in print costs for series production, since two films are printed and developed simultaneously. This advantage can only be achieved thanks to our projection printing machines "TIPRO" which produce in one operation two 16 mm films reduced from a 35 mm film.

If the punch is intended for a laboratory that cannot obtain unperforated strips in 32 mm width but receives unperforated strips of 35 mm, it is then necessary to use our machine with a cutter; one of these separates the two 16 mm films and the other cuts the excess film from 35 mm to 32 mm.

This "OPI'IMA" can be used with a single knife for trimming waste only, resulting in a 32 mm strip, two 16 mm strips, placed side by side for use on our "TIPRO" and "MATIPO" machines.

While all the laboratory work was carried out on 32 mm film, we use our large-bore cutting machine, specially designed for this type of work, for cutting the film.

## DESCRIPTION

Machine for punching two 16 mm rolls of film into a 32 mm strip

This punch does not differ much, overall, from the OPTIMA for standard films: the same frame, the same general layout, the same slides on the drums and in the channels which are of appropriate dimensions. Except for the base, it is made of a different material.

Due to the length of the pitch to be punched and to overcome the disadvantages of launching the film at the end of the claw pull, stability is ensured during perforation by centering pilots attached to the punches, which then provide a perforation strictly at the pitch.

This machine can be equipped with a brush or brush-brush attachment with an air intake for suction.

The hourly production rate of this machine is 275 meters of 32 mm film, or 550 meters of 16 mm film.

Machine for punching and cutting two 16 mm films taken from a 32 mm strip –

This machine was designed to perforate and cut, after perforating, in a single operation, two 16 mm strips taken from a 32 mm strip.

This perforator is mounted on a metal frame that carries the cutter as well as the brusher or the signing brusher if necessary.

The drive and fixation mechanism is based on the same principle as described above, that is, it includes: non-adjustable pull claws and fixation pilots that immobilize the film during the descent of the punches.

On the upper part of the frame, at the end of the drilling machine, is located the cutter intended to separate the 32 mm bend in two, after drilling.

Below the cutter is the arm or the brush-signer equipped with its suction air inlet.

The metal base also includes a double friction roller onto which the two perforated films are wound.

The hourly production of this machine is 275 meters of 32 mm film, or 650 meters of 16 mm film.

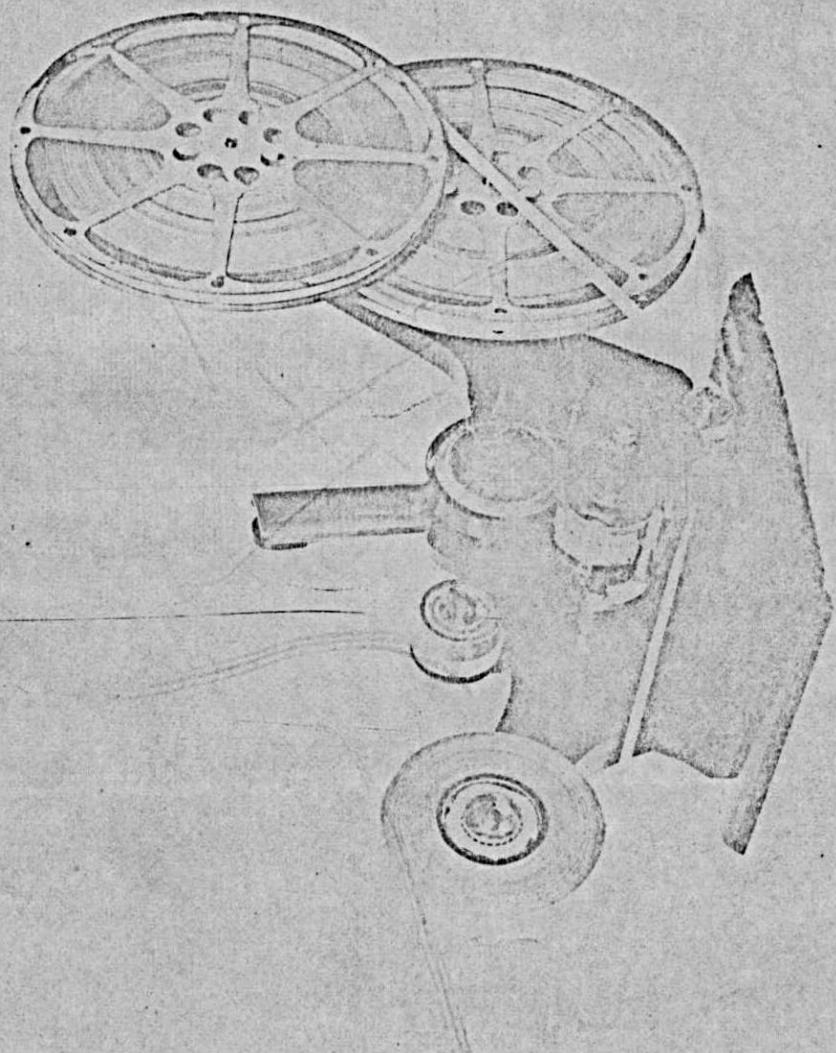
#### TWO-PIECE PUNCHING MACHINE 16mm taken from a 35mm Strip

This machine is almost similar to the previous machine and is also mounted on a metal frame. It has a cutter designed to cut off excess film from 35 to 32 mm on the side. Same drive mechanism, same stability of perforations obtained by pilots attached to the punches.

The hourly production of this machine is 275 meters of 32 mm film, or 550 meters of 16 mm film.

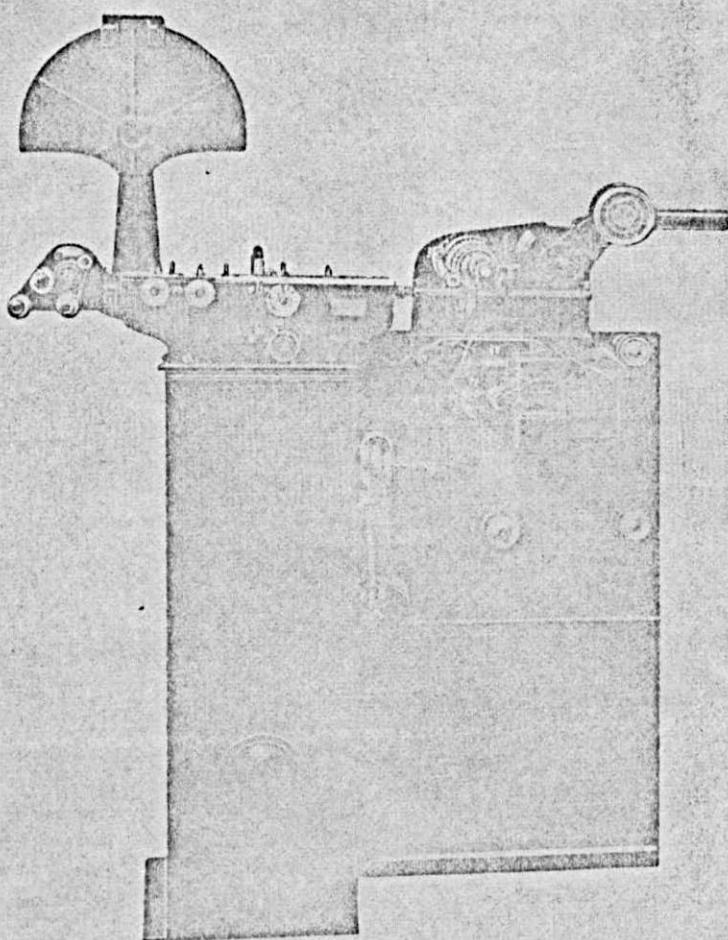
#### TWO-CUT PUNCHING MACHINE 16mm taken from a 35mm Strip

This machine model is identical to the previous one but also includes a cutter that separates the two 16 mm films and a double friction unwinder for simultaneous winding of the two films.



**Machine à Perforer**

**"OPTIMA"**

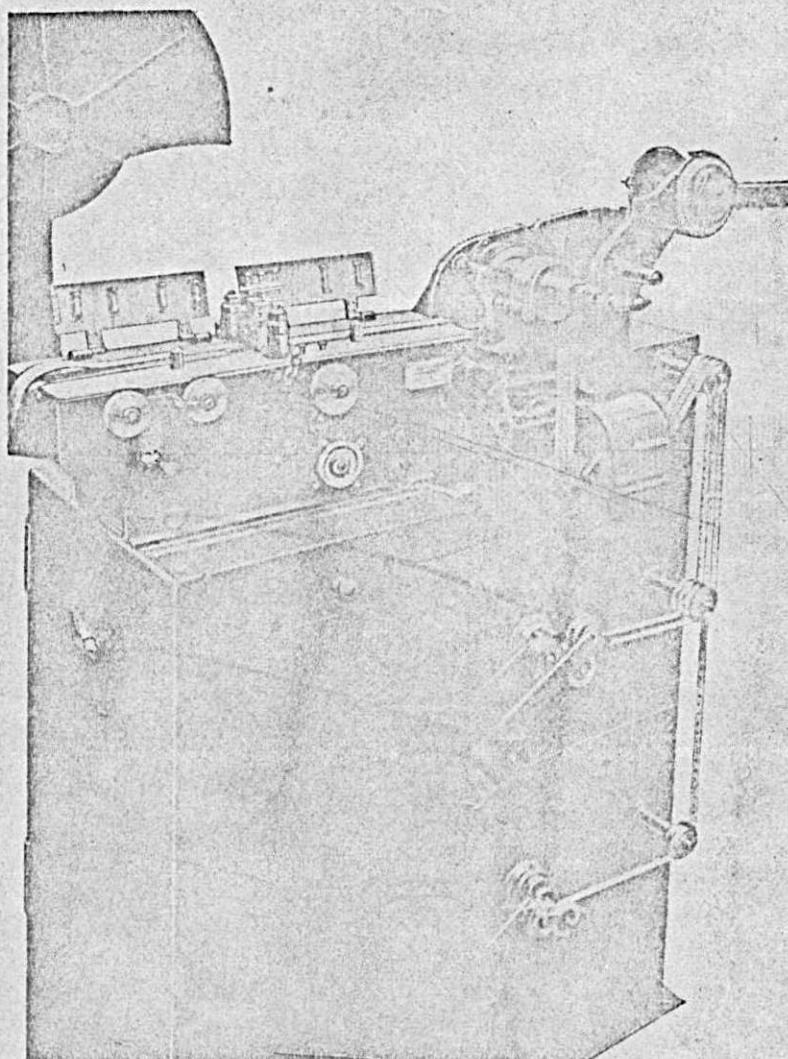


**Pour pellicule "SOUS-STANDARD"**

**16 %**

## Machine à perforer "OPTIMA"

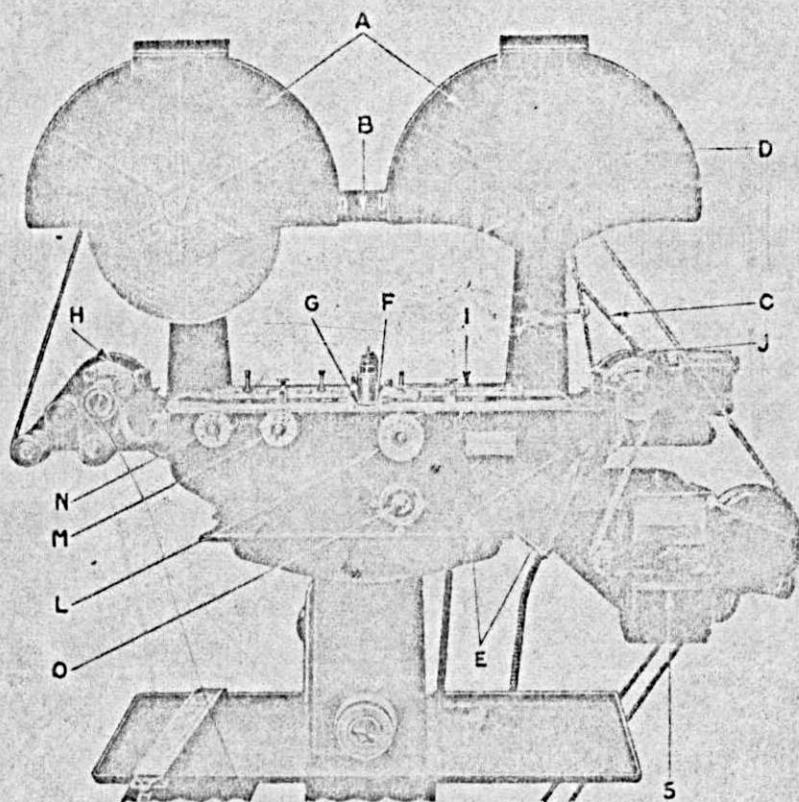
pour pellicule sous-standard



Type perforant et coupant une pellicule de 28 m/m 5  
en 3 bandes de 9 m/m 5.

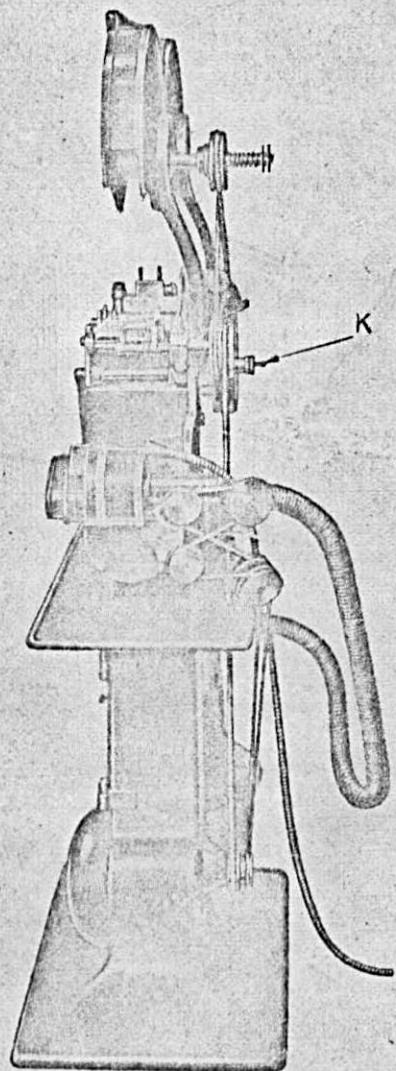
Machine à perforer

"OPTIMA"



Perforeuse pour pellicule "STANDARD"  
avec système brosseur-signeur et aspirateur

Machine à perforer  
"OPTIMA"



Perforeuse pour pellicule "STANDARD"  
Vue de profil.

