

**OPERATOR'S
MANUAL
FILM APPLICATOR**



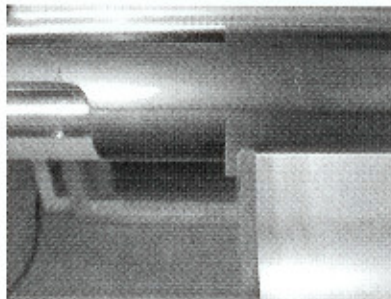
OPERATOR'S MANUAL
HARLACHER - FILM APPLICATOR H 17
(Model 2001 / 2002)

General

- the HARLACHER film applicator is designed for semi automatic, vertical **cappillary film** application onto stretched mesh
- the film comes off a roll and **has to be fed manually** prior to the **automatic application**
- a pre - application of a transfer - emulsion to the squeegee side can be programmed
- after the film application, the film gets automatically cut at its top and the carriage then returns to the starting position

Technical requirements

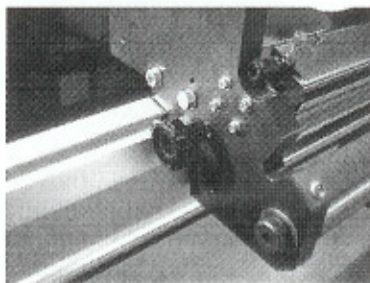
- mesh tension should not be less than 15N to 20N (/ cm)
- rubber roll should **not** travel on the frames, if possible maintain a distance of approx. 25 mm (1") between the edge of the rubber roll and the inner edge of the frames
- the roll ideally is approx. 40 mm (20mm per side) longer than the filmwidth
- the coating trough (squeegee side) should be approx. 10 mm shorter than the filmwidth



- use slow speed for application, high speed will trap air - bubbles
- make sure that the protection foil on the film is located at the outside of the film roll, directly touching the rubber roll (not the screen)

Application - procedure

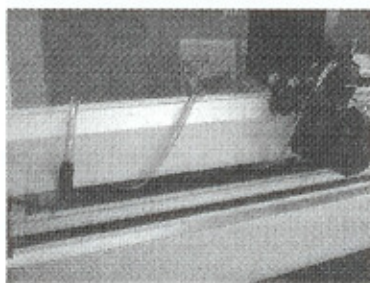
- a) move the white trough holding clamps to the outer ends of the profile (printing side)
- b) lift the filmapplicator (cover off) at the top angled profile and place it (preferably from the rear) in a slightly tilted position onto the rear trough holding profile



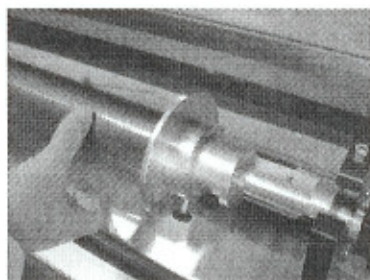
- c) shift it (tilted) precisely to the marked position (previously **exactly centered** applicator, then marked onto profile), then tilt it down towards the front
- d) connect the pneumatic tubes on either side of the edgecleaning - cylinder to the respective tubes of the applicator

Attention : keep your hands off the cutting area, the knife may move during connection !

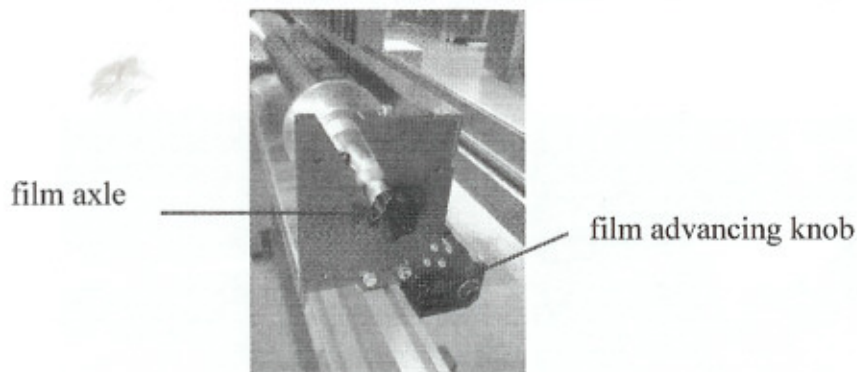
make sure that the pneum. tubes are properly wound around the profile (danger of tangles)



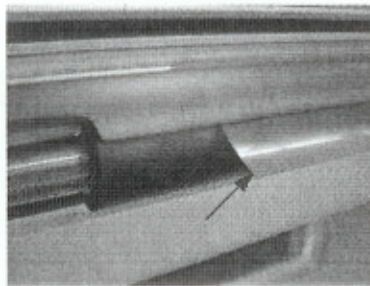
- e) insert axle with mounted (**centered**) film roll and then manually feed the film into the bottom slit



- f) at the same time as you feed the film into the slit, turn the film advancing axle clockwise to feed the film onto the rubber roll, overlapping it in front by approx. 50 mm (2")



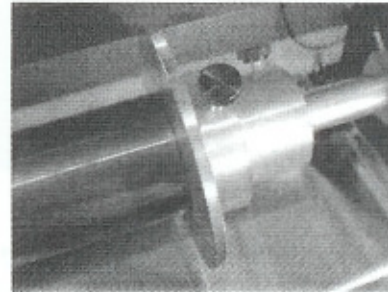
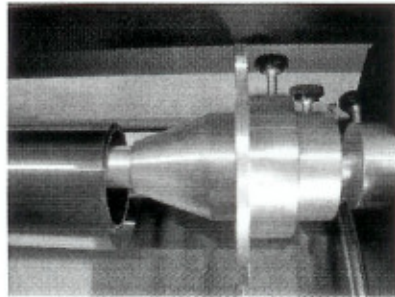
- g) now turn the knob of the film axle clockwise to retension (reverse) the film until it only overlaps approx. 25 mm (1")



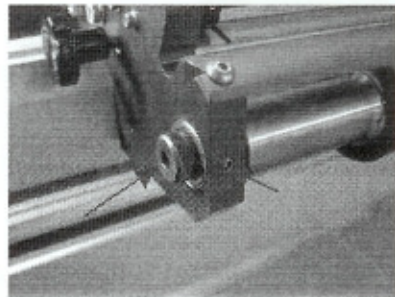
- h) mount a suitable coating trough (see technical requirements) to the squeegee side (front) and fill it with the required transfer - emulsion (ask film supplier)
- i) insert a clean , dry screen into the **exact center** of the coating machine and close the clamps
- k) select a previously programmed "cappillary roll " program No.
- l) start the automatic program according to the operating manual of the coating machine
- m) after final return of the carriage to home position (end of program), remove coated screen, again turn film advancing axle clockwise to overlap film by 50 mm, then again follow # : g), i), l), m).

Adjustments

- center the film exactly inside the two sideplates, then press the two cones towards the film and tighten them, then slide the two guide plates to the film sides and tighten them too



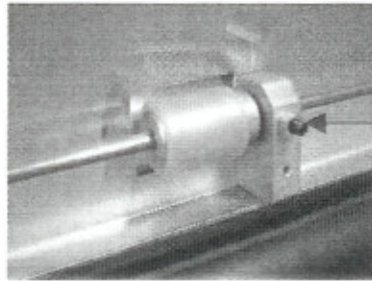
- if you need to adjust the rubber roll length for other formats, you have to replace the complete roll including its guiding profile (on top of roll) by loosening the screws at their ends in the side plates



- **on models without film advancing knob :**
if you want to use thicker films you may have to adjust the base plate by sliding it backwards after loosening its 4 screws at the side plates
- **on models with film advancing knob :**
the film advancing rubber rolls underneath the base plate are spring loaded and therefore self adjusting for different thicknesses

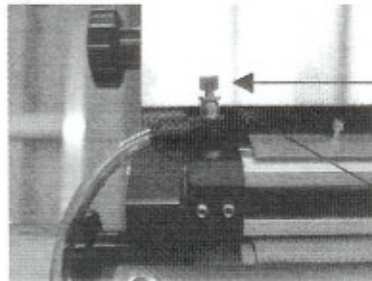


- if the film starts slipping during advancing, you can increase the pressure of the guiding rolls to the film by tightening the adjustment screws underneath the base plate.
Note : do not overtighten these screws !



lock nut and spring loaded screw

- the speed of the cutting knife can be adjusted by turning the knurled knob at the **end** of the direction it is moving to, clockwise to decrease, counterclockwise to increase. Don't forget to lock the knob by the locking ring below after adjustment



knurled knob

locking ring

Maintenance

- **always keep the machine clean and dry.** Immediately after spilling emulsion wipe it off with a wet cloth and then dry it again
- only use **very little** fine grease at the touching ends of the film axle to the support plates
- to replace the cutting knife loosen its 2 screws, replace the blade and screw it back on again

