Version Eawag 8.12.2011

Needle pulling Protocol

- 1) The machine is in room D73, there is a reservation sheet beside it
- 2) Switch on machine (on left side)
- 3) When prompted to enter the program, enter '30' and press Enter. Program settings are: Heat = 500, Fil = 4, Vel = 30, Del = 128, Pul = 75
- 4) Open glass casing
- 5) Push back flappy hinges for the pulling apparatus so that the clamps converge towards the middle
- 6) Slide glass capillary through hole in the middle block so that it has roughly equal length coming out of either side
- 7) Push clamps further towards the middle (until they touch the middle block) and run the portion of the capillary coming out from the centre block along the groove. Hold the clamp in place as you twist the screw to secure its hold on the capillary (make sure that it is tightly bound but not so tight as to break the capillary). Do this for both clamps
- 8) Close the glass casing
- 9) Press "Pull"
- 10) Open the glass casing after a loud 'pop' is heard
- 11) Unscrew the clamps and remove the needles from them
- 12) Switch off machine after all needles are made
- 13) Clean the place