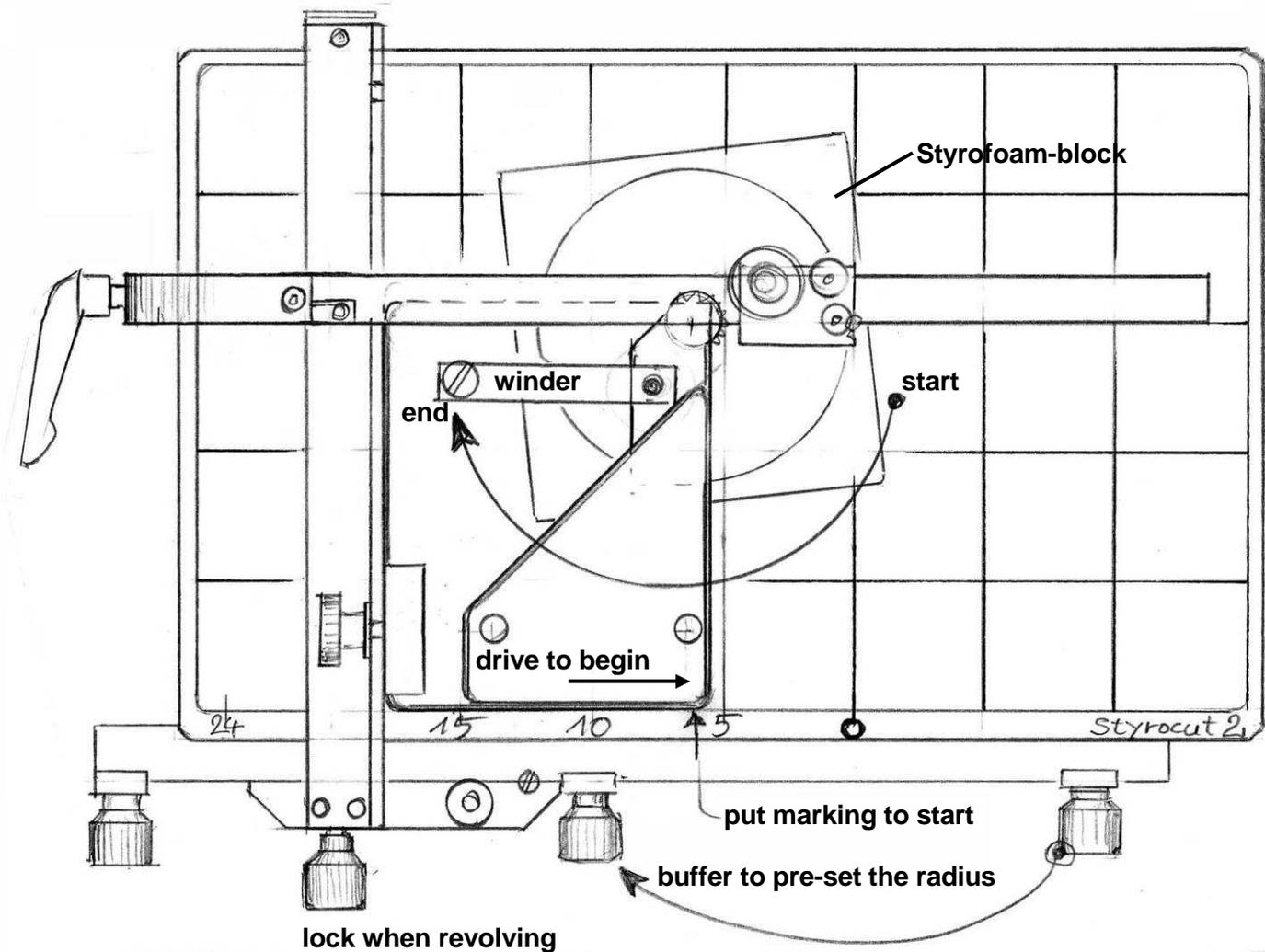


5 Circular Cutter



Large Styrofoam-blocks (radius up to 110 mm) must first be cut manually around with little overlap. Smaller work-pieces are best only square. First mark the centre of the piece to be cut. Then lift the upper part of circular cutter and push the Styrofoam block onto the lower pivot. Move the upper part downwards until it sits gently upon the block. This is to avoid later correction, for, the piece can now be adjusted vertically by means of the protractor. Only then, push the gear pinion tightly into the block, so that the gear grips. A test-turn shows, whether the block can revolve freely.

Now slide guide bar with circular cutter to the pre-set point (buffer!) of radius to be cut, diving the hot wire into the Styrofoam. The marking on front of circular cutter, too, shows the respective set radius on cm-scale. Heat of wire should be selected rather low. After having stopped, pause briefly, until the wire has fully straightened. Immediately afterwards the right hand starts gently turning the winder, while the left hand holds the circular cutter. After a half revolution of the winder, the block should be back at the starting point. Now the circular cutter with work-piece might be driven back out of the wire (for cylinders and cones). Alternatively switch off to adjust a new radius (for cylinder walls).

Important: Do not pause while turning! For cutting speed stays always the same, big radius will take much more time, than little and winder must be moved very slowly.

Inner circles: Simply guide into the inner radius of the Styrofoam block. The slit may be shut by gluing. When the block is higher, than required, you can shorten it afterwards to the desired length and thus even remove the traces of pivot and gear pinion.

Adjustments: In case the turning part's diameters an top and on the bottom are not right, check first whether the gear pinion stands exactly over the revolving pivot. This may be adjusted by loosening the two screws on the upper part of circular cutter. Only then, if necessary, correct the angle of cutting wire.