

Abstract

In a screw extruder (1) including a screw shaft (4) rotationally mounted in oppositely located frames (2, 3), which screw shaft has a substantially conically widening diameter between a feed opening (19) for crude liquid and a discharge opening for dehydrated material, and on which screw shaft (4) at least one screw blade (9) extending with a substantially uniform pitch is disposed, a filter sieve (11) cylindrically surrounding the screw shaft (4) and having a plurality of filter openings (12) is further arranged in the frame (2, 3), wherein a cleaning device for the filter sieve (11), which includes a plurality of cleaning nozzles, and a funnel-shaped filtrate trough (13) disposed below the filter sieve (11) are additionally arranged on the outer side of the filter sieve (11), the screw shaft (4) is configured to be cylindrical (6) in the region of the feed opening (19) for crude liquid, to conically (7) widen towards the discharge opening in a central region of the screw extruder, and to be cylindrical (8) in the region of the discharge opening, and the filtrate trough (13) disposed below the filter sieve (11) is designed to include at least two chambers (14, 15, 27, 28), or two mutually separate regions, which two chambers (14, 15, 27, 28) are each provided with an outlet (16, 21) for filtrate, and that the first chamber (15, 27) in the region of the feed opening (19) has a longitudinal extension at least corresponding to the length of the cylindrically configured region (6) of the screw shaft (4) in the region of the feed opening (19) for crude liquid.

(Fig. 1)