

Disclosed is a device for adjusting thickness of a filter sub-layer and thickness of a sediment layer at centrifuging suspensions comprising a rotor and a screw provided with scrapers, each of which is mounted on two supports mounted on the screw housing. The scrapers have grooves and an inclination from the side of input of source material to the location of the first groove. The supports are inserted into the sleeves of screw housing and have from one side holes for bolting the scraper and from the other side - threaded holes at the butt end, into which the bolts are inserted. The bolts in turn pass through the holes with slots in the traverses located inside the screw housing, have a groove in the head and are equipped with nuts and washers for their final rigid fixing relative to the traverses. Disclosed is a method of adjusting the thickness of filter sub-layer and thickness of sediment layer at centrifugation of suspension using a rotor and a screw equipped with scrapers, each of which is mounted on two supports installed on the screw housing. Preliminary adjustment of the thickness of filter sub-layer and thickness of sediment is carried out by progressive setting a gap between the rotor and outer edges of each of the scrapers, for the purpose each scraper on the supports is extended in the radial direction of rotation of the bolt heads for axial movement of the supports passing through the holes with slots in traverses located inside the screw housing, and secured against movements in axial direction relative to the traverse by recesses in the heads of bolts, up to the coupling of its middle part located between the supports with the rotor. The adjustment of gaps is carried out due to the grooves for fastening scrapers to the supports, and then the minimum gap is created between the scraper and rotor required to ensure rotation of the screw relative to the rotor without rubbing that are checked by rotation of the screw relative to the rotor for a complete revolution, and the working gap is set which value depends on the size of filtered particles, their number per volume unit, required performance of a centrifuge and sediment moisture. From the side of input of suspension between screw and rotor the value of gap to the location of the first support of scraper is set lower than in the location of the second support of the scraper on the outlet side of the sediment. The value of inclination on scraper inlet side of source material to the location of the first support is determined by the difference of gap values in the locations of scraper supports and the same value of the gap between scraper and rotor is provided on entire length of the section. The bolts for axial movement are fixed by the nuts with washers relative to the traverses.