

D6-1 Specification of Process and equipment for optimized pre-treatment step

The equipment chosen for the pre-treatment step of the production of cellulose nanofibers is a plate refiner. Using a refiner garniture that facilitates de-fibration rather than cutting of fibers, the material gained is well suited for the subsequent process step.

In order to reach the desired degree of grinding, a circulation of the coarse material through the refiner is required. An installation of a process tank with tangential inlet, a controllable circulation pump, flow meter and the refiner in a loop is planned to reach the result.

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