## No. 2583

## Laboratory floatator

This floatator is needed in the deinking process as well as a high-concentration pulp breaker in the DIP and paper recycling processes. With this tester, the principle of the floating selection method is applied to deinking. Carbon black, vehicle, etc. are lipophilic and are deposited on foams. As foams float on the liquid surface, the inking substances are removed with foams. The floatation method has become a common method of deinking as it is advantageous in that the amount of fiber loss is minor and the water consumption is limited. Rotations of the impeller cause suction of air and agitation at the same time to generate micro air bubbles.

It ensures a stable pulp surface, and the internal environment is efficiently maintained to that no part of it remains stagnant. The operator can visually check the pulp state by seeing through the stainless-framed glass specimen tank. The impeller shaft is made of stainless steel. Steplessly variable speed control is enabled. A suction air volume adjustment cock is provided for adjusting air bubble generation/termination and conditioning as needed. The froth layer discharged from the specimen tank is received in a separate retainer for measurement of the total amount.

Specimen: 75 g

**Specimen tank**: capacity 5  $\ell$ , made of SUS-304 (lined with

glass)

Concentration: 1 %

Rotation speed: 720 to 2800 rpm

Referential standard: J.TAPPI No.39 (Deinking test method for

waste paper)

Power source: 100/110 VAC 50/60 Hz 5A Outer dimensions:  $290\times610\times1060$  mm

Instrument weight: 53 kg

## No. 2586

## Dynamic drainage jar

It is widely known that the retention of the filler and fines rapidly drops as the running speed of the paper machine increases. This equipment is designed to reproduce the turbulence condition on the paper machine's wire part and to measure the retention of the filler and fines. An agitator is incorporated to apply a sudden shear force on slurry to have it deposited as a mat on the wire installed in the pulp tank. Then a certain amount of white water is sampled from the first portion that has passed through the wire. After accurate measurement of the white water, the solid portion is filtered through filter paper and dried, and then the amount of the ash content is measured, based on which the OPR (retention of fines and filler) is calculated.

Drainage section:

Pulp concentration: 0.1 to 0.4 %

Specimen supply volume: 500 ml (for one test cycle)

Specimen tank volume: 1000 ml Optional: specimen tank with baffle Screen plate: 125 P (200 mesh)

Agitator section:

Rotation speed: 0 to 5000 rpm (steplessly variable) Agitation blade: 60 mm in diameter, 4 blades Interval between agitation blade and plate: 6 mm Power source: 100/110 VAC 50/60 Hz 2A

Power source: 100/110 VAC 50/60 Hz 2A Referential standards: TAPPI T-261cm-91 Outer dimensions: 750×295×785 mm

Instrument weight: 6.5 kg



