



## PULP DISINTEGRATOR PD-10 model

For the mechanical disintegration  
of cellulose pulp suspension.



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### APPLICABLE STANDARDS

UNE EN ISO 5263/1-2-3 - SCAN C 18/M2 - TAPPI T 205 - NF Q 50002 - PAPTAC C.6...

### DEFINITION

A pulp sample is said to be disintegrated when it has been subjected to mechanical treatment in water so that interlaced fibers, which were free in the pulp stock, are gain separated from one another without appreciably changing their structural properties.

### APPARATUS

A disintegrator consisting of:

- A cylindrical container provided with four vanes on the inside.
- A propeller mounted on a vertical shaft, driven by electric motor.
- A counter for recording the number of revolutions of the shaft.

The three blades of the propeller of disintegration are placed in the center of the vessel at a fixed distance and rotate at a specified speed; revolutions are reflected on a digital readout display

### TEST DESCRIPTION

The pulp sample is introduced into the glass and add two quarts of water. Placed in the base of the Disintegrator firmly against the stops and closes the upper head.

You select the desired number of revolutions (in case they are different from the previous test) and begins the decay phase. When the digital counter reaches the preset speed the

Disintegrator will stop. Once the sample disintegrated pulp may be continued with the process of refining in PFI or Valley type equipment..., and finally being able to produce sheets of paper in a standard sheet forming manual or type "Rapid Köthen" once obtained paper sheets can perform various tests or measurements to assess the physical properties, surface, optical ...

This Disintegrator allows the mechanical treatment of pulp in water, so that the interlocking fibers that were free on the sheet of pulp are again separated from each other, without appreciable changes in their structural properties.

- **Compact and robust**
- **Protected electronic elements and located on the top of equipment**
- **Pre-selection of revolutions by digital display**
- **Security Mechanism with additional stop button**
- **Head tilting and easy to clean**
- **High performance motor**
- **Pot of stainless steel**
- **Digital display**
- **Easy to use and very ergonomic**



### OPTIONAL: HEATING DISINTEGRATION VESSEL FOR "MECHANICAL PULP"

The SCAN test standard describes a preliminary step in the physical testing of certain mechanical pulps.

**Note:** for some mechanical pulps, such as refiner pulps produced at high temperature immediately after the refiner, significantly different test results may be obtained, depending on whether the sample is disintegrated in hot or in cold water. For such pulps, for examples, the freeness values are higher and the strength properties lower if the pulp is disintegrated in cold water. The hot disintegration method described in this standard recommended for use when such an effect of the disintegration temperature exists. Pulp samples taken in late stages of the manufacturing process, such as a screened pulp, or a grinder pulp, normally tested without previous hot- disintegration



### DEFINITION

**Hot disintegration:** A pulp sample is said to be hot- disintegrated when it has been subjected to mechanical treatment in hot water (85° C) as described in this standard.

### PRINCIPLE

The pulp is disintegrated in a standard disintegrator at 85° C and at a concentration of about 20 g/l. the pulp suspension is then diluted with cold water to a concentration of less than 5 g/l.

### APPARATUS

Disintegrator designed and checked as described in SCAN –M2.

**Note:** The dimensioning of the disintegrator is those specified in the second report of the pulp evaluation committee, (Paper makers association of Great Britain and Ireland, Shell Mex house, London 1936)

Set the temperature of the container of the disintegrator at 85° C ± 3° C



GENERAL FEATURES	
<b>Instrument</b>	Pulp Disintegrator
<b>Model</b>	PD-10
<b>Disintegrator Vessel</b>	Stainless Steel
<b>Capacity Vessel</b>	2 Litres
<b>Power supply</b>	(380V 3-phase 50 Hz) or (230V 3-phase 60 Hz) + GND
<b>Motor revolutions</b>	2.975 ± 25 r.p.m.
<b>Dimensions</b>	350 x 550 x 500 mm (W x D x H)
<b>Net Weight</b>	35 Kg
<b>Box for transport</b>	550 x 750 x 750 mm (W x D x H)
<b>Gross Weight</b>	60 Kg

#### STANDARD DELIVERY CONTENT:

- \* Pulp Disintegrator PD-10 model
- \* 1 Pot of stainless Steel

**Optional:** Heated disintegration vessel for "mechanical pulp"