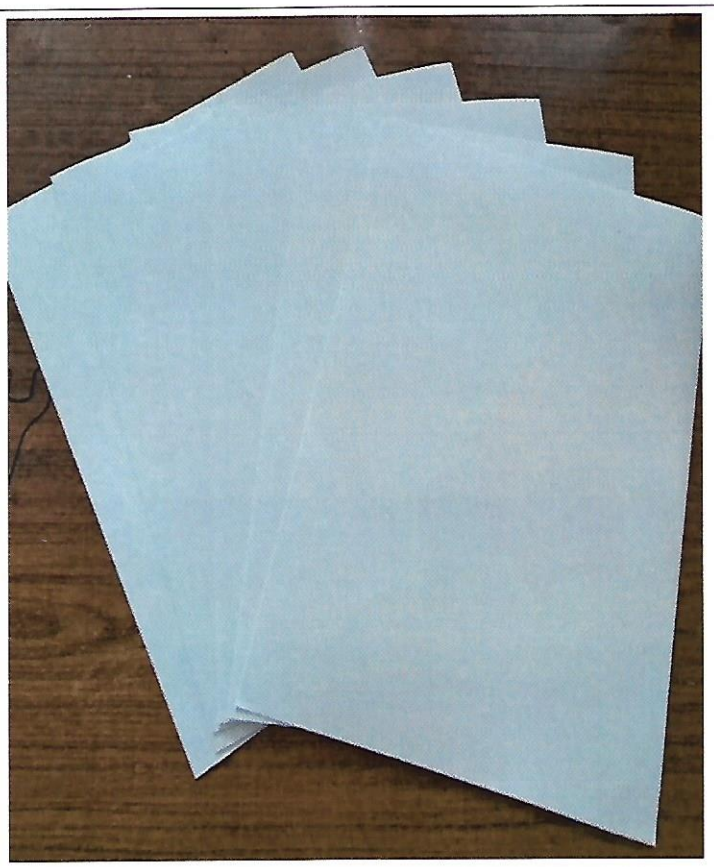
केन्द्रीय लुग्दी एवं कागज अनुसंधान संस्थान
Central Pulp & Paper Research Institute
An autonomous organisation under the administrative control of
Ministry of Commerce & Industry, Govt. Of India
(Registered under Societies Act)

CPPRI/ SPPM /2025-26 /R-41

Dated- 10th October 2025

TEST REPORT

Sample Received From	:	Leetha Pack Private Limited XXXIII /307, Leetha Industries Building Major Industrial Estate Kalmassery, Ernakulam, Kerela – 683104
Ref. No. & Date	:	Email dated 12th September 2025
Sample Detail	:	Aqueous Coated Paper Board
Testing Required	:	Repulpability Test of Aqueous Coated Paper Board
Sample Picture	:	



Aqueous Coated Paper Board

Post Box No. 174,PAPER MILL ROAD, HIMMAT NAGAR, SAHARANPUR 247001 (U.P.) INDIA
Tel. Direct (0132) 2714050, Tel. EPABX (0132) 2714053, 2714061, 2714062
Cable : CEPPRI, Saharanpur, Fax (0132) 2714052, website : www.cppri.org.in
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BASE OFFICE
A-55, 3rd Floor, Gujranwala Town, Part-1, Near Vinayak Hospital, Delhi-110 009
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1.0 STUDIES CONDUCTED AT CPPRI

1.1 METHODOLOGY ADOPTED

Most of the Pulp & Paper Research Institute across the world has developed their own methodology to ascertain the repulpability potential of paper and packaging products that are supposed to be recycled. Looking into the requirement of Indian Paper Industry and statuary requirement of Government Agencies, CPPRI has developed its own protocol to assess the repulpability of paper and packaging products for its papermaking potential. An approach for repulpability assessment of paper and paperboard is illustrated below:

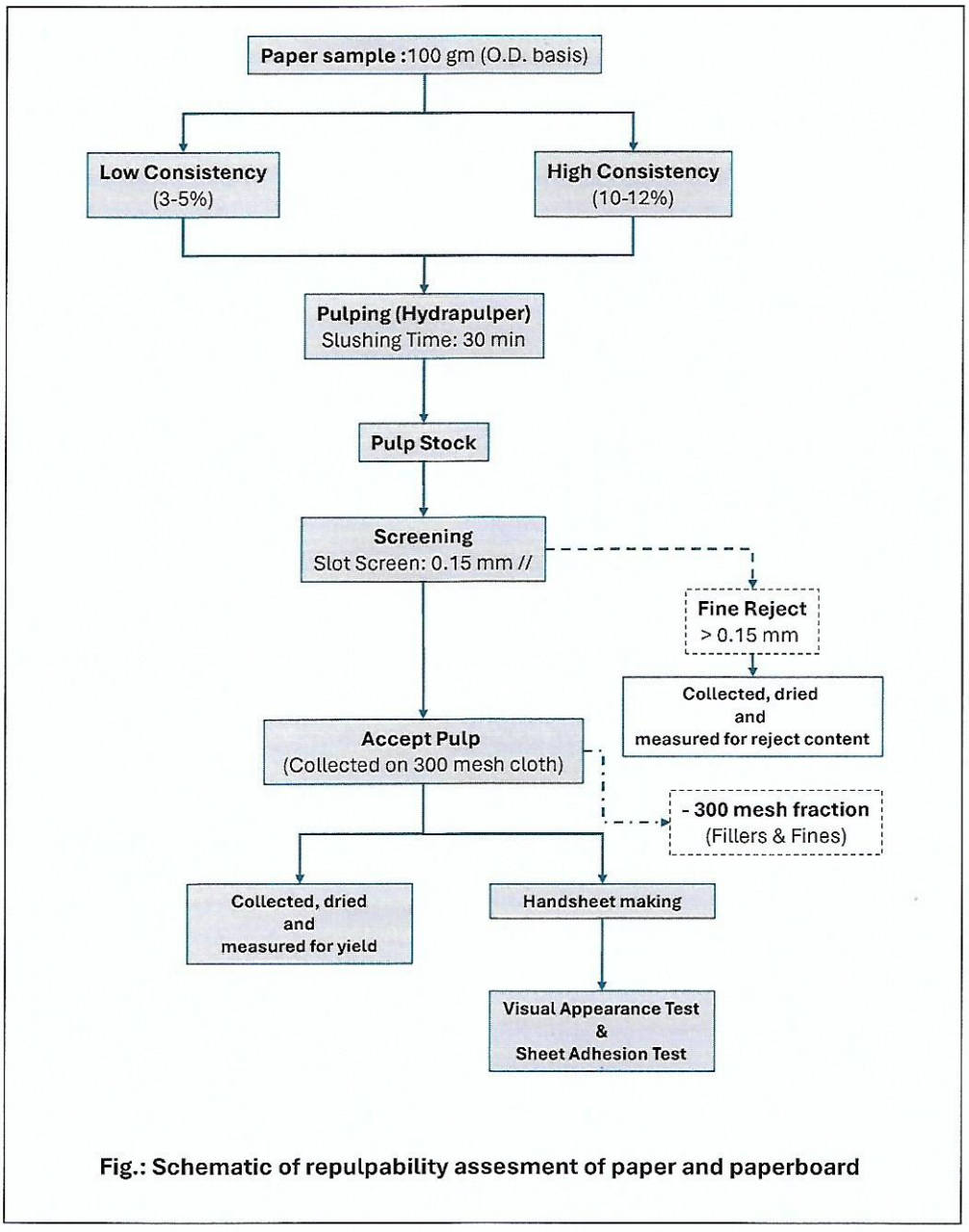


Fig.: Schematic of repulpability assesment of paper and paperboard

1.2 PROCEDURE

1.2.1 Raw Material Preparation

The sample was manually torn into small pieces in order to simulate its dimension in accordance to laboratory hydrapulper.

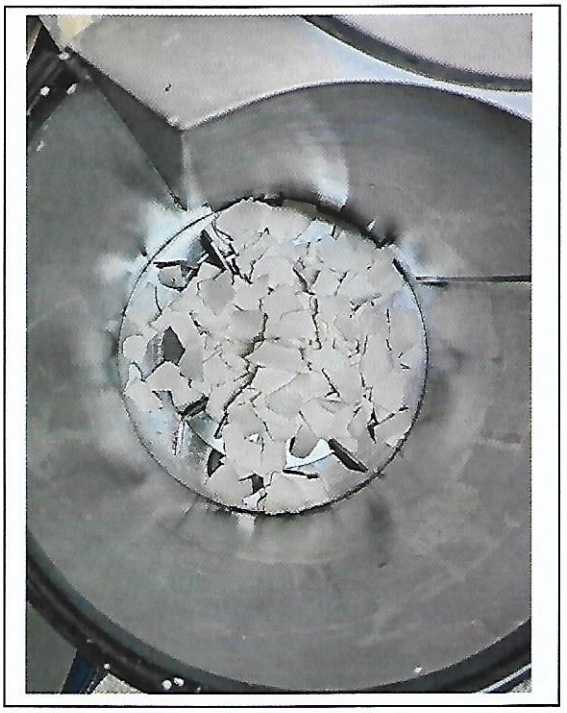
1.2.2 Pulping

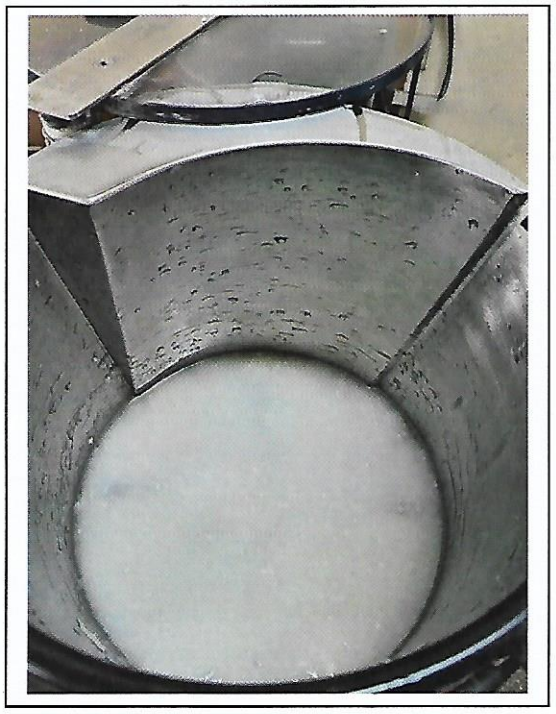
For repulpability test, The **Aqueous Coated Paper Board** Sample was slushed in laboratory hydrapulper. Two approaches were undertaken for repulping based on pulper types used by mills i.e. low consistency repulping and high consistency repulping. 3 sets of experiments (100 gm each) were conducted at each consistency to ensure the repeatability. The conditions maintained during evaluation are as follows:

Parameters		Low Consistency Repulping	High Consistency Repulping
Consistency (Cy)	%	3-5	10-12
Temperature	°C	Ambient	Ambient
Slushing time	minutes	30	30

The objective of the pulping is to convert paper into slurry of well separated fibres.

Top View of Hydrapulper





Slushing of Aqueous Coated Paper Board Sample in Hydrapulper

After 30 minutes of disintegration in laboratory hydrapulper, the pulp suspension was visually observed to access the complete disintegration of paper into fibre.

1.2.3 Screening or Non- Disintegrated Material Removal

The pulp thus obtained after pulping was passed through sommerville vibratory fine screen equipped with 0.15 mm slot. Non- disintegrated materials are retained on the screen and do not pass through the slotted screen. Only the accept pulp pass through the slotted screen. The screening of pulp will reflect the recovered yield and non- disintegrated material generated during pulping.

Top view of Somerville Screen

Non- disintegrated material

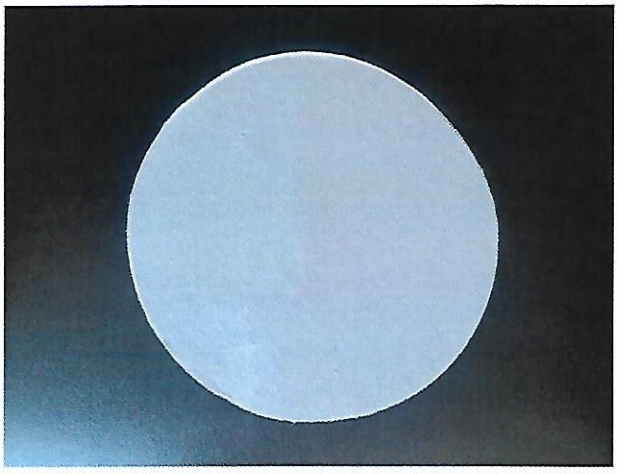
Screened Pulp
(Collected on 300 mesh Muslin Cloth)

Reject

1.2.4 Visual Aspects

Handsheets of screened pulp were made using British Handsheet Former as per ISO 5269-1:2005. Formation of handsheets of Aqueous Coated Paper Board Screened Sample is clean (without any dirt & specks). No sticky material is present in screened pulp.

British Handsheet Former



HANDSHEET OF SCREENED PULP

2.0 RESULTS

Consistency, %	Recovered Yield, %	Fine Screen Reject, %	Fillers (Inorganics), -300 mesh fraction, %
3-5	95.8	3.5	0.7
10-12	97.3	2.1	0.6

3.0 REMARKS

(i) No chemical has been used during repulping.

(ii) Repulping has been done at ambient temperature and standard condition practiced by RCF based mills.

(iii) The Aqueous Coated Paper Board Sample is easily slushable at both the consistency i.e. low and high.

(iv) The maximum achievable recovered yield is around 97% at 10-12 % consistency.

(v) Reject content in the Aqueous Coated Paper Board Sample is only 2 % at 10-12 % consistency, which is mainly unslushed paper embedded with coating material.

(vi) No adhesion issue was found in screened pulp.

(vii) Handsheets made of screened is clean (without any specks & Dirt).

End of Test Report

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