



Stock Preparation

KCL Services stock preparation system can be used for preparation of furnish blends for pilot paper machines or for studying LC refining, screening or other unit processes. It consists of a pulper, three LC refiners, thickeners, vortex cleaner and pressure screening station.

KCL's LC refiners lend themselves for studying the refining potential of chemical pulp, for post-refining of mechanical pulp and for refining of recycled fiber. Three pressure screens can be used for screening and fractionation trials.

Process parameters	
Hydrapulpers	
Machine	Tampella Black Clawson
Volume, m ³	8
Load max, kW	110
	Hot disintegration
Heating	Direct steam heating
Conical refiner	
Machine	Metso OptiFiner RF-1
Rotation speed, rpm	500 - 1800
Load max, kW	400
Feed consistency, %	2 - 5
Through-put, l/min	200 - 2400
Cylindrical refiner	
Machine	Andritz Papillon CS-380
Refining zone diameter, mm	380
Rotation speed, rpm	500 - 1800
Load max, kW	400
Feed consistency, %	2 - 5
Through-put, l/min	200 - 2400
Disc refiner	
Machine	Enso-Bauer 442 M
Diameter, mm	813
Rotation speed, rpm	530
Load max, kW	250
Feed consistency, %	2 - 5
Through-put, l/min	200 - 2400
Screening station	
Machine	Tampella TAP50
Number of pressure screens	3
Rotor	C-rotors as standard, conventional rotors when required
Screening basket	Several baskets with slots or holes
Feed consistency, %	0.8 - 1.5
Feed CSF, ml	10 - 700
Disc filter	
Machine	Celleco Hedemora
Capacity, kg/h	500
Feed consistency, %	0.1 - 1.0
Feed CSF, ml	10 - 700
Dewatered consistency, %	2.0 - 3.5
Filter press	
Machine	Rauma-Repola
Capacity max, kg/h	1000
Feed consistency, %	2 - 4
Feed CSF, ml	>100
Dewatered consistency, %	20 - 40
Drum filter	
Machine	Eimco Belt
Capacity, kg/h	200
Feed consistency, %	0.1 - 1.5
Dewatered consistency, %	15 - 25
MC Bleaching tower	
Volume, m ³	2
Consistency, %	15 - 20
Heating	Direct steam heating