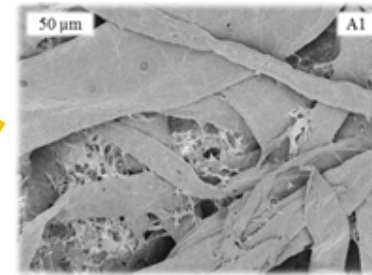
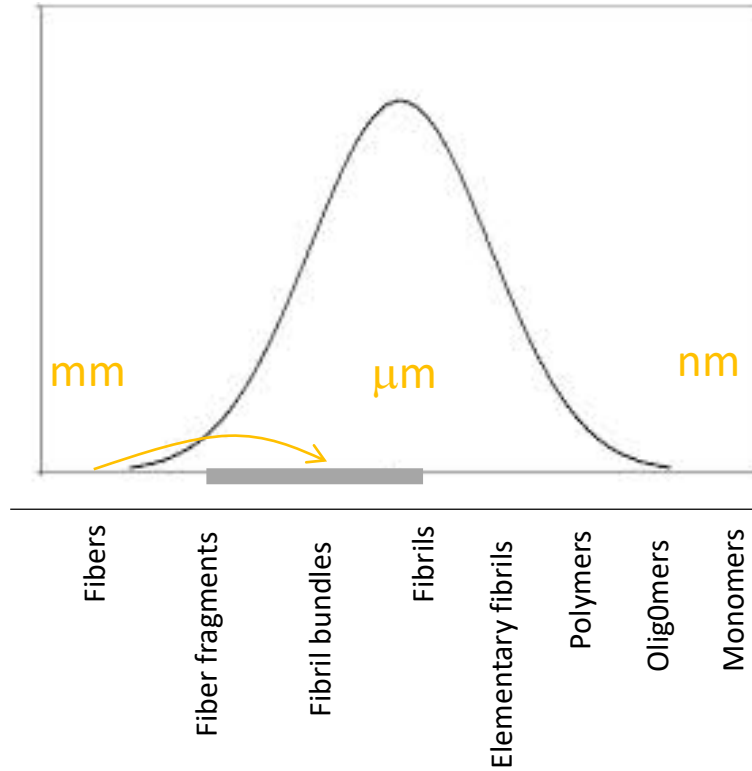
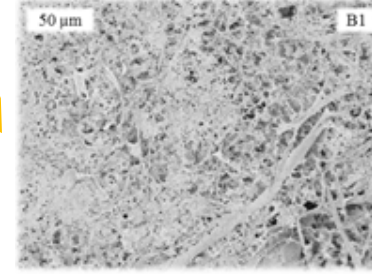


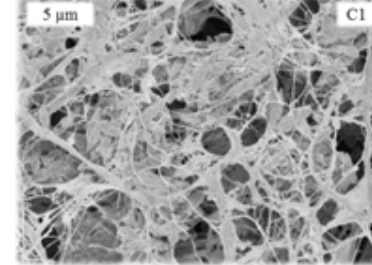
Nanopaper compared to normal paper



Standard Paper

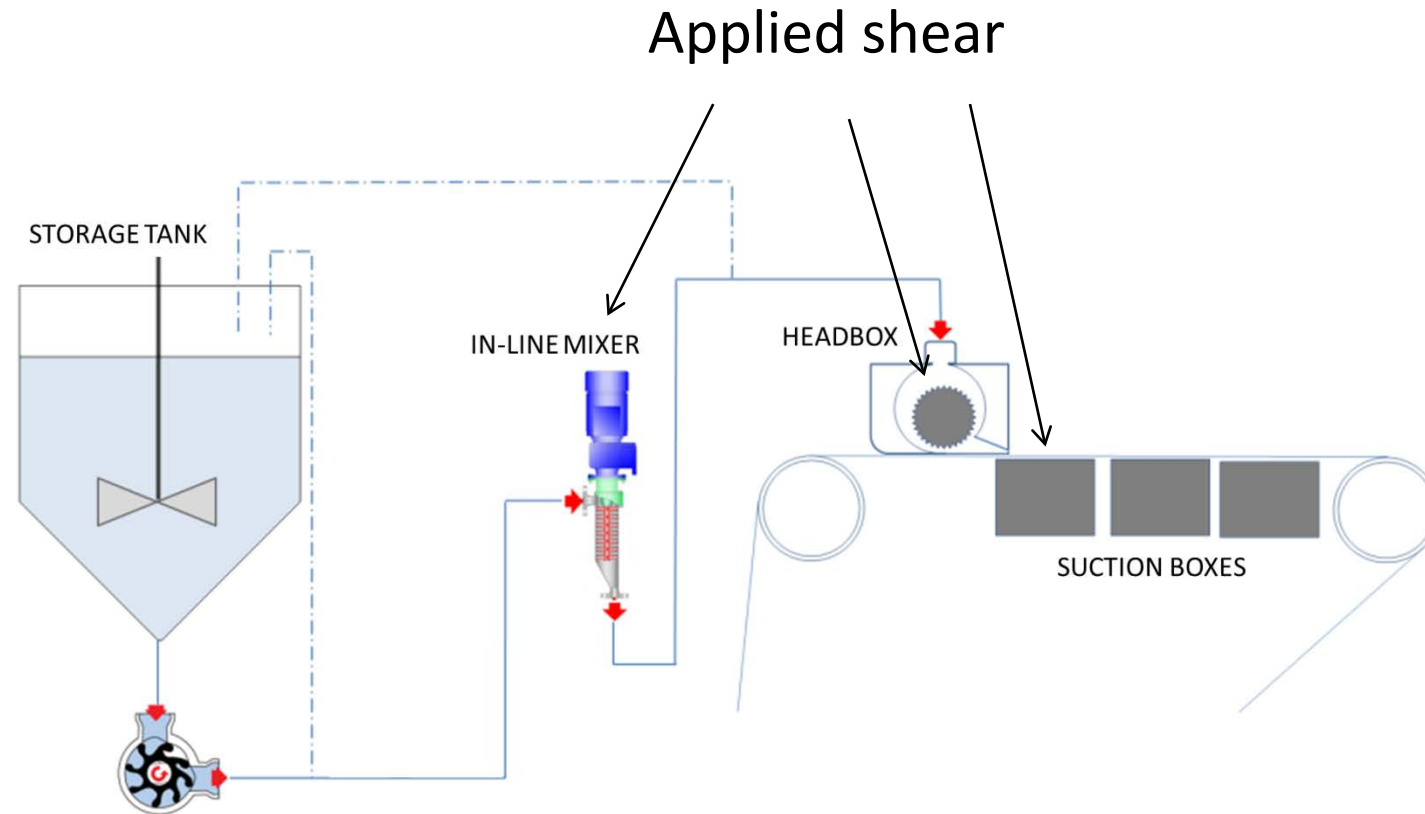


Nanopaper



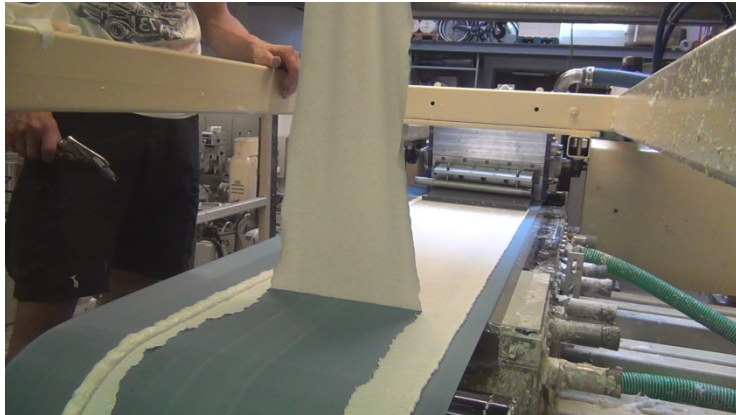
Nanopaper at high magnification

Building a pilot machine



Trial results

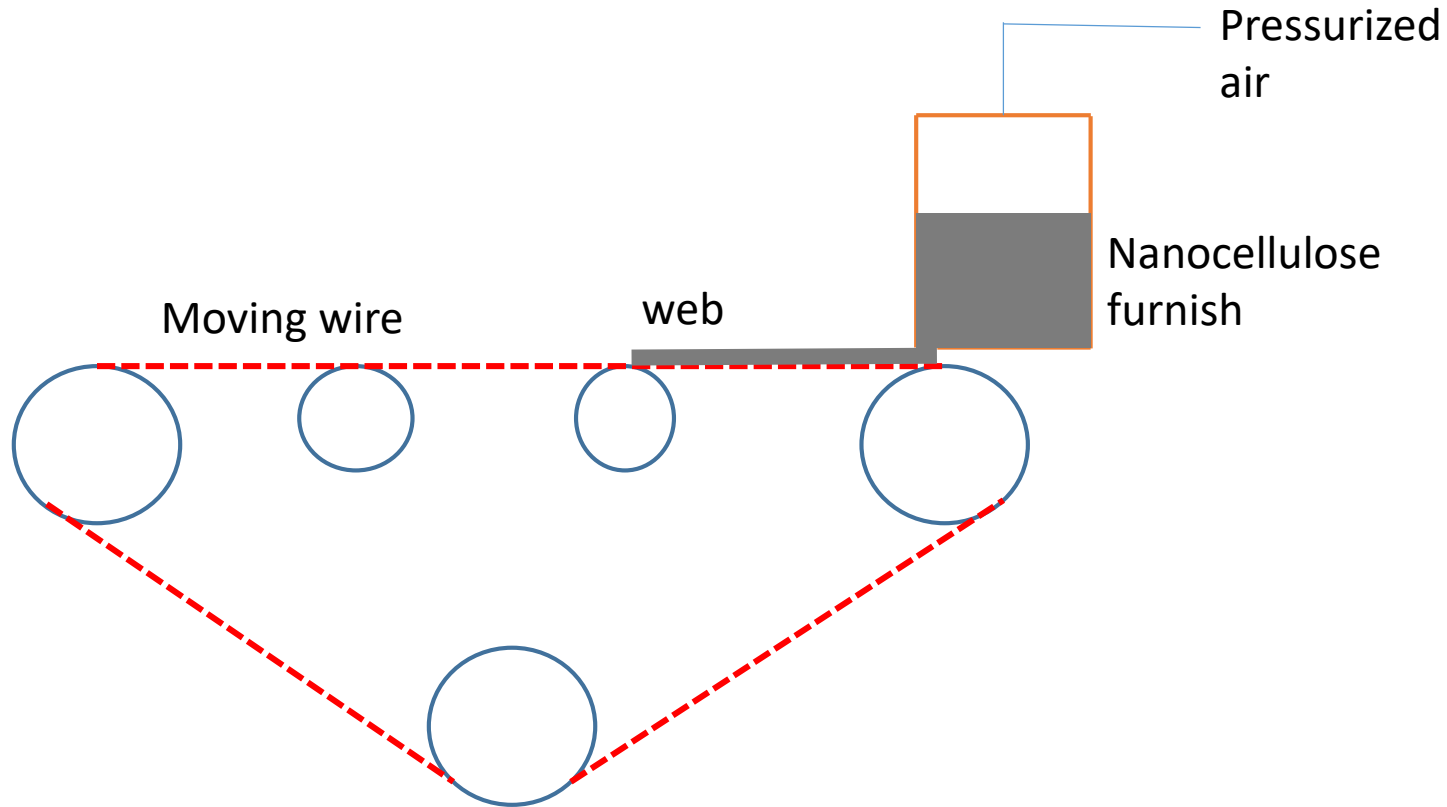
70% S-PCC/20% MFC/10% softwood kraft



Under the right conditions:

- Couch solids 33%
- Retention nearly 100%
- Wet strength very high

Laboratory Pressure Former for Nanopapers



- Allow forming of web under simple pressure forming conditions
- Study pressure/forming relationship
- Allow collection of sample web
- Control variables: headbox pressure, wire speed.
- Slice geometry should be adjustable
- As modular as possible to allow future development
- As small and slow as practical: 5 cm web width, 50 cm length, 1 liter headbox volume. Wire speed 0-10 m/min.