

Paper Machine Facility

NCCEF offers a wide array of specialised papermaking equipment to the Paper, Packaging and Allied Industries. This includes a fully equipped pilot paper machine and stock preparation plant. The Pilot Plant simulates a realistic production environment allowing industry to avoid the expense of having to use production plant for research and development purposes.

The Pilot Plant is a unique facility ideally suited for industrial product research and development projects. Individual items of equipment can be connected in a wide variety of configuration to simulate numerous industrial systems. With a minimum batch size of 5 kg of pulp and a production rate of up to 200 kg/day, a wide range of machine conditions can be reproduced at competitive prices in terms of raw materials costs and hire of equipment. The list of operating specifications for the stock approach system and paper machine can be found at the back.

NCCEF offers the expertise of members of staff who are recognised experts in their fields. The Pilot Plant personnel have a wealth of experience in running a wide range of industrial trials. Grades can be manufactured in the range of 20 - 400 g/m².



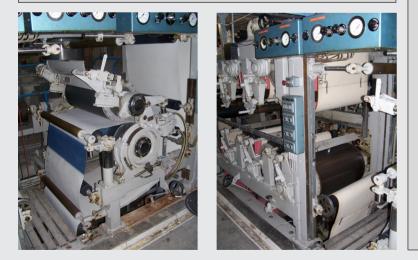




Stock Approach System

Paper Machine

- Metering pumps for chemicals and non-fibrous additives
- Open or closed white-water system
- Capacity for rapid machine condition changes
- Headbox consistency : 0.2% 1.5%
- Stock blending capacity
- Production rate up to 40 kg/hour
- Grammage range: 20 400 g m⁻²



National Composite Certification and Evaluation Facility

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• Deckle – max. 50 cm

- Machine speed: 3 55 metres min⁻¹
- Fourdrinier forming section
- Dandy rolls

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- Suction press: loading 0 – 25 kg/cm
- Reverse-nip plain press: loading 0 – 25 kg/cm
 - Pre-drying section: 7 steam heated cylinders All temperature controlled –up to 130°C
- Horizontal size press
- After-drying section:
 3 steam heated cylinders temperature controlled
- Machine calender:
 6 rolls, 5 nips, steam heated temperature controlled
- Reel-up
- Data Acquisition system



www.manchester.ac.uk/nccef