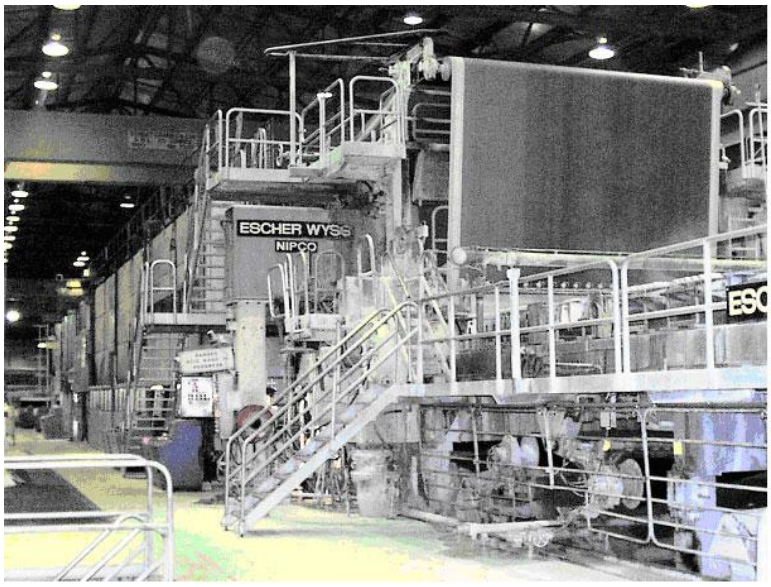
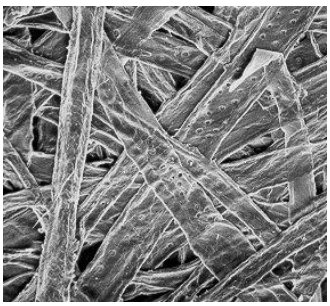
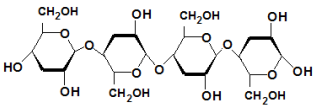
Machineman Development Programme







Machineman Development Programme – Series 20

A modular development programme aimed at production and engineering personnel in the UK papermaking industry.

Benefits

Many previous participants are now making a more powerful contribution to the successful operation of their paper mill. They now understand the universal principles of papermaking; they appreciate the impact of cause and effect on their processes and are able to troubleshoot with greater competence and confidence. In several mills, they are now working in process improvement teams helping to optimise OEE.

Managers speak about gaining multiple returns upon their investment in this development programme and they return course after course to make use of this unique development experience for other members of their operational teams.

Programme Design

Designed to cover the industry's National Occupational Standards, the syllabus of the Paper Technology Level 2 Certificate, and mills' specific requirements, the programme is held in UK paper mills and the specific technology and science within the host mill is used to reinforce the content of each technical module.

CAPS Papermachine Simulators are used periodically to bring the theory to life. These simulators enable operators to explore process, quality and cost optimisation, thereby strengthening their understanding of their own papermaking processes.

Introduced during MDP 19, this course now includes a practical papermaking week, set in the mill laboratories, which enables a deeper exploration of the subject.

Programme

Week 1: CAPS Papermachine Simulator & Paper Products Inquiry; History & Development of Papermaking; Fibrous Raw Materials; Basic Science; Stock Preparation.

Week 2: Water & Chemical Additives; Papermaking Calculations; Plant Services; Process Control; Approach Flow; Sheet Formation.

Week 3: Practical Papermaking

Week 4: Pressing (Wet and Size); Dry End Processes (including Yankee and TAD); Energy Awareness & Optimisation; Finishing & Conversion; Revision & Mock Exam

The modules included in each specific week may be subject to change but the overall programme will contain all the topics stated. Additional elements may be added to suit the particular needs of participants.

For further details about the programme content, please contact tw@twapd.com

Trainers

Delivered by highly qualified, experienced, enthusiastic trainers, who train extensively in the UK and overseas, and, where appropriate, augmented by functional specialists from local mills and allied industries, e.g. chemical suppliers, clothing suppliers, etc.

Duration of Course, Date & Venue

Each of the four weeks is a five-day course: Week 1 - w/c 8th Apr '19; Week 2 - w/c 20th May '19; Week 3 - w/c 10th Jun '19; and Week 4 - w/c 1st Jul '19.

Investment

Your investment is £2,980 per participant, plus VAT, and is inclusive of comprehensive course materials. If you choose for your participants to sit the Level 2 Certificate, then an additional charge of £125 per person will be made for registration and certification.

Where overnight accommodation is necessary then companies are required to organise this for their own people and settle any bills accordingly. A preferred hotel will be recommended with full contact details and agreed corporate rates as appropriate.

Delegate Numbers

Numbers are limited to 12 persons to foster an optimal learning environment.

Booking

For further information and to book places, please contact **TWA People Development Ltd** on 01227 379920, 07834 712092, tw@twapd.com

N.B. The examination will no longer take place during the final week of the course. It is scheduled for Thursday 18th July at 2.00pm and will take place at satellite examination centres, under strict examination conditions. Many of your mils are already accustomed to this arrangement where you have had candidates undertaking re-sits in the past.

Programme Content

History of papermaking and introduction to the UK paper industry
- Structure, Mills, Technology, Volume, Grades

Fibrous Raw Materials
- Life cycle of plant growth
- Fibres
  - virgin & recovered

Basic Science
- Periodic Table
- Structure of the atom
- Bonding
- Acids & Alkalis

Water & Chemical Additives
- Water (Influent & Effluent)
- Process Aids
- Functional Aids

Process Control
- Sensors
- Open/closed loop systems

Stock Preparation
- Equipment
- Storage
- Deflaking
- Dispersing
- Water circuits
- Refining
- Optimisation

Approach Flow
- Screening and cleaning
- Consistency control
- De-aeration
- Optimisation

Papermachine Wet End
- Forming
- Dewatering
- Clothing
- Optimisation

Pressing
- Construction
- Clothing
- Optimisation

Drying
- Construction
- Mass transfer
- Heat transfer
- Pocket ventilation
- Clothing
- Surface modification
- Yankee (Science & Technology)
- Optimisation

Finishing & Conversion
- Winding
- Conversion
  - Embossing
  - Laminating
  - Sheeting

Plant Services
- Power and steam
- Vacuum
- Air
- Water
- Lubrication

Energy Awareness & Optimisation

Pumping Technology

Papermaking Calculations
- Area
- Volume
- Consistency
- Production rate
- Mass balance

Tim J Watts
Updated 3rd January 2019