

# **Machineman Development Programme - 2011**

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

### **Benefits**

In today's papermaking industry people are expected to operate and optimise their processes after less training and fewer operational hours.

Participants and companies will benefit from a deeper understanding of the science and technology of papermaking leading to greater efficiency, improved quality awareness and cost control. Critically the participants will appreciate the impact of cause and effect on their processes and be able to troubleshoot with greater competence and confidence.

#### **Programme**

Designed to incorporate the syllabus of the original City & Guilds Papermaking qualification, Paper & Board Making N/SVQs and, more recently, the Certificates in Paper Technology; successful completion of the modules will provide underpinning knowledge evidence for selected N/SVQs.

Perhaps now is the time to invest in some offline learning and skills development to close critical gaps, which will otherwise only show up in times of need.

"The best time to build an ark is when the sun is shining".

•

# **Machineman Development Programme**

## **Programme**

**Week 1:** The global papermaking industry; fibrous and non-fibrous raw materials; stock preparation; wet-end chemistry; team working; communications; paper properties; papermachine simulator; mill visit.

Week 2: Approach flow; forming; pressing; papermaking calculations, mill visits.

**Week 3:** Drying; continuous improvement; structured problem solving; engineering services; mill visit; convertor visit

**Week 4:** safe papermaking; process control; finishing & conversion; effluent treatment; case study (Company X); presenting information; end test.

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 recognised industry trainers and 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; dates/venues provided upon request.

### **Investment**

Your investment for <u>each</u> week is £650 per participant, plus VAT, and is inclusive of comprehensive course materials.

Where overnight accommodation is required then companies are required to organise this for their own people and settle any bills accordingly.

# **Delegate Numbers**

Numbers are strictly 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

# **Machineman Development Programme**

# **Programme Content**

# Introduction to the UK paper, tissue and board industry

- Structure, Mills, Technology, Volume, Grades

# **Raw Materials**

- Fibrous
  - virgin & recovered
- Non-fibrous
- Water

## **Wet End Chemistry**

- Chemical bonding & chemical groups
- 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
- Deaeration
- Optimisation

## Papermachine Wet End

- Forming Paper, Tissue, Board
- Dewatering
- Clothing
- Optimisation

## **Pressing**

- Construction
- Clothing
- Optimisation

# Drying

- Construction
- Mass transfer
- Heat transfer
- Pocket ventilation
- Clothing
- Surface modification
- Optimisation

# **Finishing & Conversion**

- Winding
- Conversion
  - Embossing
  - o Laminating
  - Sheeting
- Packing

#### **Effluent Treatment**

#### Mill Services

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

# **Quality Assurance**

# Safe Papermaking

# **Communications**

# **Team Working**

# Introduction to Continuous Improvement

# **Structured Problem Solving**