

# KILN CONTROL SYSTEMS

# DRYSPEC 2000

Dryspec 2000 has been designed by Windsor, ensis and Automation  $\varepsilon$  Electronics and is a Windsor based SCADA system which is easy to operate, yet powerful in functionality.

**Dryspec 2000** is an advanced computer and PLC based management system providing centralised control and a database of any number of timber drying kilns and conditioning chambers plus integration of in-kiln moisture content systems and heatplant. A fully functioning demo version is available free of charge for evaluation and training purposes. **Dryspec 2000** is structured as the basic Process Control and Reporting system with add-on Advanced Process and Management options.

#### Standard Features

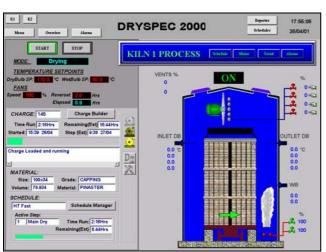
- Start, pause, restart and stop facility
- Sophisticated multi-step schedule designer including:
  - Set Point ramps
  - Graphical display
  - Endpoint on time, T.D.A.L., drying progress or MC (if in kiln MC system installed)
  - Inlet or outlet control per schedule stop
- Accurate, high frequency user-configurable charge graphs
- Adjustable fan reversal timer and speed
- · Vent and control valve position display with manual override
- Manual restart on power failure
- Archiving of all recorded data
- Basic reporting package which includes: charge and packet details, runtime data and events log
- EMC and RH display
- Configurable alarms including: priority, pager, audible, visual, logging and acknowledge.
- Charge builder including: drag and drop chamber loading, and chamber gueues
- Remote modem access and support

### **Advanced Options**

These packages can be integrated with the base **Dryspec 2000** package to give enhanced and extended functionality.

#### **Airflow Indicator**

On screen display of fillet velocity



#### Advanced Scheduler

- Conditional set point ramps
- On set point timing
- Advanced set point control including:
  - Additional outlet control options
    - Additional MC end-point options
    - Zone control (requires Dryzone moisture content measurement system)

#### **Advanced Reporter**

- Extended charge, production and endpoint reporting
- Downtime/Utilisation reporting

# Energy management: used for optimising energy use

This module interfaces the kiln drying and heat plant/energy systems and is customised to suit site requirements and capabilities, and includes:

- Dynamic Priority: prioritises kiln chambers depending on the stage of drying
- Flow/Pressure/Temperature: a combination of these (depending on hardware fitted) can be used to monitor and manage kiln energy usage
- External Energy set point, where the energy limit can be set from the energy supply system.

# KILNWATCH 2000

Kilnwatch 2000 is an easy to use, efficient and low capital cost computer control system specifically designed for smaller sites.

# Features:

- Start stor
- Dry bulb temperature control (one or more zones)
- Wet bulb temperature control
- Fan operation & reversals
- Heating set point ramps
- Steam cycle control
- Single batch trending
- End point on time TDAL (optional), or Moisture Content (optional)
- Alarms
- Modem access (optional).

#### KILNWATCH 1000

Kilnwatch 1000 is a simple electronic control system mainly for the smaller timber drying installations having one or two kilns. Each kiln has a dedicated Kilnwatch panel incorporating discrete programmable controllers, timers, relays and a chart recorder needed to perform:

- Start stop function
- Dry Bulb Temperature Control
- Wet Bulb Temperature Control
- Fan operation and reversals
- Heating set point ramps (optional)
- Steaming cycle control
- Batch record chart
- Drying time or TDAL endpoint (optional)
- Alarms.

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