

## KILN CONTROL SYSTEMS

### DRYSPEC®

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

Dryspec® 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® is structured as the basic Process Control and Reporting system with add-on Advanced Process and Management options.

#### Standard Features:

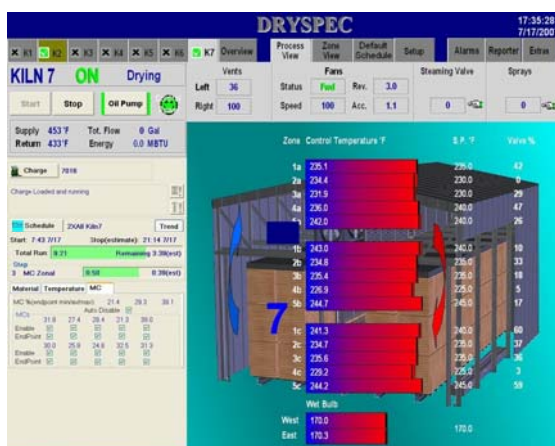
- Start, pause, restart and stop facility
- Sophisticated multi-step schedule designer including:
  - Set Point ramps
  - Graphical display
  - Endpoint on time, T.D.A.L., drying progress or MC (if in kiln MC system installed)
  - Inlet or outlet control per schedule step
- Accurate, high frequency user-configurable 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 queues
- Remote modem access and support

#### Advanced Options:

These packages can be integrated with the base Dryspec® 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 - stop
- 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.