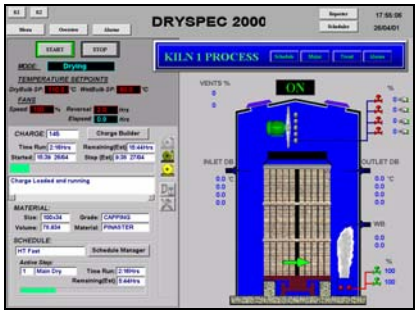
# PIONEER KILNS

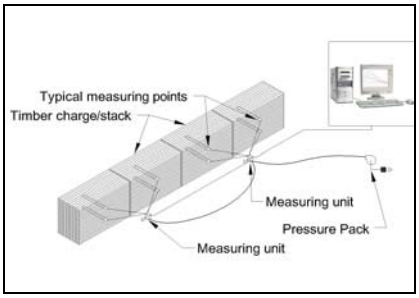
Single track kilns

Double track kilns

In kiln steaming




Kiln Control Systems




DryTrack system

Windsor Pioneer Kilns are designed specifically for drying softwoods. The Pioneer offers almost unlimited design flexibility.

- **High Performance**
  A Windsor kiln will deliver maximum throughput for minimum operating costs

- **Performance guarantees**
  Windsor offers a range of performance guarantees to suit each specification

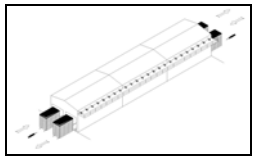
- **In-kiln Steaming**
  Windsor offers either in-kiln conditioning systems or stand-alone conditioning chambers. The latter option will increase throughput dramatically, particularly on HT drying operations.

- **Single Track/Double Track Options**
  Windsor can offer both single and double track kilns. However Windsor's experience shows that single track kilns provide better drying results due to the uniform temperature distribution.

- **Noise**
  Noise emissions from kilns must be minimised on some sites. Windsor offer a special 'Q' range of kilns designed to reduce the acoustical emissions to meet statutory requirements.

- **Direct/Indirectly heated Kilns**
  Windsor's experience clearly shows that indirectly heated kilns are more effective in producing quality lumber although a small number of direct gas-fired Windsor kilns are operating very successfully in New Zealand and Australia.

- **Training, Service and Support**
  Windsor's experienced Service Department and established Wellington based engineering facilities enable us to provide a back-up service which is second to none.

| Type | Timber grade | Operating temp. (typical) | Heat-up period (typical) | Typical drying time | Fillet velocity range | Heating medium | |
|---|---|---|---|---|---|---|---|
| **Accelerated Low Temperature** | High value appearance grades | 40-80°C | 8 hours | 3-6 days | 2-8 m/sec | HPHW Steam Thermal oil |  |
| **Accelerated conventional temperature** | High value appearance grades | 80-110°C | 4 hours | 36-80 hours | 6-8 m/sec | HPHW Steam Thermal oil |  |
| **Medium Temperature** | High value appearance and structural grades | 90-110°C | 2 hours | 20-48 hours | 6-8 m/sec | HPHW Steam Thermal oil |  |
| **High Temperature** | Structural grades | 120-160°C | 1 hour or less | 6-18 hours | 6-12 m/sec | HPHW Steam Thermal oil |  |
| **Ultra High Temperature** | Structural grades | 160-220°C | 1 hour or less | 3-8 hours | 7-16 m/sec | Steam Thermal oil |  |
| **Continuous Drying Kilns** | Structural grades | 110-130°C | Continuous | Continuous | 6-8 m/sec | HPHW Steam Thermal oil or Direct Fired |  |