

CLASSIC KILNS

The Windsor Classic kiln range is based on 20 years experience in providing efficient drying systems for plantation grown softwood. The Windsor Classic kiln range is available in six popular, standard sizes which allows for a faster delivery and lower capital investment without compromising the renowned Windsor quality.

Windsor also design and manufacture individually tailored drying kilns, the Windsor Pioneer range. They are the ideal solution for our customers with specialised drying requirements. Please contact a Windsor representative to discuss the advantages of a Windsor Pioneer kiln.



Windsor Classic kilns have an aluminium portal style structure and are clad in aluminium panels incorporating a layer of rot proof, fire retardant insulation. The standard Windsor Classic kiln has a door at one end but with provision for a second door as an optional extra if required. Personnel access doors are fitted on both sides of the stack. The Windsor Classic kiln chamber, fan system, heating coils, steam generator and all other components are fabricated from corrosion resistant stainless steel or aluminium.

The Windsor Classic Kiln Specification

	400	500	800	900	1000	1300
Nominal capacity	30 m ³	45 m ³	60 m ³	70 m ³	80 m ³	100 m ³
Length	6.35m	8.45m	12.6m	13.85m	15.35m	21.35m
Width	5m	5m	5m	5m	5m	5m
Number of fans and motors (1.93m diameter with 7.5kW 8 pole motor)	2	3	4	5	5	7
Operating temperature range	70° to 90° C dry bulb					
Fillet velocity	5 m/s (option available for higher velocities)					
Horizontal and vertical baffles	✓	✓	✓	✓	✓	✓
Full steam conditioning facilities	✓	✓	✓	✓	✓	✓
Heating medium	HPHW, Steam or Thermal oil					
Heating capacity at 90°C	600kW	900kW	1200kW	1400kW	1600kW	2000kW
Stack size range	2.0 to 2.8 m wide x 3.8 m high					

- Notes:
- 1: Structure designed for nominal wind velocities up to 37 m/sec
 - 2: Nominal capacity and fillet velocity is based on 40 mm boards and 20 mm fillets with a stack 2.5m wide x 3.8 m high
 - 3: HPHW supply range 150-165°C with a 20°C ΔT and 200 kPa ΔP - Heat capacity designed at 155°C
 - 4: Steam supply range 700 - 1100 kPag - dry, saturated steam - Heat capacity designed at 800 kPag
 - 5: Thermal oil supply range 180 - 220°C with a 40°C ΔT and 200kPa ΔP - Heat capacity designed at 200°C
 - 6: Heatup and schedule duration are affected by board thickness.
i.e. < 40 mm = slower heatup but shorter drying schedule. > 40 mm = faster heatup but longer drying schedule
 - 7: High temperature motor option allows operation in 90°C to 110°C range (subject to available heat capacity).

Optional Extra items

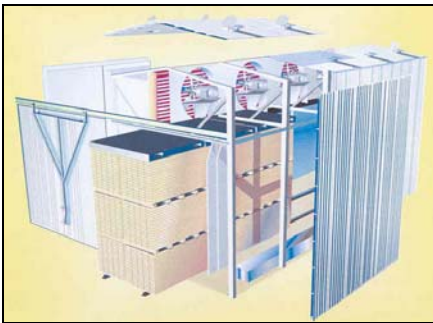
Cart and stack weight supply	Additional vertical baffle sets
Additional door lifter set	Higher fillet velocity using larger motors (15 kW)
High temperature motors - allowing operation up to 110°C	Variable speed fan drives
Choice of kiln controls - Kilnwatch 1000, Kilnwatch 2000 or Dryspec	Drypoint, Dryline or Dryzone in-kiln moisture measuring systems
Wood technology training for operators	Cladding colour

Windsor Classic kiln annual production per kiln

Model	Standard	High airflow
Classic 400	4 300m ³	4 700m ³
Classic 500	6 400m ³	7 100m ³
Classic 800	8 600m ³	9 400m ³
Classic 900	10 000m ³	11 000m ³
Classic 1000	11 400m ³	12 600m ³
Classic 1300	14 300m ³	15 700m ³

*Based upon:

- GOS plantation pine with an average initial moisture content of 130% ODB
- Running a typical drying schedule of 90°C dry bulb and 60°C wet bulb and 40 mm thick boards GOS
- Operating time of 7884 hours per year. This is 365 days x 24 hours x 90% utilisation.
- (Nominal) annual throughput will also vary depending upon final moisture content requirements.



Every Windsor Classic kiln is supplied with up to a week of site support and maintenance training from a Windsor engineer. During this time the engineer will commission your kiln and ensure that you and your staff know how to maintain your kiln safely and efficiently. In addition the engineer will provide basic training on how to start and stop your kiln, selecting different schedules and making changes to existing schedules.

Local transportation, accommodation and meals for our site supervisor and commissioning engineer is assumed to be supplied by the client.

The Windsor Classic Kiln Scope of Supply

	Responsibility	
	Windsor	Client
Concrete foundations:		
o Profile layouts / Point loadings/ Rails and rail fixings - design layout	✓	
o Full civil design / Concrete - supply and installation		✓
o Kiln hold down bolts / Rails and rail fixings - supply		✓
Site work:		
o Installation supervision	✓	
o Kiln installation labour and crantage		✓
o Commissioning and basic operator training	✓	
o Operating and maintenance manuals	✓	
o Kiln pipework material supply from heat exchangers up to isolating valves	✓	
o Pipework installation and insulation		✓
o Water supply to kiln solenoid valve		✓
o Control room		✓
Cart and weights:		
o Cart and weight design drawings	✓	
o Cart and weight supply		Optional extra
Kiln heating / steam equipment:		
o Heatplant and connecting yard pipework to kiln isolating valves		✓
o Stainless steel heat exchangers / Steam generation system including coil, tank and lids / Steam traps (if applicable)	✓	
o Kiln isolating valves	✓	
Instrumentation:		
o Dry & Wet bulb sensors / Wet bulb reservoir / Vent motors	✓	
o Heating coil & steam generator coil control valves and actuators	✓	
o Steam generator water level sensor	✓	
Electrical & Control systems:		
o Kiln control systems / Moisture monitoring systems	Several options available	
o Control wiring from PC to kiln (instrumentation) / Electrical wiring from motors to MCC and from MCC to distribution board / Yard wiring and lighting / Distribution board		✓
o Motor control centre (MCC)	✓	
o Variable Speed Drive (VSD)		Optional extra