

Kilns



Naylor Industries Plc



Intermittent Kiln

A large kiln designed and built for a clay pipe manufacturer. The pipes which are mainly for drainage can be up to 800mm diameter. A full kiln area door opening is provided for drive in fork truck loading. The door itself is of the garage type 'up and over'.



Shuttle Kiln

Northern Combustion Systems designed, supplied, installed and fully commission one 12-car batch Shuttle Kiln for pipes and fittings product ware. The kiln internal chamber at (L)37m x (W)3.2m x (H)2.5m to accommodate 12 kiln cars provided 13 firing dikes.

The kiln operated up a temperature of 1100°C fired by 39 Eclipse Thermjet medium velocity burners in 3 zones.

The refractory bench wall installed included precast interlocking refractory blocks, which interlocked with the precast blocks around the kiln car perimeter giving a good and effective heat/radiation seal. A sand seal below the bench wall and kiln car was also installed to ensure severe heat would not transmit

The kiln chamber measures approximately 10m x 6m 3.5m high and is fired with 32 Eclipse Thermjet burners in dike firing formation. For thermal efficiency the kiln is of low thermal mass insulation with variable speed motor combustion air fans. Normal kiln working temperature is around 1100°C.



to the concrete floor. The burners and combustion control included 39 off TJ75 Thermjet medium velocity burners fired positioned three in each firing dike disposed as two burners from one side and one from the opposite side, incorporated in a 3 zone control.

Flue extraction with motorised pressure control was included with 12 flue off-takes from the roof terminating externally.

The inlet and outlet kiln doors, fibre lined with substantial hinges provided a simple manual operating swing door with a manual effective clamp and seal system. A spring-loaded mechanism designed by NCS was included in the door to take up expansion the kiln cars during firing ensuring a seal was maintained.

