Ladle, Launder & Tundish Stations







Essar Steel









Essar Steel (Hazira) Ltd

As a regular supplier to a superior Indian steel producer, Northern Combustion Systems Ltd supplied a number of plant as part of a major contract for a 3.9 million Tonne expansion.

4 off
200T Vertical Dryer / Preheater
2 off
4 off
Launder Preheater
2 off
Launder Dryer

The 4 off Vertical ladle heaters designed on the cantilever principle, comprised of a pivoted, refractory lined cover with a centrally positioned, down firing duel fuel gas burner. The burner equipped with separate valve control systems to enable the burner to operate on corex gas with rapid change over to natural gas operation. The burner and ladle cover raised and lowered through 90°C using an integral hydraulic lifting system. The duty of the vertical ladle stations ranged from 450°C to 1200°C to preheat ladles in accordance with customer heating cycles.

The 2 off horizontal ladle heaters comprised of a vertical heat shield lined cover with a centrally positioned, down firing duel fuel gas burner. The burner equipped with separate valve control systems to enable the burner to operate on corex gas with rapid change over to natural gas operation. The vertical heat shield lined cover mounted on a two-axle carriage. The carriage mounted on rails and capable of 500mm forward and reverse motion using a hydraulic cylinder and close coupled power pack. The duty of the preheating station to preheat ladles in the range 450°C to 1200°C to preheat ladles in accordance with customer heating cycles.

The 6 off launder stations designed on the cantilever principle, comprised of a pivoted, refractory lined cover equipped with 4 off down firing duel fuel gas burner. 2 off large burners fired into the main body and 2 off smaller burners firing into the runoff spout. The burners equipped with separate valve control systems to enable the burner to operate on corex gas with rapid change over to natural gas operation.

The burner and cover raised and lowered using a hydraulic cylinder and close coupled power pack with transmission chain and sprockets in rails guided with diablo rollers. The duty of the Launder stations ranged from up to 800°C preheat lauders in accordance with customer pre-programmed heating profiles.

The ladle and launder stations were fully assembled and tested in our UK facility before disassembled into major sub-assemblies for container loading. The equipment to be shipped was delivered with 14 off 40′-0″ Open Top Containers destined to the customer site in Hazira, Gujerat, India. The full turnkey supply included 2 years spares, supervised assembly and engineer to fully commission the onsite equipment to completion.





