Vessel Preheating Station

NCS Ltd

P4474

JSW, India
Oxygen / Gas vessel preheating unit installed on site in India

This preheating station shown here installed at a large steel producer in India is used to preheat vessels used in a steel de-gassing process. The twin burner system has been designed to run on Corex gas for the low temperature part of the heating cycle and then to automatically switch to the second burner which uses a mix of pure oxygen and gas capable of taking the vessel to a temperature of 1550ºC. The main vessel cover is water cooled and a smaller cover is provided for the vessel spout. This PLC controlled system utilises full electronic flame safeguards to shut the burners down should there be a loss of gas, oxygen or combustion air pressure, operating limits or over temperature alarm.

The cover is raised and lowered by means of a hydraulic cylinder, with the cover pivoting on substantial Plummer block bearing housings. The mounting frame was designed to fit the customers’ existing steel mezzanine floor structure.