The open hearth furnace gets its name from the fact that the charge is open at the surface and is exposed to the flame which shoots across it. The furnace is a very large brick structure which has a shallow hearth with a very large area. It works on the regenerative principle, meaning that the products of combustion are recycled to assist in the heating process. One of side of the structure, air is preheated in checker chambers before it is combined with the fuel which is also preheated. On the other side, the chambers were preheated by the products of combustion. The flow is reversed once every twenty minutes. The charge can be solid or molten and consist of pig iron or scapy and flux. Most often, the charge is molten pig direct from the blast furnace as this saves heating costs. As compared to the Bessemer furnace, the open hearth furnace is slow (eg. 8-10 hours) because the air-fuel mixture must be preheated and the open-hearth furnace is an indirect oxidation process wheras the Besemer is direct. However, the open hearth furnace has much greater capacity, is more accurate, and can handle pig iron with a very high phosphorous content. The majority of American ores are high in phosphorous. Open hearth furnaces, depending on their size, will produce from one hundred and twenty-five to five hundred and fifty tons.