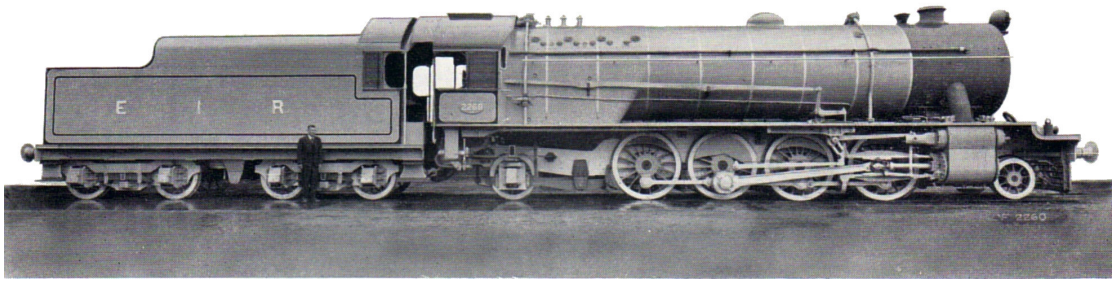
INDIAN RAILWAYS

5 ft. 6 in. Gauge **1945** **2-8-2 (XE)**

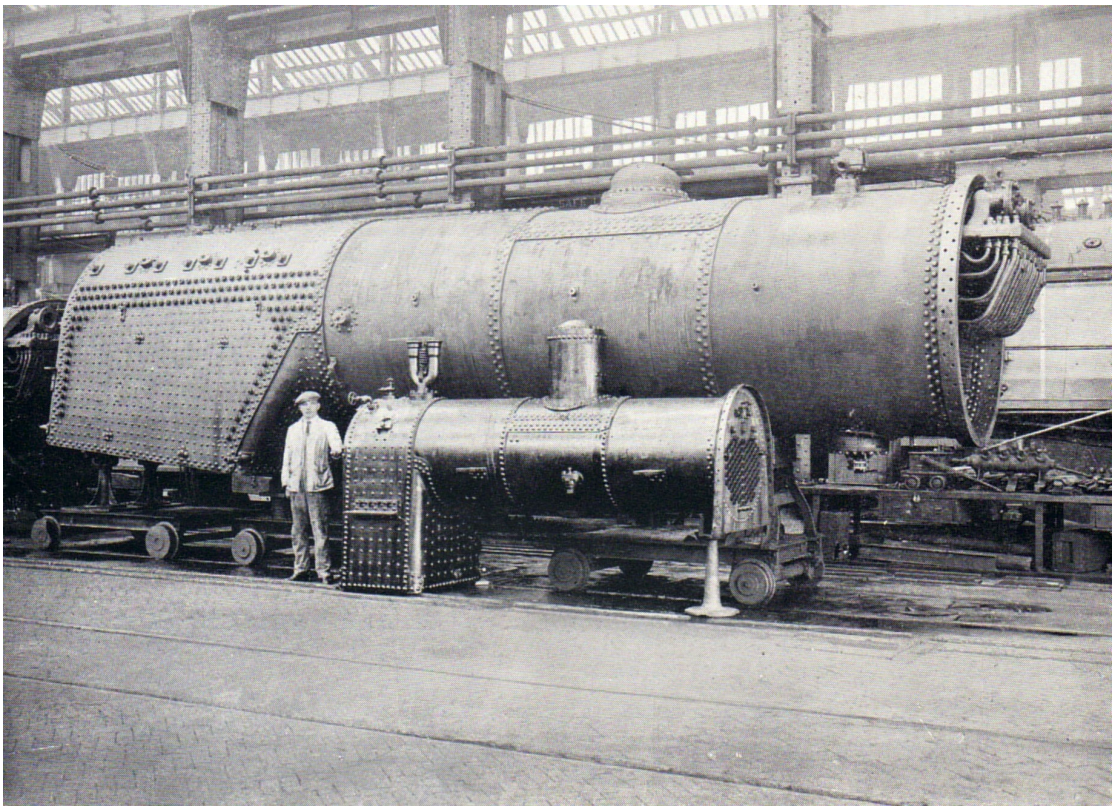


Cylinders	**(2) 23½ in. Diam. x 30 in. Stroke**	Maximum Axleload	**22.3 tons**
Diameter Coupled Wheels	**5 ft. 1½ in.**	Weight :	
Working Pressure	**210 lb.**	Engine in Working Order	**119.1 ”**
Tractive Effort at 85% Pressure	**48,086 lb.**	Tender ” ”	**77.3 ”**
		Total ” ”	**196.4 ”**

The largest of the earlier Indian Standard broad gauge freight locomotives is the powerful 2-8-2 type known as the XE. In all, 51 of these were built at The Vulcan Foundry, and 35 of them constituted the first export contract to be handled after World War II.

Whilst the basic design follows that of the- other contemporary standard types, the large dimensions of these machines are worthy of note, since they are the most powerful engines operating in India and the-largest yet built by The Vulcan Foundry

The boiler, with four arch tubes and wide round-topped firebox with combustion chamber, has a working pressure of 210 lb., a grate area of 60 sq. ft., and an evaporative heating surface of 3,014 sq. ft., whilst the superheater has 36 elements.



An XE Boiler compared with one for a small locomotive

Two cylinders of 23½ in. diameter and coupled wheels 5 ft. 1½in. across the treads combine to give a tractive effort of 48,086 lb. at 85% pressure.

The 35 units delivered in 1945 differed from their predecessors inasmuch as they had re-designed cylinders and steam chests giving improved valve events, grease lubrication on side rods, big ends fitted with Skefko roller-bearings, and a Cole pattern hind truck.

The double bogie tender carries 6,000 gallons of water and 14 tons of coal.