

MINISTRY OF SUPPLY (War Department)



4 ft. 8½ in. Gauge

1943-45

2-8-0 (Austerity)



Cylinders.....	(2) 19 in. Diam. x 28 in. Stroke	Maximum Axleload.....	15.4 tons
Diameter Coupled Wheels.....	4 ft. 8½ in.	Weight :	
Working Pressure.....	225 lb.	Engine in Working Order.....	69.8 "
Tractive Effort at 85% Pressure.....	34,215 lb.	Tender " "	55.85 "
		Total " "	125.65 "

The first "Austerity" locomotive in a series of orders placed with The Vulcan Foundry by the Ministry of Supply on behalf of the War Department, to the general designs of Mr. R. A. Riddles, C.B.E., and comprising no less than 390 engines and tenders, was delivered in May 1943. The exigencies of war, both as regards our overseas lines of communication and the necessity for increasing the motive power available on the British Railways, made it essential to produce a simple, robust freight locomotive capable of sustained trouble-free service.

At that time great care had to be taken regarding availability of materials and simplicity of manufacture, and although outwardly the appearance conformed to the customary standards adopted in this country and the majority of the economy measures adopted were not easily apparent, yet these latter were in fact substantial.

Especially was the use of steel castings and forgings eliminated wherever possible, due to the heavy requirements of these items by other war industries; fabricated parts were incorporated in lieu. Good examples of this principle are the axlebox guides which were made from flanged plate reinforced by triangular ribs, the brake hanger and spring link brackets which were of strip material, and the reversing rod and reversing shaft which were tubular with welded ends.



2-8-0 Austerity Locomotives at Nijmegen, Holland

Another innovation was the use of cast iron for the coupled wheel centres.

The straightforward design of parallel boiler with round-topped firebox and very simple clothing arrangements made it particularly suitable for quantity production, and in fact all previous production records were broken in the building of these engines, no less than 206 being built at Vulcan in 1944.

The accessories, all of well-known make, included both vacuum and air brake equipment so that the locomotives might operate in any country and on any system.

Large numbers of these engines worked on the British Railways, assisting in the transport of the vast quantities of supplies to be moved before the invasion of Normandy. Subsequently they were all transferred to France, Holland, and Belgium where they were the mainstay of the Transportation effort during operations.

After the war a few of them remained in Holland, but the vast majority were returned to this country where they are now operating normal freight services on the Eastern Region of British Railways.