

SR 40 T BOGIE BOLSTER 57883

The Southern Railway (SR) had little need for bolster wagons for commercial use. There was little heavy industry and what little timber traffic existed was in decline. However, in the mid-1930's, thirty flat wagons were ordered to a basically London & South Western Railway (LSWR) design. The LSWR wagons could be fitted with bolsters and carry lengths of 45-foot rail. However, during the 1920's, the SR started to use 60-foot lengths of rail and standardised on this length from 1936. The longer SR design became known as a 'Borail'.

These new bogie bolster wagons with eight bolsters, capable of carrying 60 ft lengths of rail, were ordered on Friday 24th May 1935 in Lot No. L873. The batch consisted of 25 wagons [numbered 57883 to 57907] built to SR diagram No.1598. 57883 was the first wagon constructed, as part of that initial batch, at Lancing Works and all 25 were outshopped during January 1937.

They were outshopped with a pair of LSWR design diamond-framed bogies and South Eastern & Chatham Railway design self-contained buffers. The bogie wheelbase was 49 ft 6 ins. and no vacuum braking equipment was fitted. The wagon was 8 ft 4 ins wide between stanchions.

This new design was 67 ft 1 in long over buffers and 64 ft long over headstocks. Eight bolsters were installed along the length of the vehicle although steel stanchions were only fitted normally to the middle six. It weighed 22 tons 2 cwt when empty and was probably originally lettered as "ED", for the Southern's Engineering Department, and painted in plain Engineers' Orange Oxide. The design proved to be exactly what was wanted so a further five batches were built over the next few years with some detail variations.

In addition to loads of rails, up to the maximum of 40 tons, it could also carry up to five 60 ft panels of track. The height of five panels was the limit of the Southern loading gauge. Wagon floors were covered originally in chequer plate steel sheeting although, when this wore thin after years of use, it was covered in $\frac{3}{4}$ inch tongue-and-groove boards to strengthen them.

Sometime in 1945, 57883 was re-numbered 64622. Its main working life was moving lengths of rails or panels of track around the Southern Railway network then, after nationalisation, across BR Southern Region. When newer wagons were introduced for rail movements it was then used to transport reinforcing bars and rolled steel joints. In November 1950, it was formally transferred to Departmental Service with the BR(S) Chief Civil Engineer's Department with the prefix DS thus making it DS64622.

It was withdrawn from active duties on Tuesday 5th September 1978 and became Internal User 083345 on Saturday 18th November that same year based at New Cross Gate. It was photographed there on Saturday 30th March 1985, complete with five steel vertical stanchions either side, carrying a load of 60 ft bullhead rails suitably chained down. 083345 (DS 64622, 57883) was sold by BR and arrived on the Bluebell Railway, on Thursday 5th July 1990, from Redbridge Sleeper Depot, near Southampton which is unusual in that Internal User vehicles were generally not moved from their designated location.

Incidentally, Redbridge was founded in 1884 becoming a major sleeper creosoting and charring works for the LSWR, Southern and BR(S). Untreated sleepers and rough timber

normally arrived by ship at the adjacent Redbridge Wharf and taken round to the tidal 5 acre log pond where timber was left to season.

Despite the comparatively compact size, covering approximately 22 acres, Redbridge depot contained a large amount of processing areas and buildings for the cutting of timber, creosoting of sleepers and a casting foundry for rail chairs and screws. The creosote pressure vessels were served by 500 yards of 2 ft 6 ins narrow gauge track and wagons. There was also a total of around 4 miles of standard gauge track serving all other areas within the depot. The switch and crossing shop, and related foundry, was erected in 1924/5.

There were three underground concrete storage tanks for creosote preservative. No. 1 working tank held 40,000 gallons; No. 2 tank held 13,000 gallons and No. 3 (reserve) tank held another 40,000 gallons. Creosote was heated to a temperature of 130°C by steam supplied by two locomotive-type boilers. The two steel creosoting cylinders, of 7 feet diameter and 75 feet in length, each contained up to 464 sleepers of standard size and had a working pressure of 200 lbs per square inch. Sleepers were under that pressure for about two hours and absorbed, normally, 10 lb of creosote per cubic foot. The miniature trucks, carrying the sleepers, were hauled inside the cylinders by electric capstans. Once sleepers were in position, a vacuum was created by a vacuum pump, and a supply of creosote was thus drawn into the cylinder from the working tank. Then the creosote was forced into the sleepers by an electric three-throw pump. When completed, the creosote that had not been impregnated drained back into the tank. The stop valve was then closed, the vacuum pump re-started so that sleepers were cleared of extraneous preservative.

It may be mentioned that before sleepers were treated, they are adzed, bored and sawn to length to receive the chairs by a machine with a capacity of 1,000 sleepers a day. When creosoting was complete the trucks were drawn out of the cylinder by another capstan, and unloaded in the charring shed. There, two charring machines inserted the three chair screws and automatically elevated the chaired sleeper so that it passed on to a standard railway wagon, ready for dispatch.

Switch and crossing chairs, together with blocks, brackets, etc. for crossings, were cast in the foundry where two cupolas turned out up to 30 tons of steel parts per week. Saw-mill machinery could deal with logs up to 3 feet diameter and 50 feet long.

The standard rail at that time on the Southern was adopted in 1923 being Bull-head pattern weighing 95 lb per yard for the 60 feet long rail. Fish-plates weighed roughly 32 lb per pair and chairs weighed 46 lb each. For many years the keys which held rails securely in chairs was formed from teak.

On the Bluebell Railway it was used, alongside No. 57949, as an engineers' wagon for carrying rail, point work components and any long load such as felled timber. An overhaul, including the purchase of new steel for the low sides, was started, but the opportunity to place it on loan to the Swanage Railway was taken up soon after in mid-2010.

The reason behind requesting this loan was the arrival of components of the former Old Oak Common Shed 70 ft turntable which had been gifted to the Swanage Railway by Network Rail. All items were removed by Beck & Pollitzer's team working intensively in the open air over many days in all weathers. Beck & Pollitzer is the world's leading provider of machinery installation and equipment relocation services delivering an unparalleled range of engineering support services to both manufacturing and industrial

sectors. They certainly did a complete job for Swanage.

The turntable actually measured 70 ft 2 ins long. It was therefore slightly longer than 57883 and needed a four-wheel flat wagon to act as an overhang wagon. It arrived on a Beck & Pollitzer lorry on Wednesday 3rd November 2010 and a two crane tandem lift, using Marsh Plant Hire cranes, transferred the turntable to 57883. Both cranes from Marsh Plant Hire Limited were hired from their Cabot Lane depot at Creekmoor in Poole.

Swanage Railway is most grateful to the Bluebell Railway for the long-term loan of Borail 57883. Basic information above courtesy of the Bluebell Railway with credit to Richard Salmon, Martin Skrzetuszewski and Ted Crawforth:

<https://www.bluebell-railway.co.uk/bluebell/pics/57889.html>

Other information compiled by Peter Sykes 12th November 2021

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