

BS EN 15566:2016



BSI Standards Publication

Railway applications — Railway rolling stock — Draw gear and screw coupling

National foreword

This British Standard is the UK implementation of EN 15566:2016. It supersedes BS EN 15566:2009+A1:2010 which is withdrawn.

The UK committee draws users' attention to the distinction between normative and informative elements, as defined in Clause 3 of the CEN/CENELEC Internal Regulations, Part 3.

Normative: Requirements conveying criteria to be fulfilled if compliance with the document is to be claimed and from which no deviation is permitted.

Informative: Information intended to assist the understanding or use of the document. Informative annexes do not contain requirements, except as optional requirements, and are not mandatory. For example, a test method may contain requirements, but there is no need to comply with these requirements to claim compliance with the standard.

The UK loading gauge is much smaller than the gauge in Europe and the maximum axle load is higher at 25.4 tonnes. As a consequence of this, longer thinner wagons are built to maximize the pay load of wagons carrying lower density products.

In order to maximize the volumetric capacity of the wagon body within this overall length 520 mm buffers continue to be used with a head radius of 1 250 mm to cater for the tighter curves found in many UK terminals (for example Oleo OP176GX buffers). As EN 15566 is referenced in the Wagon TSI, any new wagons would have to be built with a 620 mm buffer and 2 750 mm head radius.

This would have three effects:

- 1) The wagon bodies would have to be shorter to allow for the longer buffers within the same 18 300 mm overall length with a corresponding loss of payload of typically 1 tonne on every journey.
- 2) The use of the 2 750 mm head radius would push the drawbar loads over the 250 kN limit when negotiating 70 m curves, which would necessitate lengthening the screw couplings every time the wagons went into tight terminals and tightening them again once they were back on the mainline. This would cause delays to arrivals and departures, add cost and present an additional safety hazard to the shunters.
- 3) If the 520 mm buffer is no longer used for new build wagons, the manufacturers will eventually cease to make them. The vast majority of UK bogie wagons are fitted with these buffers and any new casings required to replace worn ones would then need to be specially made at a vast increase in cost.

Therefore wagons for use exclusively in the UK may continue to use 520 mm projection buffers in EN 15551 and the corresponding UK Draw Hook (to drawing C1-A1-9006711) and Screw Coupling (to drawing F-AO-13970). Drawings may be obtained from Serco Raildata – email: docrequest@serco.com

The UK participation in its preparation was entrusted by Technical Committee RAE/3, Railway Applications - Rolling Stock Products, to Subcommittee RAE/3/-/7, Railway applications - Couplers.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.