



BSI Standards Publication

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

National foreword

This British Standard is the UK implementation of EN 15566:2022. It supersedes BS EN 15566:2016 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee RAE/3/-/7, Railway applications - Couplers.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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.

There are special national conditions relating to the United Kingdom, specified in Annex D (normative) of BS EN 16839:2022, which UK users should reference. Text from that Annex D (normative) is supplied below and references amended for application in this 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 we have continued to use 520mm buffers with a head radius of 1250 mm to cater for the tighter curves found in many UK terminals, (for example Oleo OP176GX buffers). As BS EN 15566:2022 is referenced in the Wagon TSI, any new wagons would have to be built with 620 mm buffer and 2750 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 18300 mm overall length with a corresponding loss of payload of typically 1 tonne on every journey.
- 2) The use of the 2750 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 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 UK may continue to use 520 mm projection buffers in BS EN 15551:2022 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.

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UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of www.gov.uk.

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