

## UKMHA Position Paper on EN 1175:2020

### Background

EN 1175:2020, Safety of industrial trucks – Electrical/electronic requirements, was published in July 2020 as a replacement for the following standards:

- EN 1175-1:1998+A1:2010, Safety of industrial trucks – Electrical requirements – Part 1: General requirements for battery powered trucks
- EN 1175-2:1998+A1:2010, Safety of industrial trucks – Electrical requirements – Part 2: General requirements of internal combustion engine powered trucks
- EN 1175-3:1998+A1:2010, Safety of industrial trucks – Electrical requirements – Part 3: Specific requirements for the electric power transmission systems of internal combustion engine powered trucks

EN 1175:2020 was cited by the European Commission in the OJEU as providing a presumption of conformity with the Machinery Directive, 2006/42/EC, in October 2021, and was listed as a UK 'designated standard' providing a presumption of conformity with The Supply of Machinery (Safety) Regulations 2008, as amended, in July 2022. The transition period, whereby both the new standard and the previous editions provide a presumption of conformity, terminates in both the EU and the UK on 15 April 2023. From this date, the 1998+A1:2010 editions of EN 1175 parts 1, 2 & 3 will no longer provide manufacturers with a presumption of conformity.

### Adoption of EN 1175:2020

As noted in the scope of EN 1175:2020, the new standard significantly increases the design details and, to enable manufactures to update their technical construction files an extended overlap between the date of availability of the new standard and the date of withdrawal of the previous editions was agreed.



In the period since the text was finalised the world has suffered from the coronavirus pandemic, which continues to disrupt global manufacturing and supply chains. Parts shortages and long lead times, combined with unprecedented demand for materials handling equipment and the disruptions caused by the Russian invasion of Ukraine have made it especially challenging for manufacturers to ensure that their whole product range is fully aligned to the latest edition of the standard by the end of the transition period. The difficulties are particularly acute for well established designs produced in relatively low volumes.

Thus, whilst manufacturers are expected to adopt EN 1175:2020 expeditiously, there may be instances where this is not practical for some products by the end of the transition period.

Article 12 of Machinery Directive does not require that harmonized standards be applied to demonstrate compliance with requirements of the Directive even where such standards exist. Accordingly, there is no mandatory requirement for manufacturers to adopt EN 1175:2020 so long as the manufacturer has applied the appropriate procedure for conformity assessment.

## The 'State of the Art'

It is a general principle of the Machinery Directive, 2006/42/EC, that technical solutions adopted must evolve in accordance with advances in the 'state of the art'.

The main changes adopted in EN 1175:2020 compared with earlier editions include:

- definition of the PLr for safety functions of the control system;
- design specifications for safety-related parts and control systems;
- specific safety requirements for Li ion energy sources.

Where relevant, these aspects should be considered as not covered by the 1998+A1:2010 editions of EN 1175 and the manufacturer has been obliged to find their own solutions to mitigate the hazards. Accordingly, there will be no reduction in safety just because the applied standard's status has changed: product placed on the market prior to the end of the transition period (15 April 2023) remain safe and free to circulate after this date, with no updates or reassessment required.

Similarly, product first placed on the market after 15 April 2023 will be no less safe if it complies with EN 1175:1998+A1:2010. The use of standards to demonstrate compliance is optional, so there is no mandatory requirement for manufacturers to adopt EN 1175:2020 by the end of the transition period. However, even where established truck designs have a proven safety record, manufacturers should review their technical files to ensure that the applicable hazards, which are not adequately covered, or not covered at all, in the relevant part of EN 1175:1998+A1:2010, are sufficiently mitigated. This can be achieved, for example, by a combination of risk assessments and a review of the available reliability data for specific designs.



## Manufacturer's Declaration of Conformity (DoC)

The Essential Health and Safety Requirements (EHSR) of the Machinery Directive (Supply of Machinery (Safety) Regulations 2008 in the UK) can be met by meeting the requirements of both of the following standards:

- EN ISO 3691-1:2015+A1:2020
- EN 16307-1:2020

**Note 1:** These standards are cited in the OJEU (listed by OPSS in the UK) as providing a presumption of conformity.

**Note 2:** Other parts of the EN ISO 3691 and EN 16307 series' may be applicable to some types of truck

**Note 3:** Where EHSR are identified as 'not covered' in the scope and/or the Annex ZA, the standards do not provide a presumption of conformity.

**Note 4:** The standards must be used in combination to obtain the presumption of conformity.

The Electrical requirements for industrial trucks are required by EN 16307-1:2020 to be as provided by the relevant part(s) of EN 1175:1998+A1:2010. Where the manufacturer is utilising these standards it is not required to identify the standard providing electrical requirements separately on the DoC. This is because the requirements are 'normatively referenced' by EN 16307-1.

It is required that any deviations from standards identified on the DoC be listed on the DoC.

Where the product is in compliance with EN 1175:2020 this may be identified on the DoC.

Where the product is not in compliance with EN 1175:2020, but is in compliance with the relevant part(s) of EN 1175:1998+A1:2010, the manufacturer is not required to make any specific reference to the electrical requirements of the Machinery Directive on the DoC.

**Note 5:** Where compliance with other Directives/Regulations is required, e.g. EMC, these should also be identified on the DoC.

