

BS EN 353-1: 2014

Personal fall protection equipment — Guided type fall arresters including anchor line

Part 1: Guided type fall arresters including a rigid anchor line

BS EN 353-1: 2014 has been published. It supersedes BS EN 353-1: 2002 (for which there had been a 'withdrawal of presumption of conformity' to the PPE Directive). Annex B (informative) lists the significant technical changes between the new European Standard and the previous edition.

The scope and the requirements are based on the philosophy that a guided type fall arrester including a rigid anchor line is rated to sustain the maximum dynamic load generated in a fall from a height by the mass of **one** person, including any equipment carried.

Anchor lines are usually attached to or integrated in ladders or rungs adequately fixed to suitable structures. The EN applies to rigid anchor lines which are intended to be installed vertically and/or with a combination of forward-leaning angle and/or sideways leaning angle between the true vertical and the vertical +15°. Multi-user applications, i.e. rigid anchor lines that allow more than one user to be attached at any one time, are not addressed.

For consistency and reproducibility of testing, performance tests are conducted with a rigid steel mass of 100 kg representing a single user, i.e. not a test dummy and harness. The objective of *performance tests* is to confirm the arrest of a fall is made in line with the test requirements, i.e. arrest load and distance.

The potential for a fall backwards has been addressed in a 'fall back' function test. A load is applied to the guided type fall arrester in an unlocked condition to represent a typical backwards load that could be expected in service. This test has been introduced to check the locking function of the guided type fall arrester and the integrity of a guiding bracket on a rigid anchor line made of wire rope in the event of a fall occurring with the guided type fall arrester positioned directly on the guiding bracket. The objective of *function tests* is to confirm correct operation of the guided type fall arrester locking feature(s) under foreseeable conditions of use using minimum and/or maximum rated loads.

Function tests include low temperature, minimum distance, fall back, on a guiding bracket, sideways fall and sideways leaning anchor line tests. Tests are conducted using either a) minimum and maximum rated loads or b) the maximum rated load.

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