

Breath alcohol testing devices

Amendment No. 3

Correction amendment

Publishing and Approval Dates

Council of Standards Australia Approval: 4 August 2023

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Summary

This Amendment applies to the following elements:

- Global change
- Title
- Preface
- Introduction
- Clause 3.2.1

Amendment Details

AS 3547:2019 is amended as follows. The amendments should be inserted in the locations as instructed.

Element	Instruction / New text
Global change	Delete "AS 3547:2019", and <i>replace</i> with "AS 3547.1:2019" in all instances.
Title	On the cover page, title page and before Section 1 title, <i>delete</i> "Breath alcohol testing device", and <i>replace</i> with "Electronic breath alcohol testing devices for professional use" in all instances.
Preface	<i>Delete</i> Preface and <i>replace</i> with the following This Standard was prepared by Standards Australia Committee CS-077, to supersede in part AS 3547:1997, <i>Breath alcohol testing devices</i>. <i>This Standard incorporates Amendment No. 3 (Month 2023) and the change to Clause B.3.3 made by Amendment No. 2 (November 2022). The changes made to the Preface by Amendment No. 2 have been overwritten by the text of Amendment No. 3. The start and end of changes introduced by the Amendments are indicated in the text by tags including the Amendment number.</i> The objective of this document is to specify requirements for the performance, testing and marking of breath alcohol testing devices for professional use. The AS 3547 series of standards defines the minimum technical requirements, and test methods to establish compliance, for breath alcohol testing devices. The series covers a number of different device types that may be used across a number of different applications. The standards that currently make up AS 3547 are as follows, along with the basic scope of each document: (a) AS 3547.1, <i>Electronic breath alcohol testing devices for professional use</i> This Standard specifies requirements for the performance, testing and marking of breath alcohol testing devices for uses such as, but not limited to, personal, workplace and medical screening purposes.

Element**Instruction / New text**

It covers electronic portable devices for professional use, fixed installations, and units with basic interlock functions. This relates to type 2, 3 and 4 devices from AS 3547:1997.

The basic functions of an alcohol interlock are covered, with possibility of vehicle interlocks to be specifically covered under a future AS 3547.4. Other non-Australian standards currently exist in this field.

NOTE: NMI R126 applies for evidential breath analysers, used specifically for legal evidential purposes.

(b) AS 3547.2, *Electronic breath alcohol testing devices for personal use*

This Standard specifies requirements for the performance, testing and marking of breath alcohol testing devices intended for personal use.

It covers electronic portable devices for personal use. This also relates to a type 2 device from AS 3547:1997.

(c) AS 3547.3, *Single-use breath alcohol testing devices*

This Standard specifies requirements for the performance, testing and marking of single-use, disposable breath alcohol testing devices. AS 3547.3 is a modified adoption of NF X20-702:2014.

Single-use disposable breathalysers are defined as qualitative devices as they are not capable of delivering and recording a quantitative or finite test result. They are personal screening devices which provide guidance to the breath alcohol concentration of a single breath sample against a pre-set indicative measure of BrAC. While adequate accuracy and reliability is ensured through AS 3547.3, they are appropriate for use in circumstances and environments covered by legislation where important personal decisions may be made by the user following assessment of a test result. Such circumstances may include, but not limited to road safety and workplace applications.

This relates to a type 1 device from AS 3547:1997.

Table A.1 of AS 3547:1997 was based on a blood to breath ratio of 2300:1. However, to be compliant with Australian legal units of measurement defined in the National Measurement Regulations, measurement units of grams of alcohol in 210 L of breath (g/210 L) have been used in these standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices to which they apply. A “normative” appendix is an integral part of a Standard, whereas an “informative” appendix is only for information and guidance.

Introduction

Delete Introduction, and *replace* with the following:

The capabilities of electronic breath testing devices have advanced since the AS 3547:1997 document and consumers should be afforded the increased accuracy and reliability that modern devices can now provide. The devices should be able to perform in a manner that allows the user to make informed decisions. Therefore, this Standard contains current performance and testing requirements of devices intended for professional use.

The committee was aware that recalibration of electronic breath testing devices at regular intervals is vital if accurate results are to be obtained. Provision of recalibration facilities to the general public at a reasonable price, should, in the opinion of the committee, be a prerequisite for the sale of electronic breath alcohol devices. Such a requirement could not be included in an Australian Standard product specification, and it is therefore only included as a recommendation for consideration by the appropriate regulatory authorities and by the suppliers of these devices. Informative sections on the periodic verification and calibration methods have been included as guidance.

Requirements specified for Type 4 breath alcohol testing devices, such as those which are fitted to motor vehicles or machinery relate only to the performance and accuracy of these devices in measuring the alcohol content of expired air and in providing an appropriate output signal to the circuitry which interacts with the vehicle or machine.