

Australian/New Zealand Standard™

**Powder-actuated (PA) hand-held  
fastening tools**

**Part 2: Design and construction**

### **AS/NZS 1873.2:2003**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee SF-029, Explosive Powered Tools, Fasteners and Charges. It was approved on behalf of the Council of Standards Australia on 14 February 2003 and on behalf of the Council of Standards New Zealand on 24 January 2003. It was published on 5 March 2003.

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The following are represented on Committee SF-029:

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# Australian/New Zealand Standard™

## **Powder-actuated (PA) hand-held fastening tools**

### **Part 2: Design and construction**

Originated as part of AS 1873—1978.  
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## PREFACE

This Standard was prepared by the Joint Standard Australia/Standards New Zealand Committee SF-029, Explosive Powered Tools, Fasteners and Charges, to supersede AS/NZS 1873.2:1994, *Powder-actuated (PA) hand-held fastening tools, Part 2: Design and construction*.

The objective of this Standard is to specify the design, construction and performance requirements for powder-actuated (PA) hand-held fastening tools.

This Standard provides for both direct-acting and indirect-acting tools and gives separate velocity and energy limits above which additional guarding and closing pressures are required.

This Standard is Part 2 of a series as follows:

### AS/NZS

- 1873 Powder-actuated (PA) hand-held fastening tools
- 1873.1 Part 1: Selection, operation and maintenance
- 1873.2 Part 2: Design and construction
- 1873.3 Part 3: Charges
- 1873.4 Part 4: Fasteners

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of the Standard.

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## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard**  
**Powder-actuated (PA) hand-held fastening tools****Part 2: Design and construction**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard sets out design, construction, and performance requirements necessary for the safe operation of powder-actuated hand-held fastening tools.

## NOTES:

- 1 Requirements for the fasteners and charges for use in PA tools are given in AS/NZS 1873.3 and AS/NZS 1873.4.
- 2 The significant aspects essential to the safe and efficient selection, operation, and maintenance of powder-actuated fastening tools are given in AS/NZS 1873.1.

**1.2 APPLICATION**

This Standard applies to all powder-actuated hand-held fastening tools but does not include a firearm within the meaning of the Firearms Act(s), LP Gas and propane gas-powered tools or a sidewall coring gun used in exploratory borehole work.

NOTE: Attention is directed to requirements of the regulatory authorities in the various States of Australia in respect of the equipment specified herein.

**1.3 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

## AS/NZS

- |        |  |
|--------|--|
| 1873   | Powder-actuated (PA) hand-held fastening tools |
| 1873.1 | Part 1: Selection, operation and maintenance   |
| 1873.3 | Part 3: Charges                                |
| 1873.4 | Part 4: Fasteners                              |

**1.4 DEFINITIONS**

For the purpose of this Standard, the definitions given below apply.

**1.4.1 Base material**

The material into which the fastener shank is driven and from which the holding power is obtained.

**1.4.2 Charge**

A cased cartridge or a caseless pellet of explosive, designed specifically for a powder-actuated hand-held fastening tool.

NOTE: A charge may be referred to as an 'explosive charge' or 'power load'.