

AS/NZS 4024.3703:2020



Australian/New Zealand Standard™

Safety of machinery

Part 3703: Machines for compacting waste materials or recyclable fractions — Vertical baling presses — Safety requirements (EN 16500:2014 (ED 1.0) MOD)



AS/NZS 4024.3703:2020

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- Australian Institute of Health & Safety
- Australian Manufacturing Technology Institute
- Australian Manufacturing Workers Union
- Australian Packaging and Processing Machinery Association
- Department of Regional NSW
- Engineers Australia
- Human Factors and Ergonomics Society of Australia
- Institute of Instrumentation, Control & Automation Aust
- New Zealand Safety Council
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- SafeWork SA
- Swinburne University of Technology
- University of Melbourne
- Victorian WorkCover Authority (WorkSafe Victoria)
- Winery Engineering Association (Australia)
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Preface

This Standard was prepared by the joint Standards Australia/Standards New Zealand Committee SF-041, Safety of Machinery.

The objective of this document is to specify the safety requirements for the design, manufacture and information for safe use of vertical baling presses for compacting waste material or recyclable fractions (e.g. paper, plastics, textiles, cans, cardboard, mixed waste), hereafter referred to as materials.

This document covers vertical baling presses—

- (a) that are manually or mechanically fed;
- (b) with fixed enclosed baling chambers (single or multiple chamber presses);
- (c) with a mechanically, hydraulically or pneumatically operated compacting equipment;
- (d) where the compacted bale is tied manually in the baling chamber; and
- (e) with manual unloading or mechanical ejection of the compacted bale.

The scope of this document includes any mechanical feed equipment, such as belt type conveyors or bin lifts, forming an integral part of the baling press assembly. It also includes integral material flow control equipment.

This document does not apply to:

- (i) vertical baling presses without fixed enclosed baling chamber(s);
- (ii) round balers or roll baling machines;
- (iii) machines where the material is compacted into a bag;
- (iv) pneumatic conveying systems;
- (v) equipment for transporting the bales;
- (vi) local exhaust ventilation for the removal of dusts or vapours;
- (vii) hazards arising from any integral pre-conditioning equipment; or
- (viii) hazards arising from the materials being processed, e.g. asbestos, clinical waste, flammable or explosive materials, unhealthy or poisonous waste.

This document does not apply to cranes, lift trucks or other mobile plant used to load materials into the feed opening. Nor does it apply to hazards arising from loading materials into the feed opening using cranes, lift trucks or other mobile plant.

This document does not include specifications to meet the requirements of the ATEX Directive 94/9/EC. This document does not apply to vertical baling presses which are manufactured before the date of this publication.

This document is an adoption with national modifications, and has been reproduced from EN 16500:2014, Machines for compacting waste materials or recyclable fractions — Vertical baling presses — Safety requirements. The modifications are additional requirements and are set out in [Appendix ZZ](#), which has been added at the end of the source text.

[Appendix ZZ](#) lists the variations to EN 16500:2014 for the application of this document in Australia and New Zealand.

As this document has been reproduced from an International Standard, the following apply:

- (a) In the source text “this European Standard” should read “this document”.
- (b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

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

Contents

Page

Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	7
3 Terms and definitions	9
4 List of significant hazards	13
5 Safety requirements and/or protective measures	16
5.1 Mechanical hazards	16
5.1.1 General.....	16
5.1.2 Feed area	19
5.1.3 Baling chamber area	22
5.1.4 Bale ejection area	22
5.2 Control actuators, devices and system.....	23
5.2.1 Control actuators and devices	23
5.2.2 Required performance levels PL_r	24
5.2.3 Prevention of unauthorised or unintentional operation or start-up	25
5.2.4 Emergency stop.....	25
5.3 Hazards from hydraulic equipment.....	26
5.3.1 Hydraulic equipment	26
5.3.2 Hot surfaces of the hydraulic system.....	26
5.3.3 Hydraulic control system.....	26
5.4 Hazards from pneumatic equipment.....	26
5.4.1 Pneumatic equipment	26
5.4.2 Pneumatic control system	27
5.5 Electrical hazards	27
5.6 Hazards generated by noise	27
5.6.1 Noise reduction at source by design.....	27
5.6.2 Noise reduction by protective measures	28
5.6.3 Information connected with noise hazards.....	28
5.7 Hazards due to neglecting ergonomic principles in the design of the machine	28
6 Verification of the safety requirements and/or protective measures	28
7 Information for use	30
7.1 General information.....	30
7.2 Information for safe operation.....	30
7.2.1 General.....	30
7.2.2 Instructions for operation	31
7.2.3 Instructions for maintenance	31
7.2.4 Instructions for periodic examinations	32
7.2.5 Information on installation.....	32
7.2.6 Information on noise	33
7.3 Marking	33
7.3.1 Manufacturer's marking plate.....	33
7.3.2 Safety signs.....	33
7.3.3 Other markings	34
Annex A (normative) Noise test code.....	35
A.1 Scope	35
A.2 Determination of emission sound pressure level at the work station(s).....	35
A.2.1 Basic standards	35

A.2.2	Measurement uncertainty	36
A.3	Determination of sound power levels	36
A.3.1	Basic standards	36
A.3.2	Measurement uncertainty	36
A.4	Installation and mounting conditions for the noise measurement	36
A.5	Operating conditions	36
A.6	Information to be recorded and reported.....	37
A.6.1	General	37
A.6.2	Vertical baling press – Data.....	37
A.6.3	Standards used.....	37
A.6.4	Noise data.....	37
A.6.5	Specified test parameters	37
A.6.6	Installation and operating conditions	37
A.7	Declaration and verification of noise emission values	37
Annex ZA (informative)	Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC	39
Bibliography.....		40

Foreword

This document (EN 16500:2014) has been prepared by Technical Committee CEN/TC 397 “Project Committee - Baling presses - Safety requirements”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2015 and conflicting national standards shall be withdrawn at the latest by February 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard is a type C standard as stated in EN ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards for machines that have been designed and built in accordance with the provisions of this type C standard.

1 Scope

This European Standard specifies the safety requirements for the design, manufacture and information for safe use of vertical baling presses for compacting waste material or recyclable fractions (e. g. paper, plastics, textiles, cans, cardboard, mixed waste), hereafter referred to as materials.

This standard covers vertical baling presses:

- that are manually or mechanically fed; and
- with fixed enclosed baling chambers (single or multiple chamber presses); and
- with a mechanically, hydraulically or pneumatically operated compacting equipment; and
- where the compacted bale is tied manually in the baling chamber; and
- with manual unloading or mechanical ejection of the compacted bale.

The scope of this standard includes any mechanical feed equipment, such as belt type conveyors or bin lifts, forming an integral part of the baling press assembly. It also includes integral material flow control equipment.

This standard does not apply to:

- vertical baling presses without fixed enclosed baling chamber(s); or
- round balers or roll baling machines; or
- machines where the material is compacted into a bag; or
- pneumatic conveying systems; or
- equipment for transporting the bales; or
- local exhaust ventilation for the removal of dusts or vapours; or
- hazards arising from any integral pre-conditioning equipment; or
- hazards arising from the materials being processed (e.g. asbestos, clinical waste, flammable or explosive materials, unhealthy or poisonous waste).

This standard does not apply to cranes, lift trucks or other mobile plant used to load materials into the feed opening. Nor does it apply to hazards arising from loading materials into the feed opening using cranes, lift trucks or other mobile plant.

This standard does not include specifications to meet the requirements of the ATEX Directive 94/9/EC.

All hazards mentioned in Clause 4 are dealt with in this European Standard.

This European Standard is not applicable for vertical baling presses which are manufactured before the date of its publication as an EN.