



# **Stainless steel tubes and tube fittings for food processing and hygienic applications**

## **Part 2: Screwed tube couplings**



AS 1528.2:2019

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- Australian Chamber of Commerce and Industry
- Australian Food Engineering Association
- Australian Industry Group
- Australian Stainless Steel Development Association
- Dairy Australia
- Winery Engineering Association

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# **Stainless steel tubes and tube fittings for food processing and hygienic applications**

## **Part 2: Screwed tube couplings**

Originated as AS N32—1960.  
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## Preface

This Standard was prepared by the Standards Australia Committee FT-027, Stainless Steel Tubes and Tube Fittings for Food Processing and Hygienic Applications, to supersede AS 1528.2—2001, *Tubes (stainless steel) and tube fittings for the food industry, Part 2: Screwed couplings*.

The objective of this Standard is to specify the materials, dimensions, and surface finish requirements for welded-type and expanded-type screwed tube fittings, comprising male parts, liners, nuts, blank caps, seals and gaskets in screwed couplings for effecting joins in pipelines in food processing and hygienic applications.

This is Part 2 of a series of Standards for stainless steel tubes and tube fittings for food processing and hygienic applications. The Standards in the series are as follows:

AS 1528.1, *Stainless steel tubes and tube fittings for food processing and hygienic applications, Part 1: Tubes*

AS 1528.2, *Stainless steel tubes and tube fittings for food processing and hygienic applications, Part 2: Screwed tube couplings* (this Standard)

AS 1528.3, *Stainless steel tubes and tube fittings for food processing and hygienic applications, Part 3: Butt weld tube fittings*

AS 1528.4, *Stainless steel tubes and tube fittings for food processing and hygienic applications, Part 4: Clamp tube fittings*

The revision of the AS 1528 series more closely aligns with other national and international Standards applicable to stainless steel tube and tube fittings for hygienic applications, while retaining a number of requirements that were identified in the prefaces to the 2001 editions as lacking in ASTM and ISO Standards.

ISO, European and other national Standards were reviewed and found not suitable for current Australian requirements.

The major changes to this Standard in this revision include the following:

- (a) The title of the Standard was changed to include “hygienic applications” in recognition of a broader application than simply the food processing industry.
- (b) Common internal surface requirements for all parts of the Standard.
- (c) Closer alignment of tolerances with International, European and US-based Standards.
- (d) Expansion of the diameter range and inclusion of wall thicknesses common to various tube diameters.
- (e) Addition of fittings now standard for the intended applications.

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.

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# Australian Standard<sup>®</sup>

## Stainless steel tubes and tube fittings for food processing and hygienic applications

### Part 2: Screwed tube couplings

#### Section 1 Scope and general

##### 1.1 Scope

This Standard specifies requirements for all screwed tube fitting types intended for food processing and hygienic applications. This includes ring-joint types, and trapezoidal thread (ISO type) stainless steel screwed couplings.

The male parts and the liners are intended for use with the stainless steel tubes in accordance with AS 1528.1 and fittings specified in accordance with AS 1528.3 and AS 1528.4.

NOTE Information to be supplied for purchase is given in [Appendix A](#).

##### 1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

AS 1528.1, *Stainless steel tubes and tube fittings for food processing and hygienic applications, Part 1: Tubes*

AS 1528.3, *Stainless steel tubes and tube fittings for food processing and hygienic applications, Part 3: Butt weld tube fittings*

AS 1528.4, *Stainless steel tubes and tube fittings for food processing and hygienic applications, Part 4: Clamp tube fittings*

AS/NZS 1554.6, *Structural steel welding, Part 6: Welding stainless steels for structural purposes*

ISO 4288, *Geometrical Product Specifications (GPS) — Surface texture: Profile method — Rules and procedures for the assessment of surface texture*

ASTM A182M, *Standard Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service*

ASTM A240M, *Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications*

ASTM A276M, *Standard Specification for Stainless Steel Bars and Shapes*

ASTM A351M, *Standard Specification for Castings, Austenitic, for Pressure-Containing Parts*

AWS D18.1M, *Specification for Welding of Austenitic Stainless Steel Tube and Pipe Systems in Sanitary (Hygienic) Applications*

EN 10204, *Metallic products — Types of inspection documents*

##### 1.3 Terms and definitions

No terms and definitions are listed in this document.