Australian Standard®

METALS FOR THE MANUFACTURE OF SURGICAL IMPLANTS

Part 6—WROUGHT COBALT-NICKEL-CHROMIUM-MOLYBDENUM ALLOY

The following scientific, industrial and governmental organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Chamber of Commerce
Australian Orthopaedic Association
Bureau of Steel Manufacturers of Australia
Confederation of Australian Industry
Department of Defence
Department of Health
Metal Trades Industry Association of Australia
Plastics Institute of Australia Incorporated
Royal Australasian College of Surgeons
Royal Newcastle Hospital
Royal Perth Hospital
University of Melbourne
University of Newcastle
University of New South Wales
University of Sydney

This standard, prepared by Committee MD/3, Surgical Implants, was approved on behalf of the Council of the Standards Association of Australia on 14 April 1981, and was published on 15 June 1981.

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First published (included in AS T35) 1966
AS 2320, Part 6 first published 1981

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 2265 8

PREFACE

This standard was prepared by the Association's Committee on Surgical Implants and was authorized by the Medical Materials and Equipment Standards Committee. It is one of a series of standards for surgical implants which will implement for Australian purposes International Standards emanating from ISO/TC 150, Implants for Surgery.

Prior to publication of this standard, requirements for metals for the manufacture of implants were set out in AS T35. The new series accordingly supersedes that standard. The technical requirements specified herein parallel those set out in ISO 5832/6 Implants for surgery—Metallic materials—Wrought cobalt-nickel-chromium-molybdenum alloy.

This standard differs from ISO 5832/6 in that the test methods called up are Australian standards rather than ASTM standards. The Australian and ISO standards are nevertheless believed to be technically equivalent.

The SAA committee that recommended to the Association the adoption of ISO 5832/6 as an Australian standard, viz MD/3, expressed the view to ISO/TC 150 that because of the high content of nickel, the alloy specified may not be suitable for applications where fretting would be significant. The view was expressed that while the metal would be suitable in hip joints it might not be suitable for use in, say, screws and plates. It was suggested that a qualifying sentence be added to Clause 1, Scope. ISO/TC 150 decided that action was not warranted prior to the issue of the first edition of 5832/6 but agreed to refer the question of including a future amendment along the lines suggested to ISO/TC 150/SC 1, Orthopaedic Implants.