

Australian Standard[®] 2773—1985

ULTRASONIC CLEANERS FOR HOSPITAL USE



STANDARDS ASSOCIATION OF AUSTRALIA
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Capital Territory Health Commission
Confederation of Australian Industry
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ULTRASONIC CLEANERS FOR HOSPITAL USE

AS 2773—1985

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PREFACE

This standard was prepared by the Association's Committee on Sterilizing Equipment. The preparation of this standard was prompted by the need for a nationally acceptable specification covering ultrasonic cleaners for hospital use, which will enable purchasers to specify equipment which will perform effectively. The standard will help to reduce the incidence of infection in hospitals from instruments and other devices.

Other Australian standards dealing with sterilizing and sanitizing are as follows:

- AS 1410 Pre-vacuum Pressure Steam Sterilizers (With Mechanical Air Removal)
- AS 1714 Ethylene Oxide Sterilizers (Using Ethylene Oxide/Dichlorodifluoromethane 12%/88% *m/m* Sterilizing Gas Mixture)
- AS 1862 Aeration Cabinets (For Use with Ethylene Oxide Sterilizers)
- AS 2182 Portable Electrically Heated Steam Sterilizers (Downward Displacement Pressure Steam Type)
- AS 2192 Horizontal Sterilizers (Downward Displacement Pressure Steam Type)
- AS 2437 Flusher/Sanitizers for Bed Pans and Urine Bottles
- AS 2487 Dry Heat Sterilizers (Hot Air Type)
- AS 2514 Drying Cabinets for Medical Equipment
- AS 2711 Washer/Disinfectors for Respiratory Apparatus
- AS 2774 Drying Cabinets for Respiratory Apparatus

It is intended to publish a standard for washer/disinfectors for hospital utensils.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
ULTRASONIC CLEANERS FOR HOSPITAL USE

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for the larger sized ultrasonic cleaners, of the fixed console types and of the mobile types, which are intended to clean surgical equipment and medical equipment in hospitals and similar situations.

NOTE: Guidance on information to be supplied with enquiries and orders and on use of ultrasonic cleaners is given in Appendices A and B respectively.

1.2 INNOVATION. It is not intended that the standard impose unnecessary restrictions on the use of new or unusual materials or methods.

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1192 Electroplated Coatings—Nickel and Chromium

AS 1259 Sound Level Meters
AS 1449 Wrought Alloy Steels—Stainless and Heat-resisting Steel Plate, Sheet and Strip
AS 2243 Safety in Laboratories Part 5—Non-ionizing Radiations
AS 3100 Approval and Test Specification for Definitions and General Requirements for Electrical Materials and Equipment

1.4 DEFINITION. For the purposes of this standard, the following definition applies:

Shall and should—‘shall’ is taken to be mandatory, ‘should’ is taken to be advisory.

SECTION 2. MATERIALS

2.1 GENERAL. Unless otherwise specified herein, materials and equipment shall comply with the relevant Australian standards and shall be suitable for continuous use under every intended operating condition.

2.2 FRAMEWORK. Fixed frames, including any support legs, shall be of stainless steel or hot-dip galvanized carbon steel.

2.3 EXTERNAL PANELS, TANKS AND LOADING EQUIPMENT. External panels, work surfaces, lids, rinsing tanks and metal parts of loading equipment shall be of stainless steel having corrosion resistance not less than that of Grade AS 1449/304. (See also Clause 3.8 for surface finish requirements.) Cleaning tanks shall be of stainless steel having corrosion resistance not less than that of Grade AS 1449/316.

The thickness of sheet metal shall be as follows:

(a) For external panels, rinsing tanks and lids not less than 0.9 mm.

(b) For walls and non-radiating surfaces of cleaning tanks not less than 1.2 mm.
(c) For radiating surfaces of cleaning tanks not less than 2.0 mm.

2.4 NOZZLES AND TANK FITTINGS. In sonation tanks, nozzles and any other fittings shall be of stainless steel.

In rinse tanks, nozzles shall be of stainless steel or chromium-plated brass.

2.5 PIPEWORK AND PIPE FITTINGS. Pipe-work and pipe fittings which are visible and external to the unit shall be chromium-plated and cuprous metals shall be nickel-plated before being chromium-plated. Chromium plating shall be at least to Service Condition 3 as specified by AS 1192.

2.6 VALVES. Valves shall be of non-ferrous metal, stainless steel or suitable plastics material.