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AS 3130—1988



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Australian Standard[®] 3130—1988

APPROVAL AND TEST SPECIFICATION— BEAUTY THERAPY EQUIPMENT



This Australian Standard was prepared by Committee EL/18/14, Safety of Beauty Therapy Equipment. It was approved on behalf of the Council of the Standards Association of Australia on 10 March 1988 and published on 17 June 1988.

The following interests are represented on Committee EL/18/14:

Advanced Association of Beauty Therapists
Australasian College of Physical Scientists in Medicine
Australian Federation of Aestheticians and Beauty Therapists
Confederation of Australian Industry
Department of Community Services and Health
Department of Technical and Further Education, N.S.W.
Department of Technical and Further Education, Vic.
Lincoln Institute of Health Sciences
Manufacturers and suppliers of beauty therapy equipment
Regulatory Authorities (Electrical)
The Australasian College of Dermatologists
The Institution of Biomedical Engineering (Australia)
The University of New South Wales

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This Standard was issued in draft form for comment as DR 87006.

AUSTRALIAN STANDARD

**APPROVAL AND TEST
SPECIFICATION—
BEAUTY THERAPY
EQUIPMENT**

AS 3130—1988

First published as AS 3130—1988.

**PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.**

ISBN 0 7262 5038 4

PREFACE

This Standard was prepared by the Association's Committee on Beauty Therapy Equipment.

The Standard has been prepared as a supplementary document to the parent specification AS 3100, *Approval and Test Specification for definitions and general requirements for electrical materials and equipment*. To facilitate application of the supplementary requirements of this Specification, the clauses of this Standard have been listed in approximately the same order as those of AS 3100.

This Standard does not address any performance requirements for the variety of therapy equipment mentioned herein nor is it intended to lend any support for the claimed efficacy of such equipment.

During preparation of the Standard, several contentious design and testing criteria were investigated and debated at length, including the following:

- (a) Whether this Standard should have been prepared as a supplementary document to AS 3200, *Approval and Test Specification for electromedical equipment, general requirements*. The Committee did not support this view, believing that beauty therapy equipment, although often deliberately connected to a person, did not fall within the AS 3200 definition of electromedical equipment (which is equipment intended for use by medically trained personnel in the diagnosis or treatment of a patient). However, it should be noted that beauty therapy equipment intended for use in a hospital for treatment of patients may be required, by the hospital, to also comply with AS 3200.
- (b) The limits for the electrical outputs of devices intended for deliberate electrical connection to a person.
- (c) The degree of access/isolation of electrical outputs which operate at other than mains supply voltage and frequency.
- (d) Another matter which drew critical comment was the scarcity and inadequacy of equipment marking and operating instructions for some equipment. The Committee acknowledged the need for improved marking and instructions for operators and was reassured to learn of recent initiatives in several TAFE colleges to provide formal training of commercial beauty therapists.
- (e) The hazards associated with glass electrodes which may be inserted into body orifices. The committee was particularly concerned with injuries which may result should the glass shatter. Eventually it was decided that such electrodes should be confined to use on external body surfaces, or be the subject of separate approval by the Statutory Authority.

During preparation of the Standard the Committee was aware that a high percentage of beauty therapy equipment used in Australia was manufactured overseas. Unfortunately, the committee was unable to identify any relevant overseas Standards which cover the safety of beauty therapy equipment and which might have offered guidance. Accordingly, the draft of this Standard was distributed as widely as possible, particularly to overseas manufacturers and testing authorities.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

APPROVAL AND TEST SPECIFICATION—BEAUTY THERAPY EQUIPMENT

1 SCOPE. This Specification prescribes the safety requirements for beauty therapy equipment (as defined in Clause 4.1) intended for operation from supply mains or from battery supplies (internal or external).

This Specification includes devices intended for use by private individuals and by beauty and slimming clinics (i.e. non-medical agencies).

This Specification does not apply to:

- (a) Motor driven massage appliances, the requirements for which are specified in AS 3311.
- (b) Electromedical equipment, the requirements for which are specified in the AS 3200 series of Specifications, e.g. short wave therapy equipment (AS 3209), microwave therapy equipment (AS 3210), and ultrasonic therapy equipment (AS 3211).
- (c) Ultraviolet and infrared radiation skin treatment appliances for household use, the requirements for which are specified in AS 2635 and in two other Specifications currently under development.
- (d) Solarium equipment used for cosmetic purposes, the requirements for which are specified in AS 2635.
- (e) Flexible heating pads, the requirements for which are specified in AS 3149.
- (f) Skin or hair care appliances, the requirements for which are specified in AS 3304.

2 APPLICATION.

2.1 General requirements of AS 3100. This Specification shall be read in conjunction with AS 3100 and the appropriate provisions of that Standard shall apply to the construction of the equipment and to the insulation and safeguarding of parts which normally carry current.

2.2 Specific requirements of this Specification. Equipment shall be deemed to comply with this Specification only if it complies with all the appropriate provisions of this Specification and passes the tests specified herein.

2.3 Requirements of other Specifications. Electrical equipment and components, e.g. thermostats, switches, flexible cords, incorporated in equipment which are depended upon for safety, shall comply with appropriate requirements of any relevant Approval and Test Specifications unless such requirements are varied herein.

NOTES:

1. Approvals authorities may at their discretion accept a manufacturer's declaration or an endorsed test report in respect to the testing of the whole machine or any part thereof.
2. Beauty therapy equipment may also be required to comply with AS 3200, should such equipment be purchased for use by medically trained personnel in their diagnosis or treatment of patients.

3 REFERENCED DOCUMENTS. The Standards referred to in this Standard are listed in Appendix F.

4 DEFINITIONS. For the purpose of this Specification, the definitions given in AS 3100 and the following apply:

4.1 Beauty therapy equipment—equipment designed to be used by other than professionally trained medical personnel and designed for treatment and care of a person's skin and body, including the following types:

NOTE: This equipment is designed to be used by trained beauty therapists (e.g. in clinics) or for private use (e.g. in the home).

- (a) Equipment with high frequency outputs (i.e. ≥ 10 kHz) including equipment for heat producing effects (including anti-bacterial).
- (b) Equipment with medium frequency outputs (i.e. ≥ 1 kHz < 10 kHz), including interferential outputs, for nerve and muscle stimulation.
- (c) Equipment with low frequency (i.e. < 1 kHz) outputs (e.g. faradic currents) for application such as nerve and muscle stimulators, electro-acupuncture, etc.
- (d) Equipment with extra-low voltage d.c. outputs (e.g. galvanic currents) designed to facilitate chemical changes by electrolytic action.
- (e) Equipment for epilation (hair removal).
- (f) Steam.
- (g) Suction and spray.
- (h) Lasers.
- (j) Magnetic.
- (k) Ozone.
- (l) Preparation equipment, e.g. wax pots.

4.2 Accessible conductive part—a part of electrically conductive material which in normal use, and without the use of a tool, can be touched with the standard test finger.

4.3 Class I equipment—equipment intended for connection to an external power supply in which protection against electric shock does not rely on basic insulation only, but which includes an additional safety precaution in that accessible conductive parts are connected to the earthing conductor in the fixed wiring of the installation in such a way that accessible conductive parts cannot become 'live' in the event of a failure of the basic insulation.

NOTES:

1. For equipment intended for use with a non-detachable supply flexible cord or cable this additional safety precaution includes an earthing conductor as part of the flexible cord or cable and a supply plug with earthing contact.
2. For equipment intended for use with a detachable supply flexible cord, the additional safety precaution includes an appliance inlet socket with earthing contact.
3. The connection to the earthing conductor is regarded as an essential safety precaution against electric shock hazard.
4. For equipment intended for permanent connection to the power supply the additional safety precaution includes a terminal for the connection of the protective earthing conductor.
5. Class I equipment may have parts with double insulation or reinforced insulation, or parts operating at extra-low voltage.