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Methods of test for

Anodic oxidation coatings on aluminium and its alloys —

Part 12: Measurement of specular
reflectance and specular gloss at angles
of 20°, 45°, 60° or 85°

UDC 669.716.915

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- Aluminium Federation
- Aluminium Window Association
- Association of Builders' Hardware Manufacturers
- British Anodising Association
- British Lock Manufacturers' Association
- British Metal Finishing Suppliers' Association
- Institute of Metal Finishing
- Institution of Chemical Engineers
- Institution of Corrosion Science and Technology
- Metal Finishing Association
- Metal Window Federation Limited
- Royal Institution of Chartered Surveyors

This British Standard, having been prepared under the direction of the Surface Coatings (other than Paints) Standards Committee, was published under the authority of the Board of BSI and comes into effect on 30 April 1987

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Foreword

This Part of BS 6161 has been prepared under the direction of the Surface Coatings (other than Paints) Standards Committee. It is based on a draft prepared by subcommittee 2, Anodized aluminium, of Technical Committee 79, Light metals and their alloys, of the International Organization for Standardization (ISO), with the active support and participation of the UK. It replaces Appendix Q of BS 1615:1972.

The individual Parts of this standard replace the appendices of BS 1615:1972 “*Anodic oxidation coatings on aluminium*”. As all the test methods required for the purposes of BS 1615 have now been issued as Parts of BS 6161, BS 1615 has been revised accordingly and is published simultaneously with this Part of BS 6161, superseding BS 1615:1972 which is withdrawn.

At present, the following Parts of this standard have been published:

- *Part 1: Determination of mass per unit area (surface density) of anodic oxidation coatings (gravimetric method);*
- *Part 2: Determination of thickness of anodic oxide coatings: non-destructive measurement by split-beam microscope;*
- *Part 3: Assessment of sealing quality by measurement of the loss of mass after immersion in phosphoric-chromic acid solution;*
- *Part 4: Assessment of sealing quality by measurement of the loss of mass after immersion in acid solution;*
- *Part 5: Estimation of loss of absorptive power of sealed coatings: dye spot test with prior acid treatment;*
- *Part 6: Assessment of sealing quality by measurement of admittance or impedance;*
- *Part 7: Accelerated determination of light fastness of coloured anodic oxidation coatings using artificial light;*
- *Part 8: Determination of the fastness to ultraviolet light of coloured anodic oxide coatings;*
- *Part 9: Measurement of wear properties with an abrasive wheel wear test apparatus;*
- *Part 10: Measurement of mean specific abrasion resistance with an abrasive jet test apparatus;*
- *Part 11: Measurement of total reflectance using a photoelectric reflectometer;*
- *Part 12: Measurement of specular reflectance and specular gloss at angles of 20°, 45°, 60° or 85°;*
- *Part 13: Image clarity test using the Gardam grid;*
- *Part 14: Determination of infra-red reflectance;*
- *Part 15: Determination of electrical breakdown potential;*

Further Parts of this standard will be prepared, if required.

This Part describes methods of test only and should not be used or quoted as a specification defining specular reflectance or specular gloss. Reference to this Part should state that the method of test used is in accordance with the appropriate method(s) of BS 6161-12.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

