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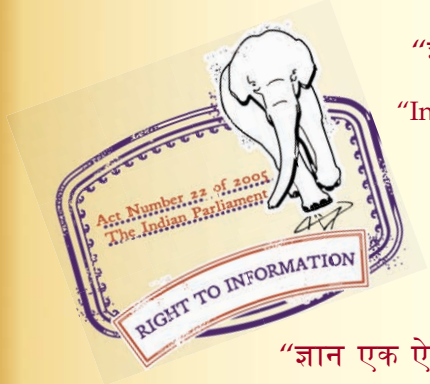

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GLOSSARY OF TERMS RELATING TO COPPER AND COPPER ALLOYS

PART 6 FINISHES

0. FOREWORD

0.1 This Indian Standard (Part 6) was adopted by the Indian Standards Institution on 30 October 1986, after the draft finalized by the Copper and Copper Alloys Sectional Committee had been approved by the Structural and Metals Division Council.

0.2 IS : 3288 (Part 1) covering terms for cast form and wrought form (main) was first published in 1965 and subsequently revised in 1973 and 1981. While reviewing the standard, the Sectional Committee decided to revise Part 1 and issue 7 more parts for making glossary more comprehensive by modifying the definition of several terms and by including many more terms commonly used in copper industry. The parts are:

Part 1 Materials (*third revision*)

Part 2 Unwrought and cast form

Part 3 Wrought form

Part 4 Processing

Part 5 Heat treatment

Part 6 Finishes

Part 7 Dimensional surfaces and structural characteristics

Part 8 Packing

0.3 This standard is intended mainly to cover technical definitions of terms relating to copper and copper alloys, and it does not necessarily include all the legal meanings of the terms. It is hoped that this standard will help in establishing a generally recognized usage for various terms encountered in the copper industry and eliminate any confusion which may sometimes arise due to individual interpretation of terms used in the industry.

0.4 In the preparation of this standard assistance has been derived from the following:

a) ISO 197 Copper and copper alloys — Terms and definitions

ISO 197/1-1983	Part 1 Material
ISO 197/2-1983	Part 2 Unwrought products (Refinery shapes)
ISO 197/3-1983	Part 3 Wrought products
ISO 197/4-1983	Part 4 Castings
ISO 197/5-1980	Part 5 Methods of processing and treatment

Issued by the International Organization for Standardization (ISO).

b) BS 1420 : 1965 'Glossary of terms applicable to wrought products in copper, zinc and their alloys'; issued by the British Standards Institution, London.

1. SCOPE

1.1 This standard (Part 6) defines commonly used terms on finishes in the field of copper and copper alloy.

2. FINISHES TERMS AND DEFINITIONS

2.1 Barrelled Finish — The finish obtained by tumbling products with or without abrassives in a rotating or vibrating container, primarily for the removal of burr and polishing.

2.2 Bright Annealed Finish — The finish obtained by annealing in a furnace atmosphere intended to prevent surface discolouration.

2.3 Bright Dipped Finish — The finish obtained by immersion in suitable solution (usually acid), followed by washing and drying to reveal the colour of the metal.

2.4 Bright Rolled Finish (Dry Rolled Finish) — The burnished appearance obtained by cold rolling clean metal through polished rolls without the use of any coolant or lubricant.

2 5 Cold Rolled Finish — The relatively smooth finish obtained by rolling at room temperature.

2.6 Dichromate Finish — The finish obtained by immersion in an aqueous solution of sodium or potassium dichromate and sulphuric acid followed by washing and drying.

2.7 Drawn Finish — The finish obtained by drawing through a die.

2.8 Extruded Finish — The finish (often oxidized and dull) obtained by hot extrusion through a die without subsequent processing.

2.9 Hot Rolled Finish — The finish obtained by rolling above recrystallization temperature.

2.10 Matt Finish — A finish obtained by mechanical or chemical means resulting in a surface which reflects light diffusely.

2.11 Open Annealed Finish (Rough Annealed Finish) or (Scale Annealed Finish) — The finish obtained by annealing in air.

2.12 Pickled Finish (Acid Cleaned Finish) — The finish obtained by immersion in a sulphuric acid or other suitable solution to remove scale and oxide followed by washing and drying.

2.13 Polished Finish (Buffed Finish) — A high gloss or polish usually obtained by buffing.

INTERNATIONAL SYSTEM OF UNITS (SINUITS)

Base Units

Quantity	Unit	Symbol
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

Quantity	Unit	Symbol
Plane Angle	radian	rad
Solid angle	steradian	sr

Derived Units

Quantity	Unit	Symbol	Definition
Force	newton	N	$1\ N = 1\ kg.m/s^2$
Energy	joule	J	$1\ J = 1\ N.m$
Power	watt	W	$1\ W = 1\ J/s$
Flux	weber	Wb	$1\ Wb = 1\ V.s$
Flux density	tesla	T	$1\ T = 1\ Wb/m^2$
Frequency	hertz	Hz	$1\ Hz = 1\ c/s\ (s^{-1})$
Electric conductance	siemens	S	$1\ S = 1\ A/V$
Electromotive force	volt	V	$1\ V = 1\ W/A$
Pressure, stress	pascal	Pa	$1\ Pa = 1\ N/m^2$

INDIAN STANDARDS INSTITUTION

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002

Telephones: 331 01 31, 331 13 75 **Telegrams: Manaksanstha**
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*Sales Office in Bombay is at Novelty Chambers, Grant Road, Bombay 400007 — 89 65 28

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