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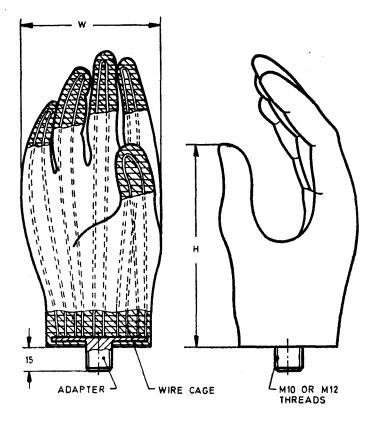
Indian Standard

SPECIFICATION FOR COSMETIC HAND, ARTIFICIAL LIMB

1. Scope — Specifies dimensional and functional requirements of cosmetic hand used for cosmetic purposes in upper limb prosthetic fitments.

2. Shape, Size and Dimensions

2.1 Shape of the cosmetic hand is shown in Fig. 1 for guidance. The major dimensions shall be as indicated in table under Fig. 1.



Size		+	v	V
	.Min	Max	Min	Max
SMALL	105	110	55	60
MEDIUM	125	130	70	75
LARGE	135	140	80	85

All dimensions in millimetres.

FIG. 1 HAND, COSMETIC

- 2.2 Cosmetic hand shall normally be made in 3 sizes namely small, medium and large meant to be used on child, ladies and adults.
- 2.3 The overall width of the cosmetic hand shall be decided by the distance between the head of the metacarpals of index finger and little finger. It shall be denoted by W'.
- 2.4 The overall height of the cosmetic hand from the level of wrist region to thumb vertex shall be decided by keeping the thumb parpendicular to the plane of wrist. This shall be denoted by 'H'.

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3. Material

- 3.1 Light weight materials such as plastics shall be used as filling material to meet the **desired** functisnalibility. Wire cages may be from materials such as aluminium alloy, copper galvanized mild steel wire etc. The materials shall conform to the requirements of the relevant Indian Standards wherever applicable.
- 4. Functional Requirements
- 4.1 The cosmetic hand shall have anatomically proportionate fingers and thumb. The shape may be in the functional position as shown in Fig. 1.
- 4.2 The hand construction shall be rigid enough to allow stretching of outer glove over it for better cosmetic appearance.
- 4.3 The fingers and thumb shall be capable of being passively operated independently to achieve different posture positions.
- 4.4 Provision of an adapter with M 10 or M 12 threading for securing the wrist unit shall be made in accordance with IS: 5594-I 983 'Wrist unit rotary for hand prosthesis (*first revision*)'. The cosmetic hand shall match with the wrist unit at the wrist region.
- 4.5 The cosmetic hand shall be given an asthetic smooth finish.
- 5. Marking The cosmetic hand shall be marked with the manufacturer's name, initials or **recognised** trade-mark and its size.
- 5.1 ISI Certification Marking Details available with Indian Standards institution.
- 6. Packing As agreed to between the purchaser and the supplier.
- 7. Sampling Sampling scheme and acceptance criteria shall be as agreed to between the manufacturer and the purchaser. However a recommended sampling plan is given in Appendix A.

APPENDIX A

(Clause 7)

SAMPLING PLAN AND CRITERIA FOR CONFORMITY

- A-I. Lot In any consignment all the cosmetic hand of the same size and manufactured from the same material shall be grouped together to constitute the lot.
- A-2. The number of the cosmetic hand to be selected at random from each lot shall be in accordance with col 1 and 2 of Table 1.

TABLE 1 SC	CALE OF SAMPLING	AND CRITERIA FOR	CONFORMITY
Lot	Size	Sample	Size
101 ,	, 100	3 5 8 13 20	

- A-2.1 In order to ensure the randomness of selection, procedures given in IS: 4905-1968 'Methods for random sampling' may be followed.
- A-3. Number of Tests and Criteria for Conformity Each cosmetic hand selected in accordance with 7.2 and Table 1, shall be inspected for shape, size and dimensions and functional requirements. A cosmetic hand shall be considered as defective if it fails to satisfy any one or more. of the requirements. A lot shall be considered as conforming to the requirements of the standard if none of the cosmetic hand in the sample is found defective.

EXPLANATORY NOTE

In the preparation of this standard considerable assistance has been given by Artificial Limbs Manufacturing Corporation, Kanpur. In this standard main emphasis is on the functional requirements.