

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 5180 (1969): Needles, Hypodermic, Dental [MHD 8: Dentistry]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard
**SPECIFICATION FOR
 NEEDLES, HYPODERMIC, DENTAL**

1. Scope—Dimensions and requirements of the interchangeable and cartridge type of hypodermic dental needles.

2. Materials

<i>Component</i>	<i>Material</i>
Blade or cannula	As given in 3.1 of IS:3317-1965*
Head	Either soft metal alloy entirely or soft metal alloy encased in a harder outer sheath of metal. The materials used shall withstand sterilization in hot air at 200°C for at least one hour
Stillette	As given in 3.3 of IS:3317-1965*

3. Shape and Dimensions—As shown in Fig. 1.

4. Finish—Blade shall be smooth both outside and inside and free from pits, tool marks, burrs and foreign matter.

4.1 Stillette shall be smooth, bright and free from kinks and shall slide smoothly into the blade and shall pass from one end to the other.

5. Tests for Needle Blade

5.1 Stiffness—A sample of needle tubing or a needle blade shall be loaded centrally with a load of 708 g on a span of 9.5 mm. The maximum deflection shall be not greater than 0.48 mm.

5.2 Elasticity—A sample of needle tubing shall be held rigidly in a chuck, the jaws of which may be radiused slightly. Alternatively, a needle blade attached to a head shall be held rigidly at the head. The specimen shall be deflected through a 12° arc at a distance of 8 mm from the chuck or head. Upon release, the needle shall show no permanent set.

5.3 Reverse-Bend Resistance—A sample of needle tubing shall be held rigidly in a chuck, the jaws of which may be radiused slightly. Alternatively, a needle blade attached to the head shall be held rigidly at the head. The specimen held at a distance of 8 mm from the chuck or the head shall be bent to the right and then to the left to an angle of 25°, this constituting one complete bending cycle. The specimen shall withstand without breaking 20 complete bending cycles.

5.4 Corrosion Resistance—The complete needle shall be immersed in a 10 percent citric acid solution at room temperature for 5 hours. After removal of the specimen from the acid solution, it shall be kept immersed in boiling distilled water for 30 minutes. The water and the immersed needle shall then be allowed to cool and shall remain at room temperature for 48 hours. Glass containers shall be used for the tests. The specimen after having been dried by evaporation, shall not show significant corrosion.

6. Tests for Union of Blade and Head

6.1 Loading Test—The head of both interchangeable and cartridge needles shall be firmly fixed to the blade so that the blade shall withstand, without loosening of the head, a pull of 2.00 kgf for 1 minute.

6.2 Pressure Test of Fitting of Head of Interchangeable Needle—After water has been run through the needle in order to ensure that it is completely filled and air totally eliminated, the needle shall be sealed off at the injection end by inserting the point into a piece of hard rubber. There shall be no perceptible leak between the blade and the head when a water pressure of 3 kgf/cm² is maintained for 20 seconds.

7. Packing—In accordance with the trade practice.

8. Marking—The packet shall be marked with type, external bore diameter and nominal length of the needle, manufacturer's name, initials or registered trade-mark and the country of manufacture.

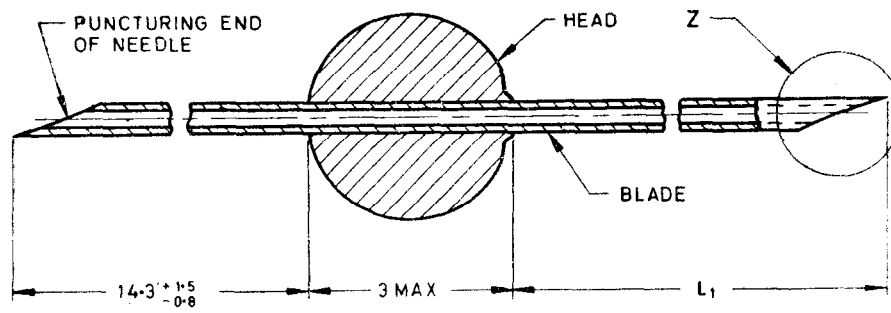
8.1 ISI Certification Marking—Details available from Indian Standards Institution, New Delhi I.

*Specification for needles, hypodermic.

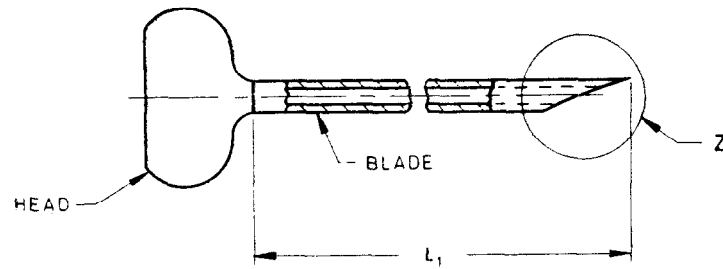
Adopted 16 July 1969

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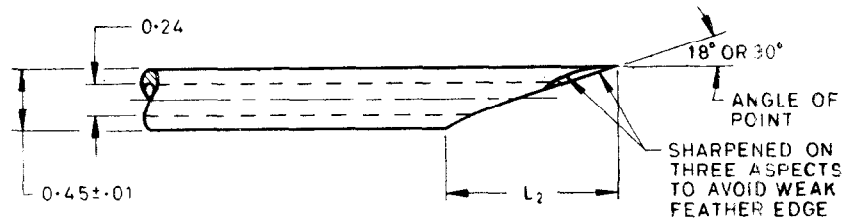
Price Rs 3.00



CARTRIDGE TYPE



INTERCHANGEABLE TYPE



DETAIL AT Z

	Cartridge Type	Interchangeable Type
L_1	25.0 or 42.0	25.0 or 42.0
L_2	18° 1.25 ± 10 percent	1.25 ± 10 percent
	30° 0.70 ± 10 percent	0.70 ± 10 percent

All dimensions in millimetres.

FIG. 1 NEEDLES, HYPODERMIC, DENTAL