IS 1269 (Part 1): 1997 Legal Metrology - Material Measures of Length

This Indian Standard (Part 1) covers the requirements for woven metallic and glass fibre tape measures used for measurements where the use of rigid length measures is not practicable. Standard specifies nominal lengths of 0.5, 1, 1.5, 2, 3, 4 or 5 m or an integral multiple of 5 m provided that the maximum shall not exceed 100 m. Standard specifies that product shall be made from suitable **fabric**(coated in order to have a good finish) or **plastic material** for upto 5 m tape and of **yarn metal wire and glass fibre** type for above 5 m length which are sufficiently strong, stable and resistant to environmental influences under the normal conditions of use. Standard prescribes requirements such as robust construction, finish, degree of accuracy, Straight and parallel edges, not causing any **inaccuracy** or permanent deformation in the tape, **rust proof coating** & free from burrs with provisions for manual and automatic winding. Standard specifies that graduated scales shall be clear, regular, indelible, and printed in such a way that reading is definite, easy and unambiguous. Graduation lines are straight, perpendicular to the longitudinal axis of the tape measure and of uniform thickness and size. The **numerals** on the tape measure shall be **clear, uniform and indelible and legible**. The position, dimension, shape, colour and contrast of the numerals shall be suitable for the scale and the graduation lines to which they relate. Further standard specifies that the tape of above 5 m length should be supplied in case made of leather or corrosion resistant metal with its specifications such as breaking strength and dimensions in order to increase the durability. The tape should employ winding device on the reel with its robust construction so that it rotates freely. Nominal length in metres, zero of the scale, manufacturer's name/trade-mark, Class of accuracy: I, II or III shall be legibly and indelibly marked.

Thus the standard takes well care of the ease, performance, durability and accurate readings in different conditions of its use through its specifications.