

GRADUATED HOSE

BACKGROUND OF THE INVENTION

This invention relates to a graduated hose, and more particularly to a graduated hose which permits a required amount of the hose to be cut for selling or the like or depending on its applications.

A conventional graduated hose is generally constructed in such a manner as shown in Fig. 1. More particularly, the conventional graduated hose generally designated at reference numeral 10 is provided thereon with a length scale on which scale values or marks 12 for indicating residual lengths of the hose 10 are provided thereon at intervals of every unit length in a longitudinal direction thereof. When a certain length portion of the conventional hose 10 thus graduated is to be sold, the hose which is wound on a reel (not shown) is drawn out of the reel, resulting in being cut into the length.

Cutting of the hose into a required length is carried out by subtracting a value of the required length from a current residual scale value 14 indicating a current residual length of the hose 10 to determine a new residual scale value 16. Then, the hose 10 is cut at a cut portion 18 thereof defined forward of the new residual scale value 16 on the scale.

Thus, in the conventional graduated hose, it is required to carry out subtraction prior to the cutting. Unfortunately, subtraction is generally hard as compared with addition. Also, a required length into which the hose is cut is generally varied every time when the cutting is required. Thus, such calculation as described above is troublesome to a degree sufficient to cause time and labor to be needed.

Also, in sales management of a hose, it is generally required to manage a total length of the hose sold. Troublesomely, such management requires to list a length of the hose cut for every selling or carry out subtraction of a residual length of the hose from its original length.

SUMMARY OF THE INVENTION

The present invention has been made in view of the foregoing disadvantage of the prior art.

Accordingly, it is an object of the present invention to provide a graduated hose which is capable of permitting a position on the hose at which the hose is to be cut into a required length for selling or the like to be readily perceived.

It is another object of the present invention to provide a graduated hose which is capable of permitting a total length of the hose sold and a residual length of the hose to be readily perceived to facilitate sales management of the hose and management of the residue.

In accordance with the present invention, a graduated hose is provided. The graduated hose includes a hose body and a length scale provided on the hose body. The length scale is provided thereon with first scale marks indicating lengths from an original distal end of the hose and second scale marks indicating residual lengths of the hose.

In a preferred embodiment of the present invention, the first scale marks and second scale marks each are arranged at every unit length of the hose.

In a preferred embodiment of the present invention, the first scale marks and second scale marks are indicated by triangles of which apexes are directed in directions opposite to each other.

BRIEF DESCRIPTION OF THE DRAWINGS

These and other objects and many of the attendant advantages of the present invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings in which like reference numerals designate like or corresponding parts throughout; wherein:

Fig. 1 is a fragmentary plan view showing an essential part of a conventional graduated hose;

Fig. 2 is a perspective view generally showing a

graduated hose according to the present invention which is wound on a reel;

Fig. 3 is a fragmentary plan view showing an essential part of an embodiment of a graduated hose according to the present invention; and

Fig. 4 is a fragmentary plan view showing an essential part of another embodiment of a graduated hose according to the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Now, a graduated hose according to the present invention will be described hereinafter with reference to Figs. 2 to 4.

Referring first to Figs. 1 and 2, an embodiment of a graduated hose according to the present invention is illustrated. A graduated hose of the illustrated embodiment which is generally designated at reference numeral 10 includes a hose body 20 and a length scale provided thereon so as to extend in a longitudinal direction of the hose body 20. In the illustrated embodiment, the graduated hose may be wound on a reel 22 as shown in Fig. 2.

The length scale is provided thereon with scale values or marks 12 indicating lengths of the hose body 20 from both ends of the hose body 20 at intervals of every 1m. More particularly, the scale marks 12 comprise first scale marks a (a_1 , a_2 , a_3 ---) indicating lengths of the hose 10 defined at intervals of every 1m from a distal end of the hose and second scale marks b (b_1 , b_2 , b_3 ---) indicating residual lengths of the hose. Both scale marks are provided at substantially the same positions on the hose body 20. In the illustrated embodiment, the first scale values or marks a_1 , a_2 , a_3 --- each are indicated by a triangle of which an apex is directed toward a proximal end of the hose and the second scale values or marks b_1 , b_2 , b_3 --- each are indicated by a triangle of which an apex is directed toward the distal end of the hose. In the illustrated embodiment, the triangles each may be an isosceles triangle and the marks or values a_1 , a_2 , a_3 --- and b_1 , b_2 , b_3 --- each may be a metric dimension.

Now, cutting of the hose 10 thus constructed into a length of X (m) will be described hereinafter.

Initially, as shown in Fig. 3, the first scale mark a_1 and second scale mark b_1 exist on the distal end of the hose 10. Then, the first scale mark a_2 and the second scale mark b_2 are arranged at intervals of every 1m. Such marking is repeated. Thus, in the state shown in Fig. 3, a total length or quantity of the hose which has been sold till then is indicated at a_1 (m) and the residual quantity or length is indicated at b_1 (m).

Then, the first scale marks a (a_1, a_2, a_3 ---) are considered. More particularly, the length X (m) required is added to the first scale mark a_1 , so that a first scale mark $a_x = a_1 + X$ is calculated and then the hose is cut at a cutting position 18 determined on the basis of the first scale a_x , resulting in being sold. At this time, the cutting position 18 is determined forward of the first scale mark a_x and a second scale mark b_x , both marks are left on a portion of the hose wound on the reel 22. Thus, a total length or quantity of the hose sold and the residual length or quantity of the hose are readily perceived to be a_x (m) and b_x (m), respectively.

Referring now to Fig. 4, a second embodiment of a graduated hose according to the present invention is illustrated. A graduated hose of the second embodiment is constructed in substantially the same manner as the first embodiment described above, except that isosceles triangles indicating first scale marks a (a_1, a_2, a_3 ---) and second scale marks b (b_1, b_2, b_3 ---) while distinguishing them from each other are arranged on a hose body 20 in directions opposite to those in the first embodiment and a manner different therefrom. In the second embodiment, the triangles for the first scale marks a and those for the second scale marks b are arranged in a manner to be substantially opposite to each other.

In the graduated hose of the second embodiment constructed as described above, when it is desired to cut the hose into a length of X (m) for selling or the like, the hose is cut at a cut position 18 defined forward of a first scale mark a_x

and a second scale mark b_x on the hose body 20. In the illustrated embodiment, the cutting may be carried out straight along a base of the triangle indicating the first scale mark a_x .

In Fig. 4, reference numeral 24 designates marks each arranged at a position spaced by a distance of 0.5m from each of the first scale marks a or second scale marks b. Such marks facilitates selling of the hose by unit lengths of 0.5m.

As can be seen from the foregoing, the graduated hose of the present invention permits a position at which the hose is to be cut into a required length for selling or the like to be readily perceived and permits a total length of the hose which has been sold till then and a current residual residue of the hose to be readily perceived to facilitate sales management of the hose and management of the residue.

It will of course be understood that the present invention has been described above purely by way of example, and modifications of detail can be made within the scope of the invention.



What is Claimed is:

1. A graduated hose comprising:
a hose body; and
a length scale provided on said hose body;
said length scale being provided thereon with first
scale marks indicating lengths from an original distal end of the
hose and second scale marks indicating residual lengths of the
hose.
2. A graduated hose as defined in Claim 1, wherein said
first scale marks and second scale marks each are arranged at
every unit length of the hose.
3. A graduated hose as defined in Claim 1 or 2, wherein
said first scale marks and second scale marks are indicated by
triangles of which apexes are directed in directions opposite to
each other.
4. A graduated hose substantially as hereinbefore
described with reference to the accompanying drawings.