METHOD OF MAKING THREADED TUBES


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3 Claims. (Cl. 29—156)

The principal objects of this invention are to provide a method of manufacturing a tube having an integral internal thread and to provide means by which the metal necessary for the thread can be provided on a thin tube in a very inexpensive way; to provide such an internally threaded tube with such an integral nut having plenty of metal to carry the thread, and to provide a construction in which an external thread can be employed.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing, in which

Fig. 1 is a plan of a flat blank of metal rolled out to shape and cut to the proper dimensions for forming the tube;

Fig. 2 is an edge view of the same;

Fig. 3 is an elevation of the finished tube;

Fig. 4 is an end view of the same;

Fig. 5 is a longitudinal section showing a form of the invention in which an external thread is employed, and

Fig. 6 is an end view thereof.

The blank 10 for forming the tube is rolled out flat, provided with a portion 11 of a thickness greater than the thickness of the sheet of the rest of the blank 10, preferably of at least twice that thickness. This portion is cut off at the ends 12 so as not to be quite the same width as the rest of the blank. It is also chamfered or slanted at 13 in the process of rolling.

This blank is then rolled up to the form shown in Figs. 3 and 4. The thickened portion is made shorter than the thin portion because its internal circumference is less. The edges of the tube at 14 are welded together. The thickened portion 15 is left inside and later provided with a thread 16 by cutting or otherwise. Thus the tube is provided with an integral internal nut and with the proper metal to support it.

It will be seen that the extra thickness of metal 13 is turned inward and furnishes the necessary metal to enable a wide thread to be cut or otherwise formed in the interior of the tube to form a nut with all the strength that would be required for it. The thread can be cut without danger of marring the inside surface of the tube.

This constitutes a very inexpensive method of producing a tube with an internal nut, eliminating the necessity of providing a separate nut, and attaching it to the tube. This saves expense on account of the fact that the steel is rolled in the form described.

In Figs. 5 and 6 is shown the use of the same method to produce a tube threaded externally. The only difference is that the original blank of metal 16 is thick enough to permit of threading it externally at 17. Both forms of the invention can be applied to a previously formed tube as shown in Fig. 6.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:—

1. The method of making an internally threaded tube which consists in rolling a blank of steel to the desired shape and simultaneously rolling upon it a thickened portion, cutting the blank to a form in which the thickened portion is shorter than the main portion of the blank, forming the blank into a complete cylinder, welding the two edges of the cylinder together, and providing an internal screw thread in the thickened portion.

2. The method of making an internally threaded tube which consists in rolling a flat blank from steel having the main portion of a thickness equal to the desired thickness of the walls of the tube, simultaneously rolling a thickened portion at one end, bending the blank to form a cylindrical tube with the thickened portion inside, securing the two edges of the blank together to complete the tube, and forming a screw thread on the thickened portion at the end to provide it with an integral internal nut.

3. The method of making a threaded tube which consists in rolling a blank of steel to the desired shape and simultaneously rolling upon it a thickened portion, cutting the blank to a form in which the thickened portion is shorter than the main portion of the blank, forming the blank into a cylinder, welding the edges of the cylinder, providing an internal screw thread in the thickened portion, and threading the exterior of the tube.

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