Tube roller

This project started more than 12 months ago. Well the thought process started then as it was part of an idea to The first phases were those of designing and then building a capacitor. A lot of looking around the web and choosing a design that would fit my needs.

With that underway it became time to build the loop. I made the choice that I wanted a circular loop but all the information said you needed a “professional” tube rolling machine. A search of the web showed a number of home brew concepts but none seemed to allow adjustment in the range I wanted. One came close so this was designed on that.

During periods of wandering around a chain hardware store looking at things I had no use for reminded me that there was a bit of building hardware that could be useful.

As can be seen from the introductory photographs the unit is capable of producing a loop of clean lines. It will handle either copper or aluminium from 12 mm to 25 mm.

The Home Brew tube Roller – concept design. Dimension to suit the scrap material you have available. A series of drawings have been prepared to show how the tube roller has been constructed. Please not dimensions have not been included, as none were or are critical. My unit was made with a length of 75 x 50mm timber that I had. There was just enough to make 2 side frames nominally 360mm long and 2 spacers. I had a piece of 75 x 50 mm hardwood which I thought would make ideal rollers. They did but they could equally as well have been made out of a softwood.

No it was not painted in all those pretty colours. That has been done to show the individual pieces There are not dimension-critical. Make it to this general format and it will work. There is only the one driven roller. The one with the handle attached.
If there is a tricky piece of construction it is the driving pin for the handle roller. My pin was made from a 75mm nail. The roller is drilled right through its edge centre line. The shaft is drilled to match. The shaft is fitted to the plate and the pin gently hit flush. If it’s loose, wrap the roller in PVC tape or equivalent to hold the pin in place.

The bracket shown in blue is a building post support. Common in hardware suppliers (in Australia and New Zealand). It should be the same in your part of the world.