

# MAGAZINE RACK

## Tools Required to Make this Design:

Scrolling: Mk 2/2H or Mk 2/3 Former  
 Punching: Practical or Master Punch/Shear (or XL5+ Power Bender fitted with 3mm punch block & pin - or use 5mm holes but 5mm rivets will be required\*)  
 Riveting: Practical or Master RBR (or XL5+ Power Bender)  
 Rolling: Practical or Master RBR (or XL5+ Power Bender - radius may need to be altered)  
 Cutting: Practical or Master Punch/Shear (or XL5+ Power Bender)

### 1 Main Rolled Rings 1200mm (x 2)

COMPONENT 1

It is recommended with all steel lengths, you first remove any excess oil, grease or scale with a cloth or abrasive paper.

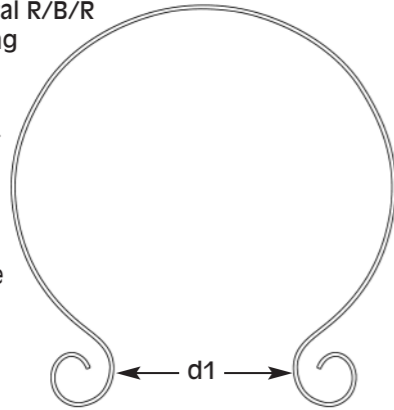
Take two lengths of 1828mm (6') 20 x 3mm steel, cut each down to 1200mm and trim all the corners then, using a fine tip marker or pencil, mark the two scroll points 'S1' 160mm from either end as shown in Component 1 overleaf.

Start by placing one end of the steel in the Mk 2/2H Former (or Mk 2/3 Former) and form a small scroll up to such point that the mark 'S1' makes contact with the Scroll Former's segment. Repeat this at the other end of the steel (making sure you are creating a 'C' scroll).



Repeat all this with the second length.

Next, set up the Practical R/B/R for rolling, and roll a ring making sure the scrolls are on the outside of the ring as shown here. Roll from scroll to scroll finishing with a gap (d1) between the scrolls of approx. 180mm. Then, using the completed component as a template, repeat the process on the second piece.



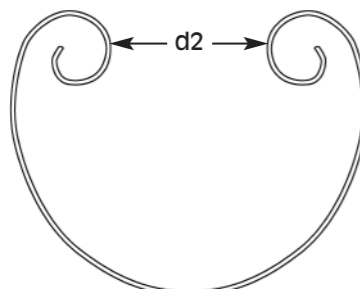
### 2 Inner Scrolls 800mm (x 2)

COMPONENT 2

Take one length of 1828mm (6') 20 x 3mm steel, cut two pieces of 800mm each, trim all the corners then mark the two scroll points 'S2' 160mm from either end as shown in Component 2 overleaf. Repeat the scrolling process (as described above), again to create a 'C' shape. Do this on both lengths.



Next, roll a ring again but, this time, the scrolls at either end need to be on the inside as shown here. Roll from scroll to scroll leaving a gap (d2) of approx 110mm. Then, using the completed component as a template, repeat the process on the second piece.



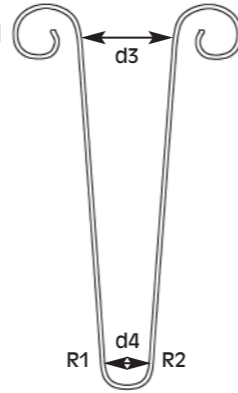
### 3 Inside Scrolled Bar 1100mm (x 1)

COMPONENT 3

Take one length of 1828mm (6') 20 x 3mm steel, cut down to 1100mm and trim all the corners then mark the two scroll points 'S3' 160mm from either end as shown in Component 3 overleaf. Also mark the centre point 'C1' and at points 'R1' 50mm from 'C1' on either side.



Then, exactly as with Components 1 + 2, start by placing one end of the steel in the Mk 2/2H Former (or Mk 2/3 Former) and scroll up to the mark 'S3'. Repeat this at the other end (making sure you are creating a 'C' scroll).



Next, place in the Practical R/B/R tool and roll between points 'R1' to 'R2' making sure the scrolls are on the outside as shown here.

Roll to give a gap of approx. 90mm at the top (d3) and approx. 50mm at the bottom (d4) between points R1 and R2.

### 4 Straps 120mm (x 2)

COMPONENT 4

Using offcuts from the 'Main Rolled Ring' (Component 1) cut two lengths of 120mm each and trim corners. Mark at 'H1' 7mm in from each end as shown in Component No 4 overleaf and punch.

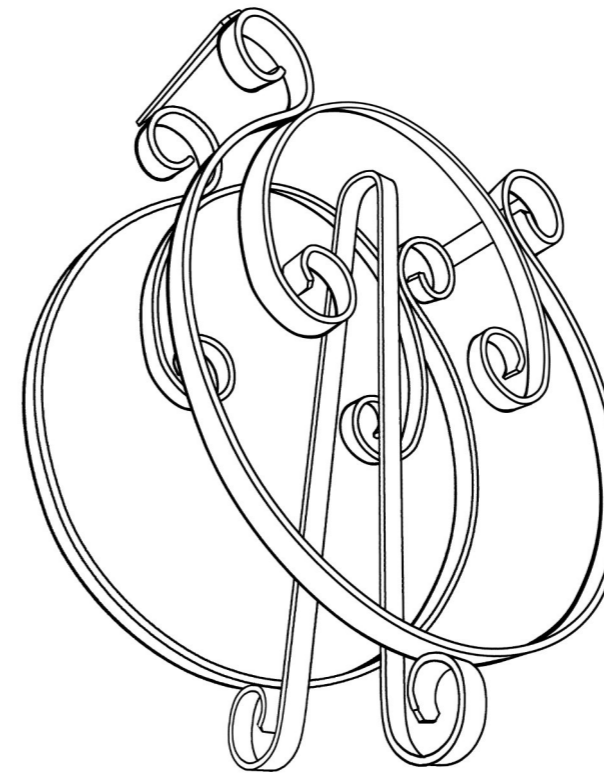
**5 Assembly** Take each of the Inner Scrolls (Component 2) and place one inside each of the Main Rolled Rings (Component 1) making sure both sets are equal. Mark the punch holes (in the centre of the bar) where the components meet, making sure there will be a gap of approx. 10mm from the baseline (when upright) as shown in Diagram 1. Punch holes and then fasten together with the 10mm x 3mm nuts & bolts.

Next, mark at the very top of the Main Rolled Rings (Component 1) and at the bottom of the scrolls on the Inside Scrolled Bar (Component 3) where the two meet, using Diagram 2 as a guide. Make sure there is a gap of approx. 15mm between the bottom of the Inside Scrolled Bar and the baseline (when upright) as shown in Diagram 2. Punch and then nut & bolt together.

Using Diagram 3 as a guide, offer up the two Straps (Component 4) to the outside of the scrolls on the Main Rolled Rings (Component 1). You will have to bring the legs in to do this. Make sure the Straps are parallel with the floor and that the bottom edge of the Strap just touches the floor. Mark corresponding points on scrolls then punch and nut & bolt together.

When you are happy with the assembled Magazine Rack, rivet together making sure you rivet the Inside Scrolled Bar to the Inner Rings first - you will need to twist them slightly to get them between the rivet posts on the R/B/R tool. Once riveted, they can be twisted back into the required position. Another person may be required to assist with this process.

Finally, rivet Component 2 to Component 1 and finish with the Straps.



metalcraft™

## Design Pack MAGAZINE RACK

DIFFICULTY RATING:

EASY

STRAIGHTFORWARD

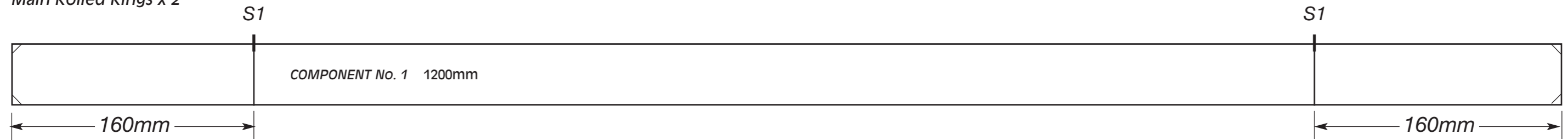
MORE COMPLEX



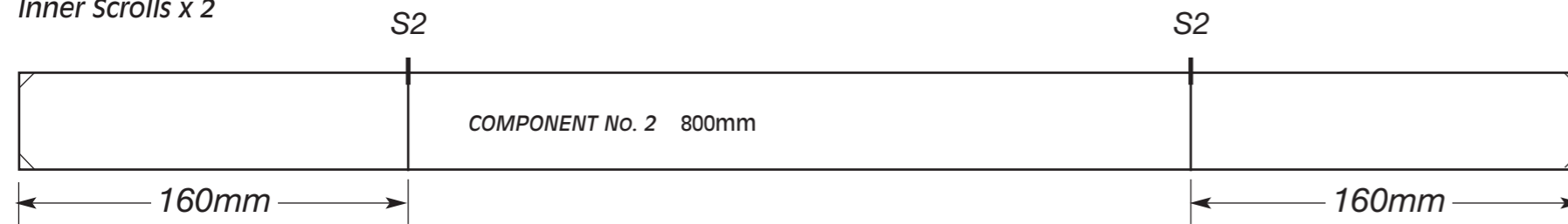
Finishing  
 The finished item can now be painted in a wide variety of finishes (smooth, satin, hammer and metallic) either by aerosol or by brush application. Powder coating and plastic dip finishes can also be applied but these type of finishes are more for commercial/industrial scale finishing.  
 However, even with aerosol or paint finish you can make your finished item look professional. In this case we used paints from the Plasti-Kote and Hammerite/Decorating outlets. For best results, always follow instructions on the tin and make sure the metal is free of all scale, dirt, grease or rust.

# Design Pack: MAGAZINE RACK - DESIGN SHEET

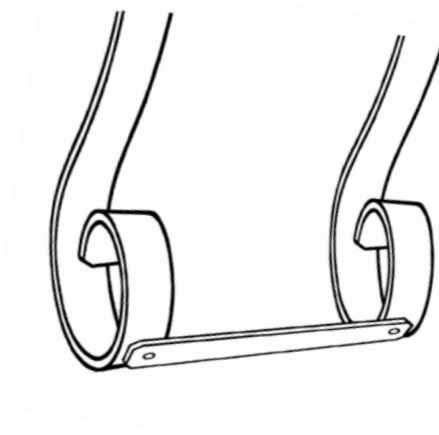
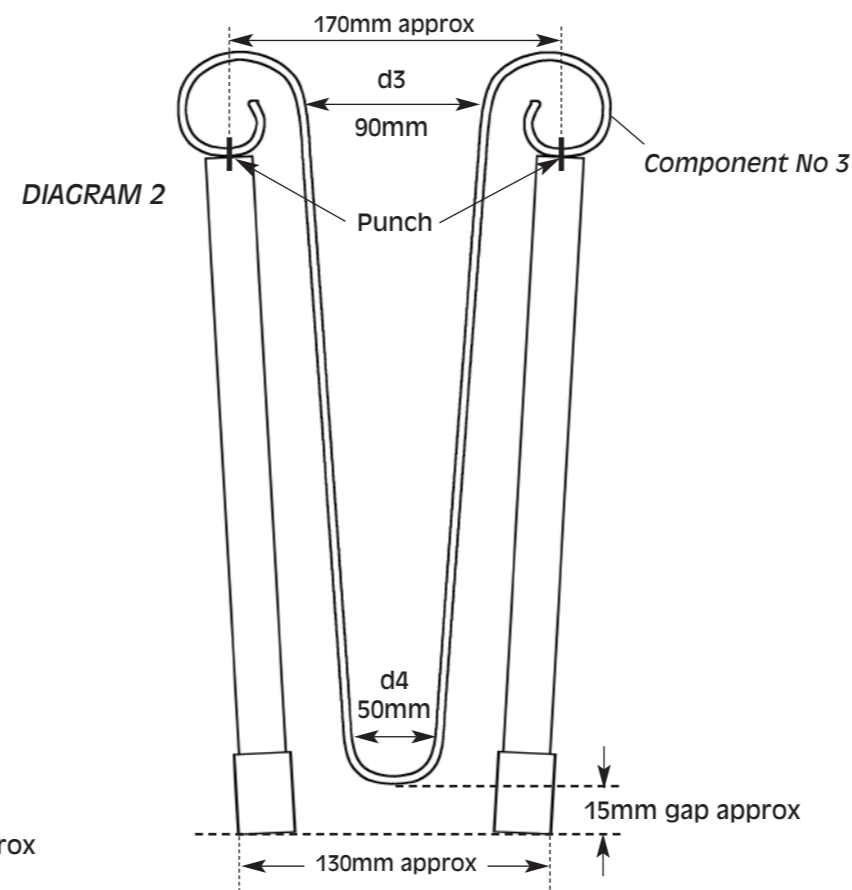
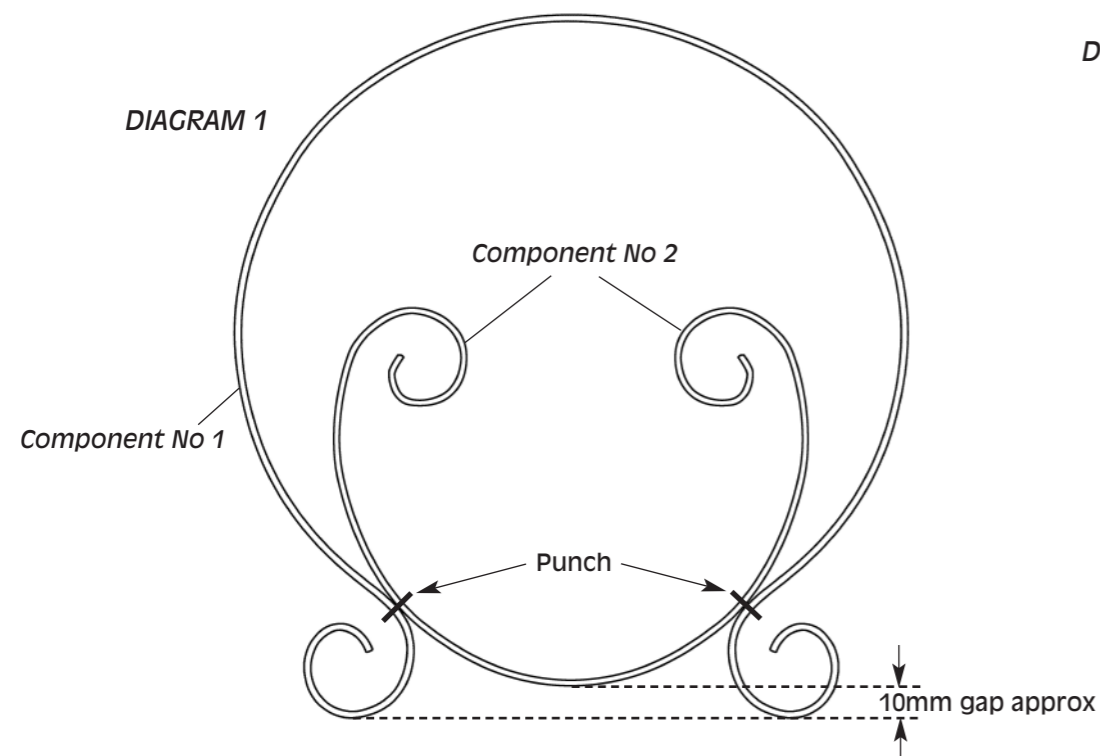
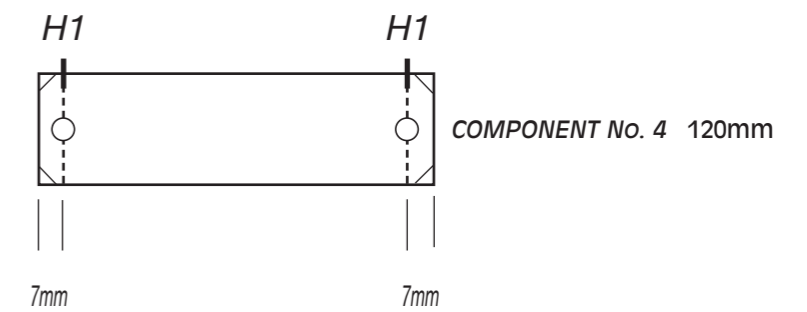
Main Rolled Rings x 2



Inner Scrolls x 2



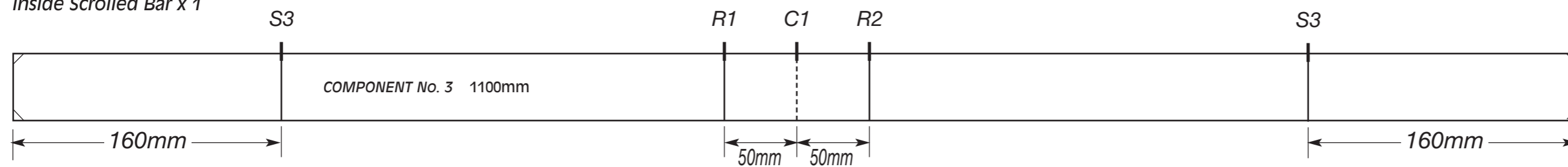
Straps x 2



## List of Materials Required:

- 4 x 1828mm (6ft) Lengths of 20mm x 3mm Steel Strip [Re-Order Ref: MC039]
- 10 x 3mm Rivets [Re-Order Ref: MC052L]
- 10 x 3mm Nuts & Bolts [Re-Order Ref: MC060L]

Inside Scrolled Bar x 1



NOT TO SCALE