

TALL CANDLE STAND

Tools Required to Make this Design:

Scrolling: Mk 3/3 Former
 Punching: Master Punch/Shear (or XL5+ Power Bender) fitted with 5mm punch block & pin and if possible use 3mm holes Block & Pin for punching holes at the top of the scrolls where the six candle trays (provided in this pack) are intended to sit – see below for more details)
 Riveting: Master RBR (or XL5+ Power Bender)
 Bending: Master RBR (or XL5+ Power Bender)
 Rolling: Master RBR (or XL5+ Power Bender)
 Cutting: Master Punch/Shear (or XL5+ Power Bender)

SPECIAL NOTE – If you only have Practical Tools you can still make a similar looking item to this using 20mm x 3mm steel instead. Although this may require a slight adjustment to the (Mk 2/3 former or Mk2/2H former) scrolling dimensions accordingly. The rolling and bending and riveting can be done on the Practical RBR and the cutting and punching on the Practical Punch/Shear.

1 Legs 1524mm (x 3)

COMPONENT 1

Take three 1524mm (5') lengths of 25 x 5mm steel and, it is recommended, first remove any excess oil, grease or scale with a cloth or abrasive paper.

Trim all the corners on the three lengths and, using Component 1 on the Design Sheet overleaf as a guide, lay out each length in turn and, using a fine tip marker or pencil, mark in 250mm from each end (S1 & S2) and then at one end measure in a further 90mm from S2 and mark this as bending position B1.

Next mark the three punched hole points H1, H2 and H3.

Now take one of the lengths and place it in the Mk3/3 Former and scroll up to the S1 mark and then the S2 mark - making sure you create a 'C' scroll as shown here. Repeat this on the other two lengths.

Now take the Master Punch & Shear tool and punch the three holes H1, H2 and H3 using the 5mm punch pin & block. Repeat this on the other two lengths.

Using the Master R/B/R tool bend each length at B1 to 160° using Template No. 1 as a guide. Do this gradually so as not to over bend and take care to put the 'C' scroll into the Master RBR tool the correct way round to bend as shown here. At this stage check all three bends on each of the legs are as identical as possible by laying them on top of each other.

Finally, using a set square or accurately drawn right angle (as shown in Diagram 1), mark the very top point of the top scroll (furthest away from B1) and use the Master Punch & Shear to punch the hole required for the Candle Tray to be fixed to. For best results, use a 3mm Block & Pin to punch this hole, although a 5mm hole will probably suffice but the 3mm Nut & Bolt fixing provided will have to be tightened up and checked to make sure it is firmly located.

2 Smaller Scrolls 900mm (x 3)

COMPONENT 2

Take three 1524mm (5') lengths of 25 x 5mm steel and cut each down to 900mm and trim all corners.

Then, using Component 2 on the Design Sheet overleaf, mark the Scroll Points S3 & S4 250mm in from each end. Then measure in a further 50mm from each scroll mark and punch points (H4 & H5) using a 5mm Block & Pin. Repeat for the other two lengths.

Now take one of the lengths and place it in the Mk3/3 Former and scroll up to the S1 mark and then the S2 mark - making sure you create a 'C' scroll as shown here. Repeat this on the other two lengths.

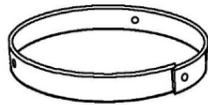
Next place each one of these 'C' scrolls in the Master Punch/Shear tool in turn and punch at points H4 and H5 using the 5mm punch pin & block.

Finally, using a set square or accurately drawn right angle (as shown in Diagram 1), mark the very top point of the scroll and use the Master Punch & Shear to punch the hole required for the Candle Tray to be fixed to. For best results, use a 3mm Block & Pin to punch this hole, although a 5mm hole will probably suffice but the 3mm Nut & Bolt fixing provided will have to be tightened up and checked to make sure it is firmly located.

3 Bottom Ring 600mm (x 1)

COMPONENT 3

Using an offcut from one of the Smaller Scrolls (Component 2), cut this down to 600mm, and trim the corners. Then lay out and mark the three punched hole points H1 as shown on the Design Sheet overleaf (Component 3).

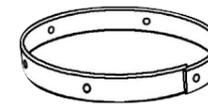


Punch a 5mm hole at all points in the Master Punch & Shear tool and finally, roll this length into a circle so that ends come round and just touch each other using the Master R/B/R.

4 Middle & Top Rings 600mm (x 2)

COMPONENT 4

Again, using offcuts from the Smaller Scrolls (Component 2), cut down each length to 600mm, and trim the corners.



Then lay out and mark the six punched hole points H6 and H7 as shown on the Design Sheet overleaf (Component 4). Next punch a 5mm hole at all points using the Master Punch & Shear tool and finally, use the Master RBR to roll both lengths in turn into circles so that ends come round and just touch each other. Make sure these two components are as identical as possible and of the same size as the Bottom Ring (Component 3).

5 Assembly

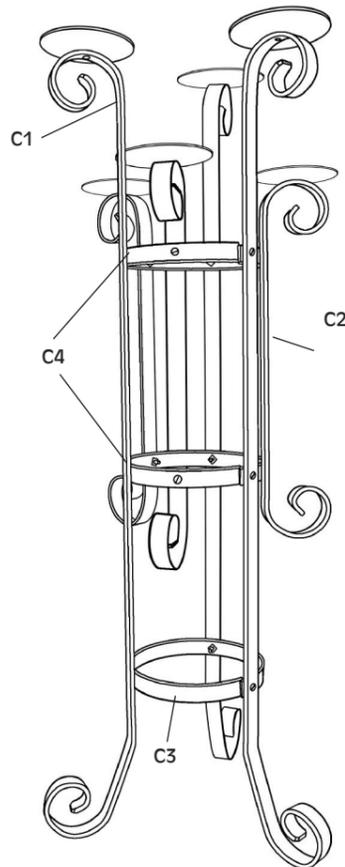
Firstly align the holes H1 on the Bottom Ring (Component 3) on the inside of the three Legs (Component 1) at hole position H1 and use the 16mm x 5mm nuts/bolts supplied to fix the Bottom Ring in place.

Then in a similar manner fix the Middle Ring in position using the 16mm x 5mm nuts/bolts with Holes H6 aligned to H2 on the three Legs (Component 1). Then fix the Top Ring in position with Holes H6 aligned to Holes H3 on the three Legs (Component 1).

Then take the three smaller scrolls and fix to the middle and top rings via Holes H4 & H5 with Holes H7 again using the 16mm x 5mm nuts/bolts. However, make sure the small scroll is fixed the correct way up with the pre-punched hole for the candle tray at the top.

When happy with the alignment of everything tighten up all nuts and bolts.

Finally, rest the Candle Tray on the top of each of the scrolls and fix in place using the smaller 12mm x 3mm nuts and bolts with the bolt head on the underside and the nut on the top.



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 ranges - available from most DIY and Painting/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.

Finishing

metalcraft™

Design Pack TALL CANDLE STAND

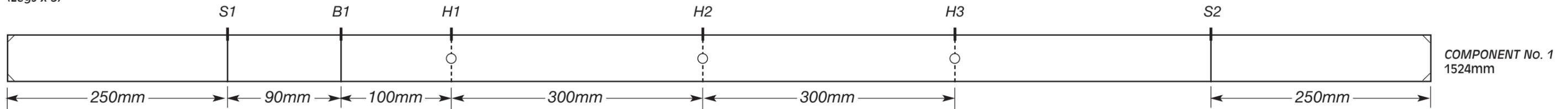
DIFFICULTY RATING:

EASY	✓
STRAIGHTFORWARD	
MORE COMPLEX	

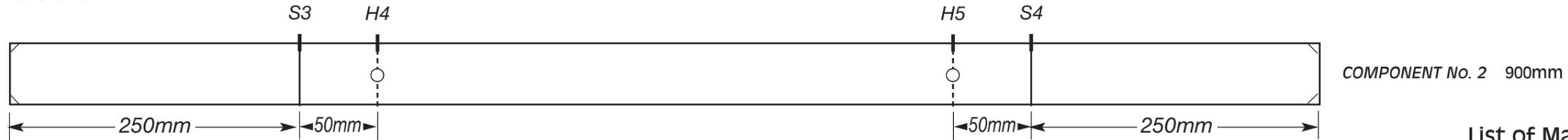


Design Pack: TALL CANDLE STAND - DESIGN SHEET

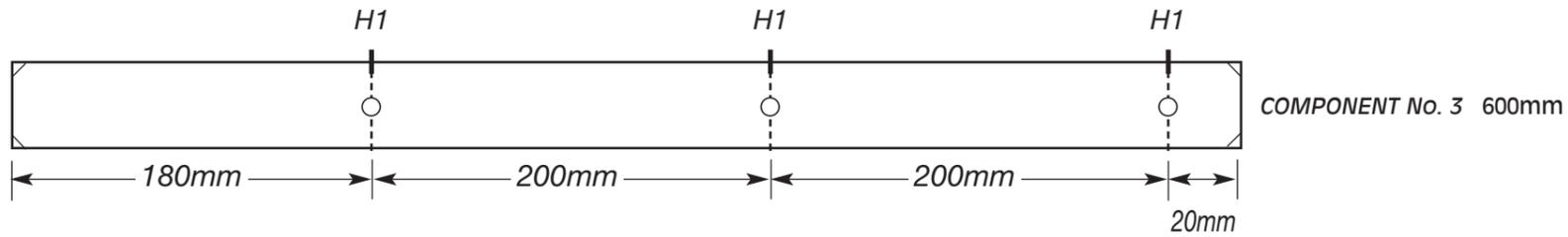
(Legs x 3)



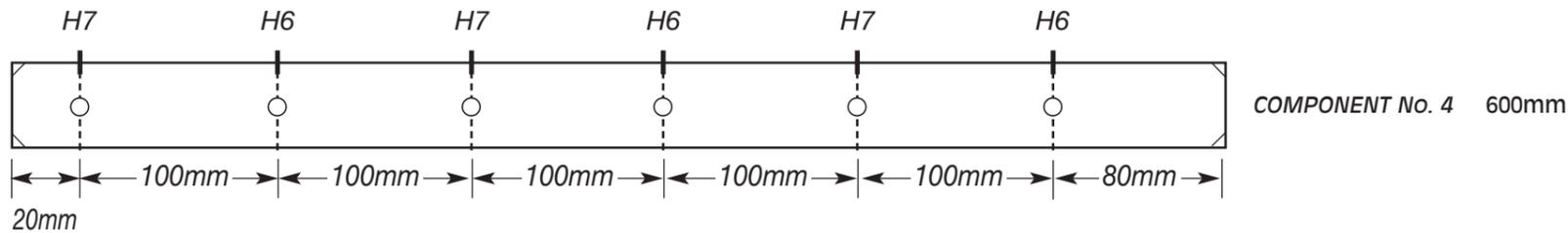
(Scrolls x 3)



(Bottom Ring x 1)



(Middle & Top Ring x 1)



List of Materials Required:

- 6 x 1524mm (5ft) Lengths of 25mm x 5mm Steel Strip [Re-Order Ref: MC040]
- 6 x 5" Candle Trays [Re-Order Ref: MC955]
- 1 Pack x 12mm x 3mm Nuts & Bolts [Re-Order Ref: MC061L]
- 1 Pack x 16mm x 5mm Nuts & Bolts [Re-Order Ref: MC063]

TEMPLATE No. 1

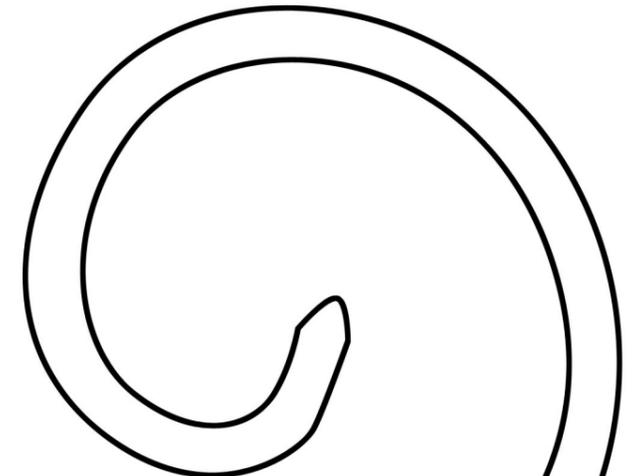


DIAGRAM 1

