

Procedure for marking stainless steel with Cougartron MK612 marking machine and vinyl cut-out type stencil

Preparation of the workpiece

1. Ensure that the area to be marked is in a horizontal position
2. Remove all traces of grease and dirt from the area to be marked with a clean cloth / wiper paper and white spirits

Application of the vinyl stencil

(see video 'How to Install a Large Vinyl Decal or Sticker' - <https://www.youtube.com/watch?v=bRkURz3GrDQ>)

3. Place the vinyl stencil on the workpiece in the desired position
4. Use masking tape to make a 'hinge' down the centre of the stencil
5. Peel the backing from the left half of the stencil, and cut off it away using scissors
6. Use a scraper device, (up and down motions) and start the strokes from the centre of the stencil, to apply the stencil to the workpiece.
7. Remove the masking tape 'hinge' and remove the backing from the remainder of the stencil. Apply this in the same way as for the previous half of the stencil.
8. Once all of the stencil is applied, then carefully remove the remaining film from the vinyl

Marking procedure

9. Ensure the MK612 machine is switched off
10. Plug both leads into the power unit. It doesn't matter which way these are plugged in.
11. Plug the earth clamp onto one of the leads, and the etching handle and electrode onto the other lead
12. Fix a piece of black carbon felt and yellow membrane onto the etching electrode using a rubber O-ring.
13. Pour a small amount of the CGT-S1 etching fluid into the small plastic container provided
14. Dip the electrode into the fluid, and ensure that the felt is completely soaked all the way through with the fluid.
15. Also, for larger stencils, use the CGT-S1 bottle to drop a small amount of fluid over the area to be marked.
16. Switch the MK612 machine on, and set the selector to 9V. Ensuring the timer is on 'manual' setting.

17. Run the electrode over the areas to be marked. Use a firm (but not too hard) downward pressure and ensure that the end of the electrode is flat on the surface at all times.
18. Take care to cover all areas equally. Use a 1" diameter circular motion when moving the electrode. Combine this with running the electrode in straight lines.
19. Once the entire stencil has been covered, you will notice that it takes on a black (mottled, inconsistent) hue.
20. Use a clean cloth or wiper paper to remove all fluid off the surface of the stencil. Use the same cloth to dab the end of the electrode.
21. Repeat steps 14-20 3-4 times until the marked areas are a solid black colour
22. Remove the vinyl stencil.
23. Spray the entire marked area thoroughly with CGT-N1 neutralising fluid and wipe off with a clean cloth or wiper paper.
24. The marking process is now complete.