

HIMACS Bowl Installation

HM2150

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Introduction

This section guides the installation of HIMACS Bowls(Shapes).

Overview

HIMACS cast sinks and bowls, HIMACS thermoformed sinks and bowls can be fitted with the under-mount technique with or without a rebate. The minimum general method to get the bowl installation with stable quality will be addressed in this section.

Note!

- 1. This guideline has been created to provide technical information for successful fabrication and installation of HIMACS, and it is intended to be used in a safe environment considering their own discretion and risk by who has technical skill for fabrication and installation of HIMACS.
- 2. This guideline is continually revised to provide reliable and up-to-date information, replacing all previous versions of the guideline and technical information, however the usage and conditions of use are beyond LX Hausys control, LX Hausys cannot guarantee the suitability of material, fabrication and installation for all usage and conditions of use. Users should not regard or rely on this guideline as a complete, sole, up-to-date or absolute information. HIMACS users, fabricator and installer should review whether the design for HIMACS, fabrication method, installation method and required performance are suitable for the intended use and conditions of use. LX Hausys shall not be liable for any direct or indirect, commercial damages or losses caused by the fabrication and installation results of HIMACS using any or all of these guideline. In addition, the results of joining with other materials, and the fabrication and installation guidelines for other materials shall not be converted by LX Hausys.
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HI-MACS

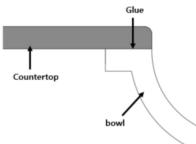
1. Basic Information

Using the rebate method is strongly recommended when sheet and bowl have the same color.

Fig. 1-1. Under mount with reboting
Rebate and Glue
Countertop

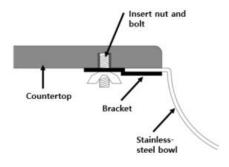
When the color of the sheet and bowl is different an easy butt seam under-mount technique can be done. Ensure the surface where you bond is smoothen.

Fig. 1-2. Under mount without rebating



Other bowls like stainless-steel or ceramic bowl can be installed as shown in Fig.1-3 under mount stainless-steel bowl and Fig.1-4 top mount ceramic bowl.

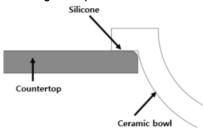
Fig. 1-3. Under mount stainless-steel bowl



Note!

Never use direct crew or bolt on HIMACS sheet to fix any products and material. The stress from the direct screw will make cracks on HIMACS sheet.

Fig. 1-4. Top mount ceramic bowl

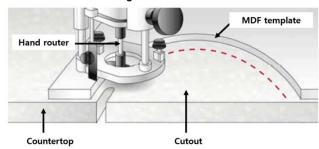


2. Installation Details

2-1. Bowl installation with rebate

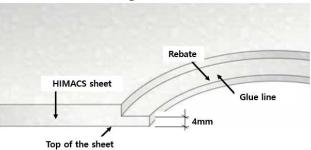
- Use a pre-made cut-out template made out of MDF or any other wooden material.
- Calculate the cutout so that the whole of the final cutout in the sheet is smaller than the inside diameter of the bowl.
- · An overhang(oversize) of 2 to 3 mm is fine.
- Bring the "cutout template" in position and fix it properly with clamps.
- Ensure the work piece is in a straight position and properly supported.
- Rout the cutout (clockwise) by using a hand router with a min. of 1.8 KW power and which is able to take a 12mm shank, a 10mm and a 30mm sleeve guide.

Fig. 2-1. Cutout



- · Remove the "cutout template" and position the "rebate template".
- Use a sharp 20double flute carbide router(side and ground cutter) with a 30mm sleeve guide. Install the depth of the router in a way that at least 4mm of material thickness of the HIMACS sheet will be left.
- After finishing this step. Take off the "rebate template" and proceed with the normal cleaning procedure, using denatured alcohol and a white clean cloth or a white industrial paper.
- Clean the rebate and the edge of the bowl which will be bounded to remove any dust, grease or pen marks best with denatured alcohol and a white cloth.
- After cleaning do not touch with your fingers. If so, clean it again because dirt may show up in the glue line later.

Fig. 2-2. Rebate



- Prepare HIMACS adhesive. Fill in the tube with the filler component of the tube with the hardener, if you use tube type adhesive
- · Squeeze out some air and close the top of the tube with the plug.

- Put the tube in an orbital sander and mix it properly for at least 1,5 min. by moving the tube to the left and to the right direction.
- · Ensure the mixing of the adhesive is properly done.
- Put on the adhesive in a continuous line into the rebate or on the edge of the bowl.

Fig. 2-3. Glue

HIMACS adhesive
Tube/Cartridge

HIMACS sheet

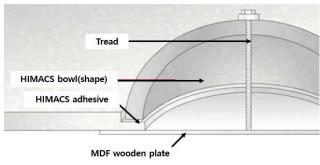
Glue bead

- · Turn over the bowl and position it into the rebate.
- Ensure the drain whole is on the right place when turning the sheet later and that the bowl is placed square.
- When the bowl is in the right position, clamp it down with clamps or with a thread through the drain whole protected by a thick sheet of wood and additional clamps in front if needed.
- · Ensure not to over tighten the strip.

Top of the sheet

 Leave the HIMACS-Adhesive cure for at least 35min. by min room temperature of +17°C.

Fig. 2-4. Fixing



- · Take off the clamping systems and turn over the sheet.
- Trim the cutout with a tungsten carbide profile router bit with Nylon bearing and a shank of 12mm.
- Always use a profile of 45° and start exactly at the glue line between bowl and sheet. Do not use any radius it causes to see more of an eventual slight color difference between sheet and bowl of the same color.

Fig. 2-5. 45° Trimming

45°

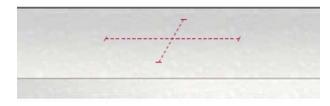
Glue line

 Sand and finish off according to 'HM2100 HIMACS Finishing(Sanding and Polishing)' - "Semi-Gloss-Finish".

2-2. Bowl installation without rebate

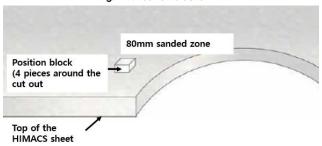
- · Mark position of the bowl from the back of the sheet.
- Ensure the position of the bowl is correct when turning over the sheet later on.

Fig. 2-6. Marking



- Bring the "cutout template" in position and clamp it down properly with clamps.
- Ensure the work piece is in a straight position and properly supported.
- Cutout the hole with a hand router of at least 1.8 KW power and which is able to take a 12mm shank, a 10 mm single flute carbide router bit with a 12mm shank and a 30mm sleeve guide.
- · Ensure the work length of the router bit is well measured.
- Sand a stripe of approx. 80 mm next to the cutout on the back of the HIMACS sheet smooth by using a random orbital sander with sandpaper of 100 and 60 micron (or 150/180 grit sandpaper).
- Ensure all marks and scratches of the pre-sanded back of the sheet are removed.
- Bring the bowl in the right position again and glue 3-4 position blocks (with a size of approximate 2cm x 2cm made of HIMACS or in wood) and fix them with hot-melt glue (Remove them after finishing).

Fig. 2-7. Position blocks



- Clean parts, the sheet and the edge of the bowl which will be bounded to remove any dust, grease or pen marks – best by using denatured alcohol (or Acetone) and a clean white cloth.
- After cleaning do not touch with your fingers. If so, clean it again because dirt may show up in the glue line later.
- Prepare HIMACS adhesive. Take a 45ml or a 250ml cartridge with the right color as needed. (check your sheet/adhesive color list)
- Squeeze out some of the liquid without mixer tip to check if both: hardener and liquid are been moving out of the cartridge.
- Add the mixer tip and put the first 2cm of the adhesive on side and start bonding process. Ensure the mixing of the adhesive is properly done.
- Put on the adhesive in a continuous line, best onto the edge of the bowl.
- · Turn over the bowl and position it.



- Ensure the drain whole is on the right place when turning the sheet later and that the bowl is placed square.
- When bowl is in the right position, clamp it down with clamps or with a thread through the drain whole protected by a thick sheet of wood and additional clamps in front if needed. Ensure not to over tighten the strip.
- Leave the HIMACS -Adhesive cure for at least 35min. by min room temperature of +17°C.
- Do not clean off non cured adhesive with Acetone or denatured alcohol. This could cause weakness of the adhesive.
- · Install additional mechanical fixings to a 4-corner cross-level.

Fig. 2-8. Fixing system (Keil undercut anchor)





- · Take off the clamping systems and turn over the sheet.
- Trim cutout with a tungsten carbide profile router bit with Nylon bearing and a shank of 12mm (exp. Titman, XC201-12,7-12-25*12).
- Sand and finish off according to 'HM2100 HIMACS Finishing(Sanding and Polishing)' - "Semi-Gloss-Finish".

2-3. Other bowl installation

- With a separate template make a smaller cutout into the top so that the bowl fit and the flange of the bowl can be properly fixed to the top.
- Put a radius on both edges of the sheet thickness –top and bottom.
- Sand edges with 150/180 grit sandpaper (or 100/60 micron sandpaper) smooth.
- Top mount: Install the sink from the top when insert into the cutout and fix it with elastic adhesive (like silicone)
- Under mount: Install the bowl from underneath with elastic adhesive (like silicone) and additional mechanical fittings.
- · See Fig. l-4 and Fig. 1-5

Note!

- Every kitchen sink requires additional support when the countertop is installed. While a HIMACS kitchen sink is not as heavy as cast iron, the overall dimension means that full of water, dishes, and cookware, the weight is substantial.
- Due to the variety of sink-and-cabinet combinations LX Hausys does not recommend a specific product from the many resources available. However, the guideline for installing a cast iron sink indicates the type of support that must be provided.

Referenced documents

'HM2080 HIMACS Cutting & Cutout'
'HM2090 HIMACS Seaming(Bonding)'
'HM2100 HIMACS Finishing(Sanding and Polishing)'

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