

Comcal strap brazing procedure

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Procedure preparing steps:

Step 1. Make sure appropriate protective equipment is used. (Gloves and safety glasses)

Step 2. Make sure the working area is clean.

Step 3. Inspect the brazing assembly functional (no jam on the rails; brazing roads not loose)

Step 4. Turn on temperature sensor.

Step 5. Make sure heating power supply is plugged and operational. Power it up.

Step 6. Wait till temperature raise up to 600°F

Step 7. Clean oxide layer with file from flanges at brazing area. Make sure that you clean bezeld edge of small and big flange. Do ~(3-4) file moves for small and (8-10) moves for big one. See pic. 1.



*Pic.1 Cleaned bezeld edges
of big and small flange*

Step 8. Remove filing dust with vacuum cleaner from the table.

Step 9. Stir the brazing compound with stirring stick and make sure oil not separated.

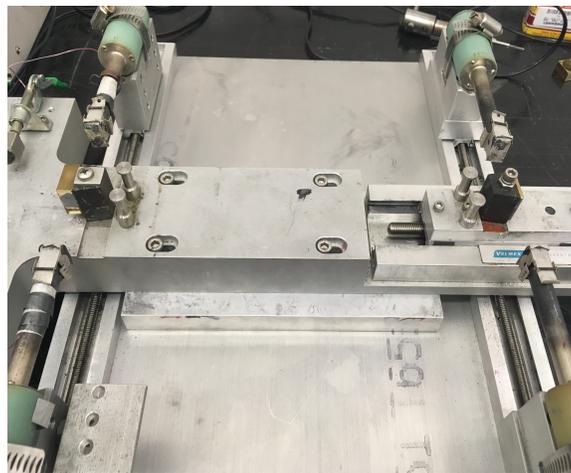
Brazing procedure:

Step 10. Apply brazing compound to brazing area of flanges. Make sure you apply thin film, avoid big drops.



Pic. 2 Brazing compound applied

Step 11. Place flanges on mounting blocks and align them with side edges. See pic. 2.



Pic.3 Flanges alignment

Step 12. Set position of front forge adjuster to 1.39 .

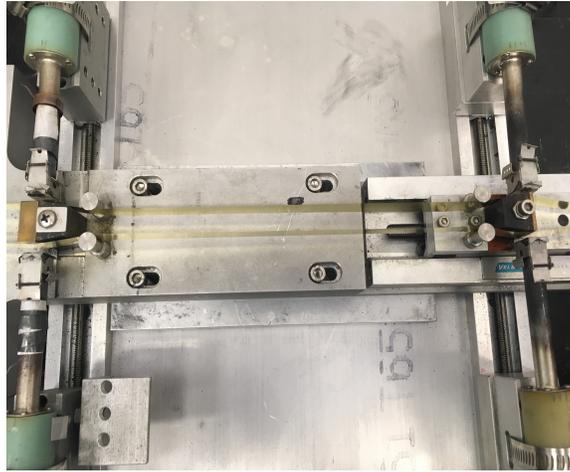
Step 13. Take two brass strip. Make sure that strip length is about 45cm.

Step 14. Place brass strips into channel holders and clamp them with green rear clamps. Be careful of hot brazing heads. Hold clamps with your fingers all the time. Apply longitudinal tension to the brass strip strip front side.

Step 15. Align the brass strip that it in the middle of front-end and rear flange.

Step 16. Use the adjustment knobs to bring brazing heads within 1cm of flange surfaces.

Step 17. Use knobs to provide final motion and bring brazing heads in contact with the flanges. Apply firm press and wait for 20 seconds for each side. See pic.4



Pic.4 Brass brazing

Step 18. Reverse knobs to home position.

Step 19. Move front forge adjuster to 1.2 position.

Step 20. Walk back end flange off holding block using excess strap material, do not touch flanges (they are hot).

Step 21. Wait till flanges are cool down and trim off excess strap material with razor blade or knife.



Pic.5 Brazed brass

Step 22. Move final product to storage area for QA check.

Step 23. Clean work space and remove metal filings with vacuum cleaner.