

## Procedure steps for assembly BNB horn.

H.L. 10/28/20

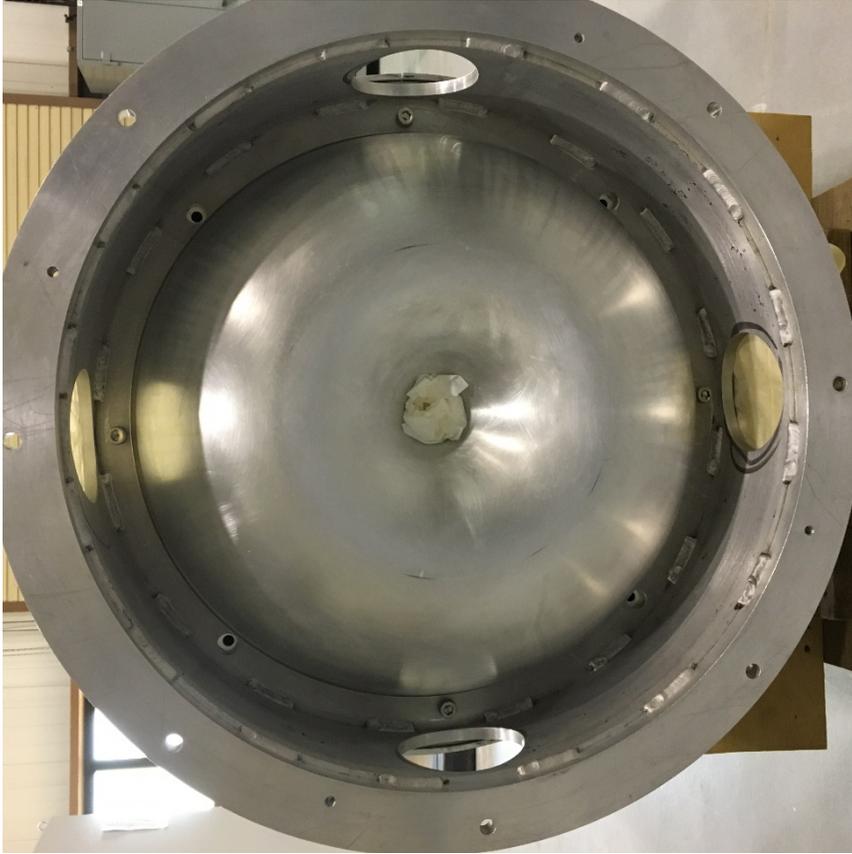
After finished welding inner conductor and inspect all the welded. If the BNB horn inner conductor is looking good, 100% penetration then move it out of the welding machine and move it to assembly area.

- 1- Install outer conductor into the assembly fixture. ME #389036A



- 2- Remove inner conductor outer cell in vertical, make sure the DS end cap at the top.









- 3- Install inner conductor into outer conductor, remember install the Evac seal in vacuum groove. Use Kapton tape to hold Evac seal in place. See drawing # ME-389030C, ME-389037, ME-389022A





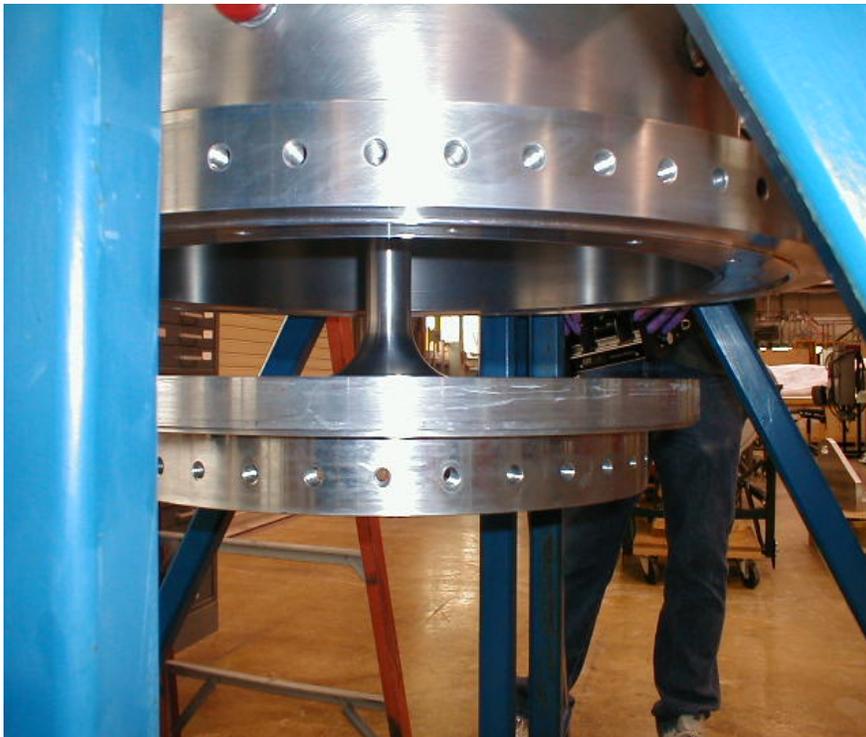




4- Remove inner conductor fixture after finish installation inner into outer



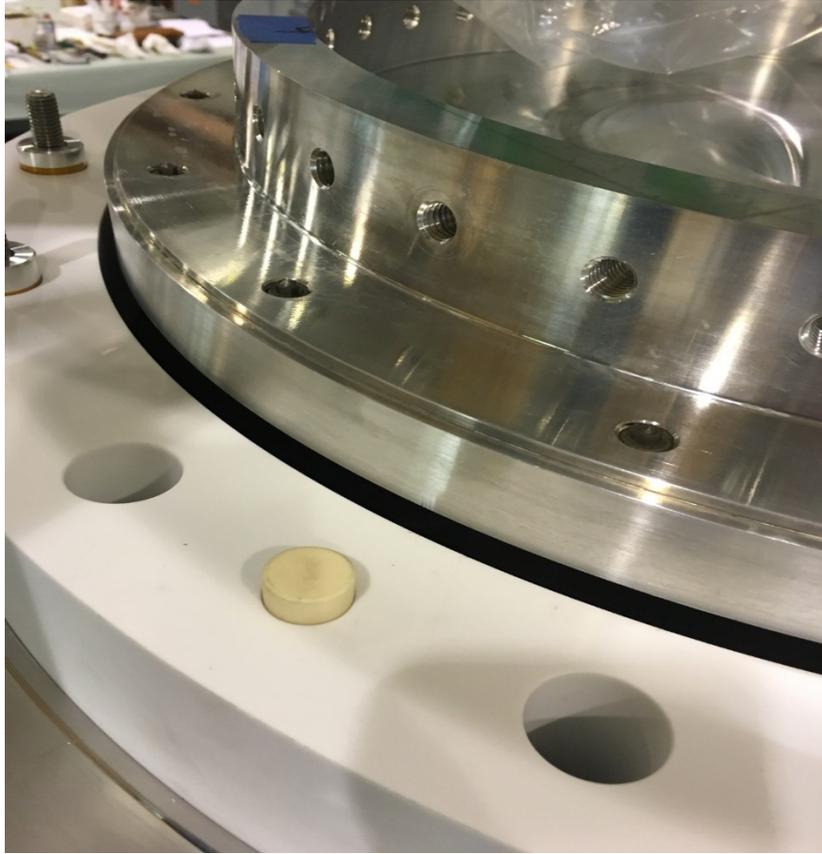
5- Inner conductor after installed.



- 6- Install brackets and spider supports to hold the inner conductor in center position. These brackets protect the inner conductor from bending when rotation the horn from DS to US position.



- 7- Install screws and torques DS end cap, the bolts is 3/8- 16 X2.5" long aluminum, must be torqued to 24 ft-lb.
- 8- With this position. Measure the height between OC and IC will make a final cut on the US flange because the welded may shrinkage of the IC.
- 9- Turn the horn fixture 180 degree.
- 10- Install the ceramic ring, ceramic locating pin and Evac seal, ME-389028, ME-389013 and ME-389178







- 11- Install brackets to hold inner conductor in center position.
- 12- Measure the inner conductor/outer conductor. Take this reading and compare between tension mode and compression mode. Calculate the average between two then get this number to cut the US flange to correct the thickness. Here is the example of BNB horn # 4

**BNB Horn # 4**

4/28/16

**Making measurement needed to cut US flange with ceramic ring installed**

Position # in tension mode

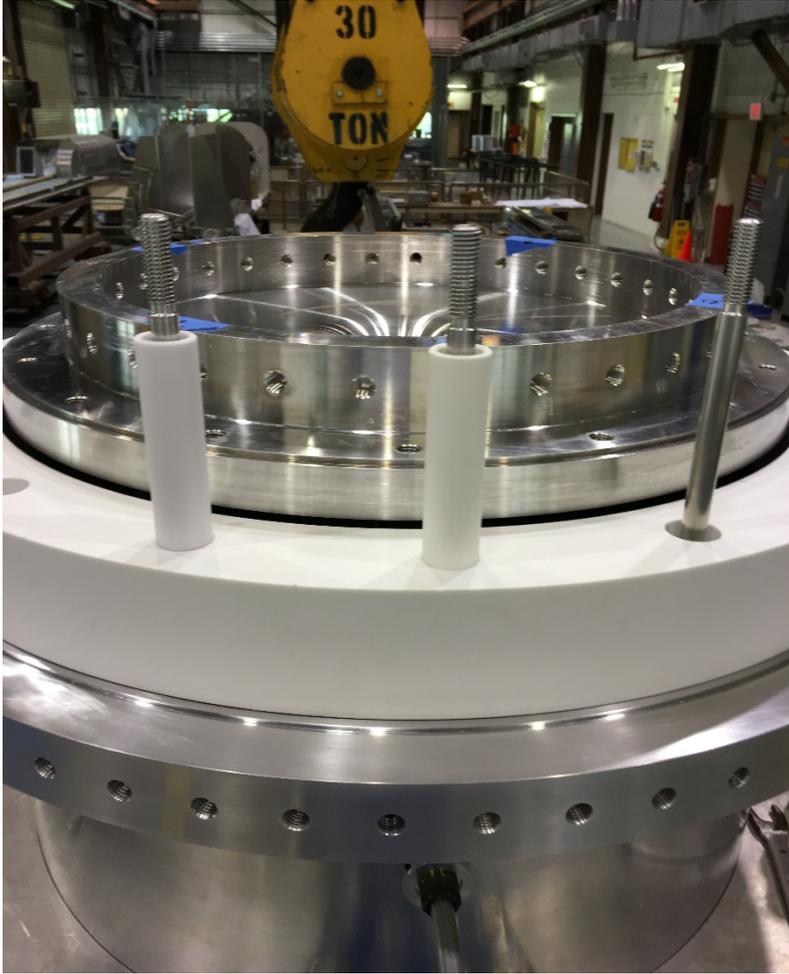
1	1.544"			
2	1.538"			
3	1.536"		<b>Ave: 1.540"</b>	
4	1.542"			

Position # in compression mode

1	1.532"			
2	1.528"			
3	1.525"		<b>Ave: 1.529"</b>	
4	1.530"			

**Take ave. of tension/compression = 1.5345"**







14- Install US flange and Evac seals, ME-389031, ME-389013-1 and ME-389013-2









15- Final installation of US flange. MB-389064 and MB-389061



16- Remove the horn from assembly fixture





17- Install horn into assembly platform.





18- Finish assembly BNB horn.