



# DOM Assembly SUBATECH

status

# **DOM Integration**



	SUBATECH		KM3NeT		DU line			ORCA N° 73								Date 09/12/2020		
DOM	691	692	693	694	695	696	697	698	699									
Painting	1	/	/	/	/	/	/	/	/									
Structure gluing	/	/	/	/	/	/	/	/	/									
Gauge & nanobeacon gluing	Ok	Ok	Ok	Ok	Ok	Ok	Ok	Ok	Ok									
Piezo gluing	Ok	Ok	Ok	Ok	Ok	Ok	Ok											
Fiber routing	Ok	Ok	Ok	Ok	Ok	Ok	Ok	Ok	Ok									
Mushroom gluing	Ok	Ok	Ok	Ok	Ok	Ok	Ok											
Electronic integration	Ok	Ok	Ok	Ok	Ok	Ok	Ok					66% work dor						
Penetrator fixing	Ok	Ok	Ok	Ok	Ok	Ok	Ok											
He test	Ok	Ok	Ok	Ok	Ok	Ok	Ok											
Optical splicing	Ok	Ok	Ok	Ok	Ok	Ok												
PMTs integration	Ok	Ok	Ok	Ok	Ok	Ok												
Functional test	Ok	Ok	Ok	Ok	Ok	Ok												
Top structure gluing	Ok	Ok	Ok		Ok													
Pouring	Ok	Ok	Ok															
Closing/sealing	Ok	Ok	Ok															
Acceptance test	(Ok)	(Ok)													87			

DOM 692: Actually in test with the new environment.

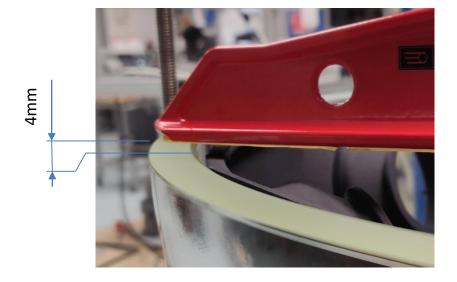
Due to a bad tightening on a maintenance bar the bottom structure was too high in the hemisphere so we had to cut the upper part of the structure with a cutting clamp.



This problem has taught us that the tools were not completely adapted, no clearance between the structures.

To verify what it's possible to correct I made some measurement with new support structure just posed in their hemisphere.

#### **Bottom**



# Top structure in a hemisphere with mushroom glued



Conclusion: - On the top it's difficult to increase the clearance because it's posed on the mushroom.

- On the bottom it's possible to change the position of the structure in the hemisphere.

Top: - I keep the tool like before, no change.

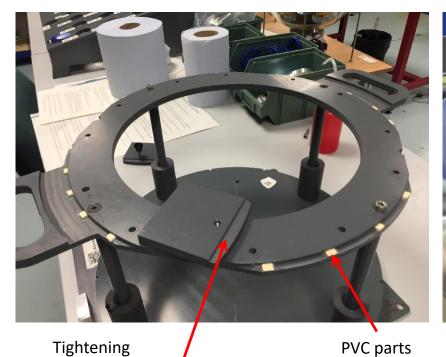
Bottom: - The goal is to win 2mm to lower the structure.

2 solutions - Machine the tool

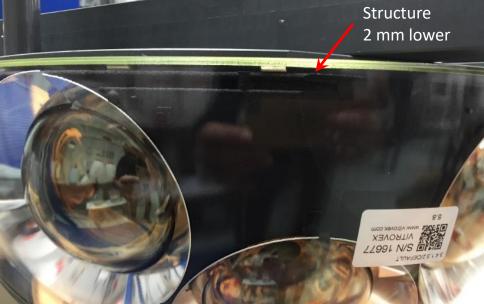
- Glued wedges on the tool

glued

Due to the workshop busy this month I decide to take the 2<sup>nd</sup> way.



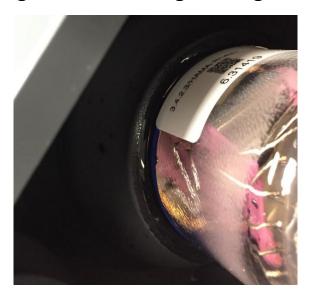
Plates machined



DOM 693

DOM 693: - Pouring Friday, gel in the pressure gauge and leak trough O-rings.





- Closed Monday No problem to fit the 2 hemispheres.



## This week

695: Pouring today and closing Friday.

696: PMTs integration and functional test, top structure gluing.

697: PMTs integration.

### Next week

695: Acceptance test.

696: Pouring and closing.

697: Functional test, top structure gluing.

698: Mushroom gluing and electronic integration.

699: Mushroom gluing and electronic integration.

Bake up