JUNCTION BOX STATUS

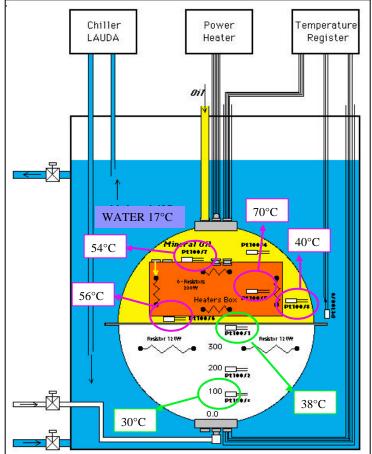
Strasbourg, July 11th 2000 S. Cuneo I.N.F.N. Genova

ANTARES: July 11th 2000

S. Cuneo (I.N.F.N. Genova)

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Heat dissipation measurements



TEST CONDITIONS

- power in the oil compartment: 1200 W
- power in the electronic compartment: 250 W
- transformer: copper box, filled with oil
- no gas volume in the oil compartment
- atmospheric air in the electronic compartment

RESULTS

• 70°C should be a good operating temperature for the transformer

• 30°C is cool enough for the opto-electronic components?

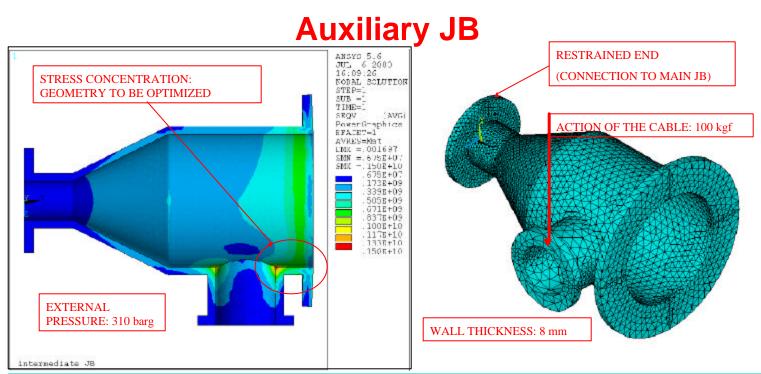
• as sea water temperature is expected to be 13° C, it should be reasonable to shift down the results of 4° C

REMARKS

• the tests in the opposite configuration (transformer under the electronics) showed no changes in the oil side temperature, but a noticeable increase (temp. range 44-55°C) on the other side

• Helium @ 1 bar abs instead of air allows to reduce the above temperatures of around 7-8°C

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REMARKS

- structural analysis is going on: geometry optimisation and buckling analysis
- detailed design is at a dead point, due to lack of information about the main electro-optical cable termination and the seal at its end
- no interference with main JB schedule: IFREMER agreed to separately test the main and the auxiliary JB

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JB: vessel status

	LOTERIOS A TIMET COMPANY PIANO DI CONTROLLO - Quality Control Plan												QCP -	H0100
STANDARD DI FABBRICAZIONE - Fabrication Standard					TITANIUM GR. 5				COLLAUDO - Inspection					
POS	DESCRIZIONE Description	%	DOCUM. APPLICABILI Applic. Documents COBICE - Code LOT PROC.		CRITERI DI ACCETTAB. Acceptance Criteria CODICE - Code LOT PROC.		LUOGO ISP. Inspect. Place	ENTI ISPETTIVI -		- Inspection Agency CLIENTE Customer		AG. INDIP. T.P.I.		NOTE - Notes
1	IDENTIFICAZIONE MATERIALI Material Identification	100		PRT-007		PRT-007	LOT	H/C			Unselulited	R	o sof de	
2	VERIFICA CERTIFICATI D'ORIGINE Mill Test Certificates Review	100	SPC. MAT. Matert Spec.	\mathbf{O}	SPC/IAT. tatyri: Spe	D	LD/	h/C				R		UNI EN 10204 - 3.1B
3	TRASFERIMENTO MARCATURE Transfer of Markings	100		PRT-0		P [-008	LOT	н		W.		н		
4	FORGIATURA Forging	100		PRT-001		PRT-001	FORNITORE	н		w		w		
5	T. TERMICO DI RICOTTURA	100		PRT-005		PRT-005	FORNITORE	с		w		W/R		
	PRELIEVO PROVE MECCANICHE Mechanical Test Sampling	100		PRT-009		PRT-009	FORNITORE	н		w		н		(STACCARE DUE PROVINI, 1 PER IL CLIENTE)
7	PROVE MECCANICHE Mechanical Test	100	ASTM B381-97A	PRT-009	ASTM B381-97A	PRT-009	FORNITORE	С		R		R		
8	ESAME MICROGRAFICO Micrographic Test	100	ASTME 112				FORNITORE	С		R		R		
9	CONTROLLO CON ULTRASUONI (UT) Ultrasonic Test (UT)	100	ASME SA 388	PRT-020	ASME SA 388	PRT-020	FORNITORE	с		R		н	5	
10	CONTROLLO FORMATURA (VD) Forming Check (VD)	100		PRT-013		PRT-013	LOT	н						
11	PROVA IDRAULICA TENUTA OR (HT) Hydrostatic Test (HT)	100		PRT-019		PRT-019	LOT	С		н			1 1	310 BAR - DURATA 90 MINUTI O-RING FORNITI DAL CLIENTE
12	CONTR. VISIVO E DIMENS. FINALE (VD) Final Visual and Dimensional Check (VD)	100	DWG.	PRT-033	DWG.	PRT-033	LOT	С		н			4	
13	MARCATURA E CERTIFICAZIONE Marking and Certification	100		PRT-002		PRT-002	LOT	С		R				UNI EN 10204 - 3.1B
14	CONTROLLO IMBALLAGGIO Packing Check	100		PRT-026		PRT-028	LOT	н					8	

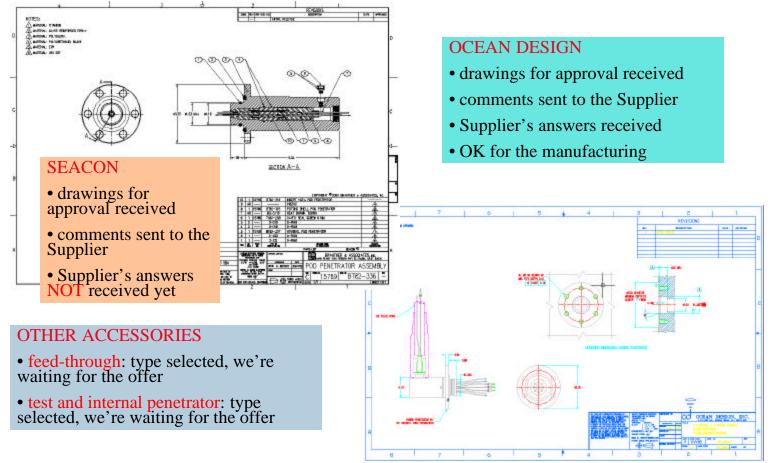
REMARKS

- around 30% of the operations completed: forging and annealing performed last Friday
- hard to comply with the schedule (delivery @ beginning of August): delay of sub-suppliers (screws and nuts)
- hydrostatic test: order placed, probably will be shifted to MID OCTOBER 2000

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JB: penetrators & accessories status



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