Status at E.Z.

PP

14° Bi-Weekly meeting S1-Global, June 1, 2009

MANUFACTURING SCHEDULE ZANON JOB 3023

Attività	Attività						ç	giu Os	9			lug 09				ago 09		5	set 09)		ott 09					nov (
	· · · · · · · · · · · · · · · · · · ·	18	19	mag 0: 20 2	21 2	2 2	3 24	1 2	5 26	3 2	7 2	8 2	29 :	30	31	32 33 34	35	36	37	38	39	40	41	42	43	44	45	46
MATERIALS						ł							[
A 182 F 304L Forgings for main flanges				ļ																	1							
Aluminium plates																												
Carbon steel plates																					Î							
S.S. 316L plates																												
A 182 F 316L Flanges for nozzles				ġ.			l						ĺ					[1	I							
A 312 Tp 316L Pipes													l	Î							Î							
Miscellaneous				ļ									Î	Î							Î							
CRYOSTAT CONSTRUCTION			1																					ᡝ				
VACUUM VESSEL			ł																		-							
Plate cutting				i.																1	1							
Plate beveling														ĺ							Î							
Course rolling				0			1													1	1							
Course longitudinal welding					ר															1	1							
NDT checks on welds																												
Courses calibration]															1							
Main flanges premachining							÷]		1									-	1	1							
Main flanges fit-up & welding at shell								_										1	-	1	1							
Nozzles openings execution							à]								1	1	1							
Nozzles preparation																					1							
Nozzles fit-up & welding at shell												·····								1	Î							
External parts preparation									····-	1			Ī	Ī						T	Ī							
External parts fit-up & welding at shell															<u></u>					1	1							
Final machining							Ì			1				1				.ş		Î	Î							
Dimensional check							1					····							Γ	1	1							
Surfaces sandblasting				· · · · · · · · · · · · · · · · · · ·																ĥ	1						·	
Cleaning & vacuum test																			1	ĥ								
Surfaces painting																				Π	1							
RETURN PIPE				ļ											F			1	1		1							
Plate cutting														Ĩ					-	1	1							
Plate beveling				· · · · · · · · ·	Π														-		1							
Pipe rolling						1																						
Pipe longitudinal welding							7													-	1							
NDT checks on welds																			1	1	1							
Pipe calibration				1			Π												1	1	1							
Extremity rings fit-up & welding at pipe				1																1	1							
																		<u> </u>	<u> </u>	1	1		i					
t: 3023.P.001 Rev.0 Task 12/05/2009		Progr	ess						Mil	esto	ne •	•				Sum	nmar	y 두	,			-						

ETTORE ZANON S.p.A.

MANUFACTURING SCHEDULE ZANON JOB 3023

1,											~~											1						
4	Atti∨ità		r	mag	09			giu	iu 09				ug 0	9		ago 09	05		S	et 09			ot	t 09	40 4		r	ov 0
External supports prepa	aration	18	19	20	21	122	23	124	125	26	27	28	29	30	31	32 33 34	35	36	37	38	39 -	40	41 4	2 4	43 4	4 4	5 4	6 4
External supports fit-up		-			 						<u>.</u>								-					·····				
Final machining	s a arolang ut pipe	_		Į					L			<u> </u>	<u> </u>		ļ													
Dimensional check						+		-		-	L			ļ					-									
Pneumatic & helium lea	ak test			!						-			Ļ		<u>.</u>						<u>+</u>							
		_		Į,						-					ļ													
Final cleaning		_		ļ		_									_				_		ļ							
THERMAL SHIELDS		-	ļļ	.	4			Ļ,		-				-					◄	.Į	ļ							
Shields 4.5°K preparati	ion (upper)	_		-		Ļ		<u> </u>		_				-	Į													
Dimensional check		_		Į		ļ								1	ļ													
Shields 4.5°K preparati	ion (lower)	_			ļ			ļ						ļ	ļ			ļ			Į							
Dimensional check		_		Į						_				ļ	ļ						ļļ.							
Shields 70°K preparation	on (upper)													<u> </u>	ļ						Ļ	ľ						
Dimensional check																						ľ						
Shields 70°K preparatio	on (lower)																	<u>.</u>						1				
Dimensional check																								Ì		ĺ	ĺ	<u> </u>
Internal pipes preparation															<u> </u>													
Superinsulation preparation				I		Ţ	Ī	l	Ī	Ī									l							Î		
Other items for assembly				1				<u>.</u>		<u></u>					Ĵ			1		1	1	1		ĺ		1		
INTERNAL PARTS ASSEM	ABLY			I						1				Ī	I				F					F		1		
Return pipe, thermal sh	nields & other items assembly			1	·····			1					1		1			1		<u> </u>	<u>.</u>	1						1
Dimensional check				1	·	T		1						1	1				-	1	Το	ľ						
Thermal shields 4.5°K o	disassembly			1	1			1		1			1	1	1				1	1								
Internals assembly com	-	-		1	<u>.</u>	1		1		-			1	1	1			1	1	1								
Final checks		-		Î	<u>.</u>	1	1	1		-			1	1	ĺ			1	1	1	1	; []			1		
Final cleaning		-		1						-			1	1	1			1	-	1	1					1		
Preparation for shipmer	nt	-		1	······	÷		1		-			1	1	1			1	-	1	1			ר ר				
Delivery c/o Zanon wor				1		+-		-		-				-											5/10			
t: 3023.P.001 Rev.0 12/05/2009	Task	Progr	ress							Miles	stone	∍ ♦				Sum	mar	y 🗜	,			◄						
3				E٦	гтс	ЭR	EZ	ZAN	101	N S	i.p.	Α.														Fil	e 30	23P(

Vessel rolled and welded Next stage nozzle openings Flanges and weldings All shield components undergone Water-jet cutting Next: weld, roll & bend

Other components

- All material in house
 - Forged post supports arrived last week
 - Composite posts available at INFN
- GRP
 - Water jet cutting of plates
 - HeGRP longitudinal pipe weld next stage, all support welded in June, then sent to machining
- Activities following schedule