



Gas Pipeline Project
Algeria to Italy via Sardinia
GL-F-002
FEED Scope of Services

J P KENNY



PORTO BOTTE
PROCESS & UTILITIES EQUIPMENT LIST

PROJECT No.
RC6202

WBS
07-10-26

No OF SHEETS
4

DOCUMENT No

AREA
400

DIS
H

TYPE
5

NUMBER
0001

02	29/05/08	ISSUE AS PER SRG PHILOSOPHY	SCB	SRG	PLV	JFG	
01	10/12/07	ISSUE FOR COMMENTS	SRG	BGR	PLV	JFG	
REV	DATE	DESCRIPTION	BY	CHK	ENG	PM	CLIENT



GALSI PIPELINE PROJECT - UNIT 400 - SOUTHERN SARDINIA RECEIVING TERMINAL

PROCESS & UTILITIES EQUIPMENT LIST

6202.400.H.5.0001

Revision 02
Date 29/05/08

REV.	ITEM	SERVICE	NB	Main CRITERION	Second CRITERION	Pressure			Temperature			Material		Diameter x L Diameter x H L x W x H (mm)	TOTAL Weight EACH		Type	Remarks
						P _{op}	P _s	P _d	T _{op}	T _s	T _d	Shell	Tube		Empty	Test		
						bar(g)	bar(g)	bar(g)	(°C)	(°C)	(°C)	Shell Casing	Internals Impeller					
UNIT 400 - GAS FILTRATION																		
02	400.S.01	SLUG CATCHER	1	1 071 000 Sm³/h	Mesh	60 / 166		183	-1.5 / 25		-7 / 85	CS		3200 x 6400			H	
UNITS 401/402 - GAS FILTRATION																		
02	401/402.S.01	GAS FILTER	1+1	856 800 Sm³/h	Cartridges + Vanes	60 / 166		183	-1.5 / 25		-7 / 85	CS		2400 x 5800			H	
UNITS 404 - GAS HEATING																		
02	404.E.01 A/B	GAS HEATER	1+1	Duty: 16 630 kW		NG: 77 GW: 3		NG: 183 GW: 5.5	NG: 0 /+3.7 GW: 70 / 30		-7 / 85	SS					PE	
UNIT 414 - METERING																		
02	414.Y.01	GAS METERING	2+1	535 500 Sm³/h	Ultrasonic	75		78,8	1 / 25		-7 / 85							
UNIT 421 - INSTRUMENT AIR & SERVICE AIR																		
02	421.K.01 A/B	AIR COMPRESSOR	1+1	58 Nm³/h	38 kW	ATM / 9		11			By supplier	By supplier	HOLD					oil-free screw compressor
02	421.T.01	WET AIR BUFFER	1	2 m³	-	9		11			85	CS	1000 x 2600				V	
02	421.T.02	DRY AIR RECEIVER	1	2 m³	-	9		11			85	CS	1000 x 2600				V	
02	421.Z.01 A/B	INSTRUMENT AIR DRYER	1+1	50 Nm³/h of dry air	-	9		11			85	CS	HOLD				V	heatless adsorption type
UNIT 422 - FUEL GAS																		
02	422.Y.01	FUEL GAS METERING	1 + 1	4260 Sm3/h	Turbine	75		78,8	1 / 25		85							
02	422.E.01 A/B	FUEL GAS HEATER	1 + 1	87 kW	4260 Sm³/h	75		78,8	1 / 40		85	CS	CS					Water bath
UNIT 423 - VENT																		
02	423.D.01	VENT	1	160 000 kg/h		ATM		2	-59		-65 / 85	SS		20" x 20 m				
UNIT 424 - DRAINS																		
	424.P.01	DRAIN SUMP PUMP	1	5 m³/h @ 20 m	0.5 kW			4,5			85						Centr.	65% hydraulic efficiency
02	424.S.01	API SEPARATOR	1	[HOLD]														
02	424.T.01	DRAIN SUMP	1	16 m³		ATM		Full of water			85	CS		1900 x 5500			H	
	424.Y.01	SEPTIC TANK	1	5 m³		ATM		Full of water						2500 x 2000 x 1500				
	424.Y.02	EVAPORATION PIT	1	[HOLD]										(1)				(1): ground area = 20 m by 20 m



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						P _{op}	P _s	P _d	T _{op}	T _s	T _d	Shell	Tube		Empty	Test		
						bar(g)	bar(g)	bar(g)	(°C)	(°C)	(°C)	Shell Casing	Shell Internals Impeller					
UNIT 425 - HOT WATER																		
02	425.E.01 A/B	WATER HEATER	1+1	17 500 kW	Water flow rate: 360 m3/h			5,5	29 / 71									Direct HC fired heater 80% efficiency
02	425.P.01 A/B	WATER PUMP	1+1	360 m³/h @ 20 m	30 kW			5,5	30		85						Centr.	65% hydraulic efficiency
	425.P.02	WATER IN TANK PUMP	1	3 m³/h @ 30 m	0.5 kW			5,5			85						Centr.	65% hydraulic efficiency
	425.T.01	WATER EXPANSION DRUM	1	5 m³				5,5			85	CS		1300 x 4000			V	
	425.T.02	WATER STORAGE TANK	1	20 m³				Full of water			85	GRP		2100 x 6300			H	
UNIT 426 - RAW WATER																		
	426.P.01 A/B	RAW WATER PUMP	1+1	3 m³/h @ 40 m	0.5 kW			5,5			85						Centr.	65% hydraulic efficiency
02	426.T.01	RAW WATER STORAGE TANK	1	5 m³		ATM		Full of water			85	Galvanised Carbon Steel		1300 x 3900			H	bolted tank with butyl liner
	426.T.02	SANITARY WATER ACCUMULATOR	1	0.3 m³				5,5			85						V	
UNIT 428 - NITROGEN PRODUCTION																		
02	428.K.01 A/B	NITROGEN PRODUCTION AIR COMPRESSOR	1+1	6 Nm³/h of air	1 kW	ATM / 8		9										oil-free screw compressor
	428.T.01	NITROGEN BUFFER	1	2 m³		8		9			85	CS		1000 x 2600			V	
	428.Z.01	NITROGEN PRODUCTION UNIT	1	2 Nm³/h of N ₂ 95% N ₂ purity		8		9			85							membrane type
UNIT 440 - EMERGENCY DIESEL GENERATOR																		
02	440.G.01	EMERGENCY DIESEL GENERATOR	1	350 kW														
	440.T.01	EMERGENCY DIESEL GENERATOR DAY TANK	1	[HOLD]														