

CHANE
Ampliação do Terminal de Granéis Líquidos do Barreiro
EQUIPMENT LIST
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Pages modified under this revision: 2

 PROJECT MANAGER: Inês Mesquita
 (name & visa)

C	16/06/2025	Reemissão para Licenciamento	A.Cancela	I.Mesquita	I.Mesquita
B	17/04/2025	Reemissão para Licenciamento	A.Cancela	I.Mesquita	I.Mesquita
A	11/02/2025	Emissão para Licenciamento	A.Cancela	I.Mesquita	I.Mesquita
Rev.	Date DD/MM/YY	STATUS	WRITTEN BY (name & visa)	CHECKED BY (name & visa)	TECHNICAL APPROVAL BY (name & visa)
DOCUMENT REVISIONS					

CLIENT		CHANE		EQUIPMENT LIST										EQUIPMENT LIST				
LOCATION		Terminal de Granéis Líquidos do Barreiro												Activ. / Unit		N.O.		Rev.
UNIT														3218	EL		001	C
STORAGE TANKS																		
R E V	ITEM	DESIGNATION	Q T Y	TYPE (1)	CAPACITY		DIAM. m	HEIGHT m	DESIGN TEMP. °C	MASS DENSITY OF PRODUCT (AT OP. TEMP.) kg/m3	DESIGN PRESSURE mbarg	MATERIALS +corr. allow. (mm)	REMARKS					
					WORKING (3) m³	GEOMETRICAL m³												
C	T-701	1 st category storage tank (A) (B)	1	FX (D)	4871	4970	23,0	12,0	60	775 (C)	+25.0 / -5.0	CS	(A) The geometric volume for storage tanks was defined as 5 000 m3. (B) New tanks must be prepared to store 1 st category products and JET A1. The installation of internal floating roof, floating aspiration and dewatering system it will be presented as optional for cost estimation. (C) For calculation purposes, it was considered gasoline as store product. (D) The implementation of Internal floating roof or blanketing to be confirmed by client in the next engineering phase.					
C	T-702	1 st category storage tank (A) (B)	1	FX (D)	4871	4970	23,0	12,0	60	775 (C)	+25.0 / -5.0	CS						
C	T-703	1 st category storage tank (A) (B)	1	FX (D)	4871	4970	23,0	12,0	60	775 (C)	+25.0 / -5.0	CS						
C	T-704	1 st category storage tank (A) (B)	1	FX (D)	4871	4970	23,0	12,0	60	775 (C)	+25.0 / -5.0	CS						
C	T-705	1 st category storage tank (A) (B)	1	FX (D)	4871	4970	23,0	12,0	60	775 (C)	+25.0 / -5.0	CS						
C	T-706	1 st category storage tank (A) (B)	1	FX (D)	4871	4970	23,0	12,0	60	775 (C)	+25.0 / -5.0	CS						
C	T-707	1 st category storage tank (A) (B)	1	FX (D)	4871	4970	23,0	12,0	60	775 (C)	+25.0 / -5.0	CS						
C	T-708	1 st category storage tank (A) (B)	1	FX (D)	4871	4970	23,0	12,0	60	775 (C)	+25.0 / -5.0	CS						
B	TK-406	3 rd category storage tank (A)(B)	1	FX	3500	3817 (A)	18,0	15,0	38	879 (B)	+5.0 / -2.0	CS	(A)The new tank capacity was estimated considering the basin capacity and required safety storage and distance for 1st category products. '(B) For calculation purposes, it was considered that the 3 rd category product, could be FAME, Biodiesel or HVO.					
NOTES : (1) FX : Fixed roof FT : Floating roof FS : Fixed roof with Floating Screen S : Sphere C : Cigar (2) Indicate, if applicable, tank heating, agitator and insulation.																		
PUMPS																		
R E V	ITEM	DESIGNATION	Q T Y	TYPE OF DRIVER (1)	TYPE OF PUMP (2)	RATED FLOW. m³/h	SUCTION PRESS. bar g.	DIFFER. HEAD m	OPERATING PUMPING TEMP. °C	MECHAN. SEAL TYPE (3)	SHAFT POWER @ RATED (estimated) kW	INSTALLED MOTOR POWER (estimated) kW (4)	MATERIALS		REQUIRED NPSH m	AVAILABLE NPSH m	REMARKS	
													CASING	INTERN.				
	P-701 A/B	1 st category Expedition Pump (A)	2	E	C	240	0,0	53,0	60	Flexibox	36,0	45,0	CS	CS	by vendor	3,0	(A)Each pump will have capacity to send product to 2 loading arms for each product. The second pump is a spare. Chane to confirm this philosophy.	
	P-702 A/B	1 st category Expedition Pump (A)	2	E	C	240	0,0	53,0	60	Flexibox	36,0	45,0	CS	CS	by vendor	3,0		
	P-703 A/B	1 st category Expedition Pump (A)	2	E	C	240	0,0	53,0	60	Flexibox	36,0	45,0	CS	CS	by vendor	3,0		
	P-704 A/B	1 st category Expedition Pump (A)	2	E	C	240	0,0	53,0	60	Flexibox	36,0	45,0	CS	CS	by vendor	3,0		
	P-705 A/B	1 st category Expedition Pump (A)	2	E	C	240	0,0	53,0	60	Flexibox	36,0	45,0	CS	CS	by vendor	3,0		
	P-706 A/B	1 st category Expedition Pump (A)	2	E	C	240	0,0	53,0	60	Flexibox	36,0	45,0	CS	CS	by vendor	3,0		
	P-707 A/B	1 st category Expedition Pump (A)	2	E	C	240	0,0	53,0	60	Flexibox	36,0	45,0	CS	CS	by vendor	3,0		
	P-708 A/B	1 st category Expedition Pump (A)	2	E	C	240	0,0	53,0	60	Flexibox	36,0	45,0	CS	CS	by vendor	3,0	(A) Each pump will have capacity to send product fom the new tank to 1 loading arm. The second pump is a spare. Chane to confirn this philosophy.	
	P-406 A/B	3 rd category Expedition Pump from TK-406 (A)	2	E	C	132	0,0	47	20	Flexibox	19,0	22,0	CS	CS	-	2,5		
NOTES : (1) T : Turbine D : Diesel motor E : Electric motor VE : Variable speed Electric motor (2) C : Centrifugal Re : Reciprocating Ro : Rotary (3) S : Simple D : Double (4) Warning: Installed power shall be confirmed by specialists / Vendors. Also, possible requirements for open discharge start-up may be considered.																		
DRUMS																		
R E V	ITEM	DESIGNATION		Q T Y	INT. DIAM. I.D. mm	HEIGHT OR LENGTH T.L. to T.L. mm	DRUM POSITION (1)	DESIGN TEMP. °C	DESIGN PRESS. bar g.	MATERIALS +corr. allow. (mm) (3)	HEAD TYPE (2)	BOOT (4)		REMARKS				
												INTERNAL DIAMETER I.D. mm	HEIGHT T.L. to T.L. mm					
	D-701	Diesel Slop Drum (A)(C)		1	1 800 (B)	5 400 (B)	H	60	0,5	CS	E	-	-	(3) (4)				

	D-702	Gasoline Slop Drum (A)(C)		1	1 800 (B)	5 400 (B)	H	60	0,5	CS	E	-	-	(A) Working Vessel capacity: 10 m3. (B) To be confirmed during next engineering phase. (C) Located in basin 1. (D) Located in basin 2.
	D-703	Diesel Slop Drum (A)(D)		1	1 800 (B)	5 400 (B)	H	60	0,5	CS	E	-	-	
	D-704	Gasoline Slop Drum (A)(D)		1	1 800 (B)	5 400 (B)	H	60	0,5	CS	E	-	-	
NOTES : (1) H : Horizontal V : Vertical (2) E : Elliptical H : Hemispherical F : Flat (3) Cladding material and surface (m2) are to be specified in column REMARKS (4) The material and the lining of the boot are to be specified in column REMARKS if different from those of the shell														

MISCELLANEOUS														
R E V	ITEM		DESIGNATION		PDS REV	Q T Y	RATED CAPACITY	UNITS	MATERIALS +corr. allow. (mm) (1)		OBSERVATIONS			
	SR 701		Pig receiver T-701		NA	1	-	-	-		Pig Receiver located inside the basin, close to inlet valve of storage tank.			
	SR 702		Pig receiver T-702		NA	1	-	-	-		Pig Receiver located inside the basin, close to inlet valve of storage tank.			
	SR 703		Pig receiver T-703		NA	1	-	-	-		Pig Receiver located inside the basin, close to inlet valve of storage tank.			
	SR 704		Pig receiver T-704		NA	1	-	-	-		Pig Receiver located inside the basin, close to inlet valve of storage tank.			
	SR 705		Pig receiver T-705		NA	1	-	-	-		Pig Receiver located inside the basin, close to inlet valve of storage tank.			
	SR 706		Pig receiver T-706		NA	1	-	-	-		Pig Receiver located inside the basin, close to inlet valve of storage tank.			
	SR 707		Pig receiver T-707		NA	1	-	-	-		Pig Receiver located inside the basin, close to inlet valve of storage tank.			
	SR 708		Pig receiver T-708		NA	1	-	-	-		Pig Receiver located inside the basin, close to inlet valve of storage tank.			
	MOV 701.1		Motorized valve TK-701		NA	1	-	-	-		Motorized valve at the inlet of the storage tank T-701			
	MOV 701.2		Motorized valve TK-701		NA	1	-	-	-		Motorized valve at the outlet of the storage tank T-701			
	MOV 702.1		Motorized valve TK-702		NA	1	-	-	-		Motorized valve at the inlet of the storage tank T-702			
	MOV 702.2		Motorized valve TK-702		NA	1	-	-	-		Motorized valve at the outlet of the storage tank T-702			
	MOV 603.1		Motorized valve TK-703		NA	1	-	-	-		Motorized valve at the inlet of the storage tank T-703			
	MOV 703.2		Motorized valve TK-703		NA	1	-	-	-		Motorized valve at the outlet of the storage tank T-703			
	MOV 704.1		Motorized valve TK-704		NA	1	-	-	-		Motorized valve at the inlet of the storage tank T-704			
	MOV 704.2		Motorized valve TK-704		NA	1	-	-	-		Motorized valve at the outlet of the storage tank T-704			
	MOV 705.1		Motorized valve TK-705		NA	1	-	-	-		Motorized valve at the inlet of the storage tank T-705			
	MOV 705.2		Motorized valve TK-705		NA	1	-	-	-		Motorized valve at the outlet of the storage tank T-705			
	MOV 706.1		Motorized valve TK-706		NA	1	-	-	-		Motorized valve at the inlet of the storage tank T-706			
	MOV 706.2		Motorized valve TK-706		NA	1	-	-	-		Motorized valve at the outlet of the storage tank T-706			
	MOV 707.1		Motorized valve TK-707		NA	1	-	-	-		Motorized valve at the inlet of the storage tank T-707			
	MOV 707.2		Motorized valve TK-707		NA	1	-	-	-		Motorized valve at the outlet of the storage tank T-707			
	MOV 708.1		Motorized valve TK-708		NA	1	-	-	-		Motorized valve at the inlet of the storage tank T-708			
	MOV 708.2		Motorized valve TK-708		NA	1	-	-	-		Motorized valve at the outlet of the storage tank T-708			
	MOV 406.1		Motorized valve TK-406		NA	1	-	-	-		Motorized valve at the inlet of the storage tank T-406			
	MOV 406.2		Motorized valve TK-406		NA	1	-	-	-		Motorized valve at the outlet of the storage tank T-406			
C	LA 700.1		Jumpers Unit 700.1		NA	1	-	-	C		Unit 700 Jumpers for gasoline/diesel/ jet located in basin 2			
C	LA 700.2		Jumpers Unit 700.2		NA	1	-	-	C		Unit 700 Jumpers for gasoline/diesel/ jet located in basin 3			
C	DELETED		DELETED		-	-	-	-	-					
	LA-701		1st Loading Arm of loading bay 5		NA	1	120	m³/h	CS					
	LA-702		2nd Loading Arm of loading bay 5		NA	1	120	m³/h	CS					
	LA-703		3rd Loading Arm of loading bay 5		NA	1	120	m³/h	CS					
	LA-704		4th Loading Arm of loading bay 5		NA	1	120	m³/h	CS					
	LA-705		Vapor Recovery Arm		NA	1	-	-	CS					

	LA-706	1st Loading Arm of loading bay 6	NA	1	120	m³/h	CS	
	LA-707	2nd Loading Arm of loading bay 6	NA	1	120	m³/h	CS	
	LA-708	3rd Loading Arm of loading bay 6	NA	1	120	m³/h	CS	
	LA-709	4th Loading Arm of loading bay 6	NA	1	120	m³/h	CS	
	LA-710	Vapor Recovery Arm	NA	1	-	-	CS	
	SH-701	Oil-Water Separator Basin 3	NA	1	100	m³/h	Concrete	
	SH-702	Oil-Water Separator Basin 4	NA	1	100	m³/h	Concrete	
C	SH-703	Oil-Water Separator Pipe rack	NA	1	100	m³/h	Concrete	
	SR 406	Pig receiver T-406	NA	1	-	-	-	Pig Receiver located inside the basin, close to inlet valve of storage tank.
B	Ethanol and FAME Blending System	Blending System for loading bay 5 and 6	NA	1	-	-	-	
C	LSH 750.1	Overfilling protection system for loading bay 5	NA	1	-	-	-	
C	LSH 750.2	Overfilling protection system for loading bay 6	NA	1	-	-	-	
C	XS-750.1	Grounding System for loading bay 5	NA	1	-	-	-	Ground connection system for loading bay 5
C	XS-750.2	Grounding System for loading bay 6	NA	1	-	-	-	Ground connection system for loading bay 6
(1) The cladding material and surface area (m2) are to be specified in column REMARKS.								

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