

ISOMETRIC IFC - CHECK LIST

Line Number		30-TNR-01027-25-16SS01-NI				Stress CN / Level Nº Level:											
Isometric Number		K1-30-TNR-01027-25-16SS01-NI 01				Process Approval Required YES NO					T.EN – FMC - RØNLAND BIXLOZONE PROJECT						
		11 30 111 01027 23 100001 11 _01		An Agricultural Sciences Company			800178										
Infor	mation to be attache	d:							- 🗀	- 🗀	1			HOLD	<u> </u>		
_	er Copy of PID:	YES	V	N/A		N° 800178-3	3000-PID-0021-001-	-PMC-0	Rev.		N°		SHORT DE	ORT DESCRIPTION RESOLVED (🗸)			
PID Modification Sheet:		YES		N/A		Nº		-	Rev.								
Equipment Vendor Dwg. :		YES		N/A		N°			Rev.		1						
Instru	ment Dwg. :	YES		N/A		N°			Rev.								
Project By-Pass (4):		YES		N/A	\checkmark	N°			Rev.								
	Approved Isometric:	YES	<u> </u>	N/A		Rev.			Extraction Date:		Į.						
SIT A	pproved Isometric:	YES		N/A		Rev.			Extraction Date:								
					A	VERIFICAR /	TO BE CHECKED						"CA/	IFC	REV 0	REV 1	REV 2
													" N/A " NO APLICA / NOT APPLICABLE		✓		
	Revision By : (D) Designer / (LDG) Design Leader / (ST) Stress Specialist / (LST) Stress Leader / (SP) Supports Specialist / (LSP) Supports leader / (M) Materials / (SL) Spooler / (CHK) Issuer / (L) Discipline Lead								NO APP	√	X ⁽¹⁾	1st-Chk (2)	2nd-Chk ⁽³⁾				
						Revision By : (D)) Designer / (LDG) Design	Leader						Ву	: D	Ву:	LDG
	N° de línea según PID y Lista de Líneas / Line No. according to PID and Line List.													V			
ation	Datos de la línea se	gún Lista	de Líneas / <i>Line d</i>	ata accord	ing to Line List .									V		N/	
Information	Piping Class según PID y Lista de Líneas / Piping class according to PID and Line List.										V		V				
lso Inf	Vinculo E3D con Di	agrams (P	rocess Unit, Temp	o. Operacio	ón, Numeración TOD	AS válvulas manu	uales) / Link between E3D	and Diagram	s (Process Unit, Op	emp, ALL manual va	alves Tag	ged).					
<u>s</u>										+							
	Diámetro de la línea indicado en número de línea en el cajetin / Line diameter indicated in the line number in the title block . Equipo modelado según plano Vendor válido para generar isométrica IFC / Equipment modelled according Vendor drawing valid for Isometric IFC generation.																
¥	Código / Code: 2			goniorai	50.50 ii 0 / Lyt	,addiida a	g . S.Idor drawing						N/A				
Equipment	Nombre de tubulado	ıras segúr	PID y plano Vend	dor / Nozzl	es name according to	PID and Vendor o	drawing.						N/A				
Equip	Rating y diámetro d	e tubuladu	ras según plano V	/endor / No	ozzles rating and diar	neter according to	vendor drawing .						N/A				
	**						ing to Vendor drawing.						N/A				
	, , , , , , , , , , , , , , , , , , , ,		J . F		,) Designer / (LDG) Design	Leader						Ву	: D	By:	LDG
	Línea sin colisión (v	erificación	incluyendo la nub	oe de punto	os) / Line is clash free	• ()	, , , ,									-,.	
	`						<u> </u>		inaa wa to 1	James to disconnection of	ا العامل	an far !	NI/A	-			
						accion final para el	emisión / Process commen	is to critical l	nes received and imp	nernentea betore fina	u extracti	on for issuance.	N/A				
	Verificación contra l Correcta referencia					existentes u otra h	noja de la isométrica en los	s extremos d	e línea v sus ramales	incluvendo elevacio	nes v co	ordenadas /					
							end of the line and its brand				7100 y 00	ordonadao /		•		•	
	Verificación contra l			sion nondi	anto contido do fluio	numeración de inc	estrumentos, cambios de es	onooifionoió:	aumalimiente de no	too / In line compone	nto inclu	dad branch					
					e class breaks, notes			specificación	, cumplimiento de no	las i in-line compone	ins inclu	ieu, branch		•		•	
Design	Verificación contra l				Ai/li			:4		-41/414 141		·				<u> </u>	
e De						nes minimas o max	ximas requeridas, formaci	on de conde	nsados / <i>Requirea ini</i>	et and/or outlet lengtl	ns to equ	ipments, minimum		V			
Line	or maximum distances and/or elevations, condensate generation. Comentarios de SIT a recibidos e implementados antes de extracción final para emisión / Instrumentation comments received and implemented before final extraction for issuance.								N/A								
	Verification and Discount Verification to the home between the in (Obsah bases between the Verification and Indian							N/A									
	Tamaño de las válvulas de control y de seguridad, instalación de acuerdo a hook-up / Size of control valves and safety valves, instrument installation according to hook-up.							IN//A									
	Picajes según tabla de picajes correspondiente / Branch configuration according to correspondent branch table .								V		V						
	Venteos y drenajes de Procesos según requerimientos de PIDs y de puntos altos y bajos para prueba hidrostática y modelados según "assembly" correspondiente / Process vents and drains according PID requirements and high and low points for hydrostatic test and modelled according proper assembly.																
	Verificación de distancia mínima entre soldaduras / Minimum distance between welds check.										V						
	Notas explicativas adicionales incorporadas / Additional clarification notes added.								N/A								
	Notas explicativas adicionales incorporadas / Additional clarification notes added. Revision By : (ST) Stress Specialist / (LST) Stress Leader							IN/A	Dur	ST	By:	LCT					
	El cálculo do atroco	dianonible	no ostá nondient	o do rovioi		, , ,	, , ,							Бу.	31	Бу.	LOI
Stress							on is not awaiting for revision						+				
s	Los requisitos segui	n el calcul	o de stress estan i	incorporad	, ,		on requirements have been		·								
	1				Revi	ision By : (SP) Sup	pports Specialist / (LSP) Su	upports leade	er					By:	SP	By:	LSP
	La línea está soportada por completo y la lista de soportes rellenada / Line is completely supported and support list updated.																
	Concepto de soport	e y separa	ción máxima entre	e soportes	/ Support concept a	nd support spans .											
orts	Requerimientos de specialist.	soportes e	stan de acuerdo a	al cálculo d	e stress y ajustados	con el especialista	a de Stress / Support requir	rements acc	ording to stress calcu	ation note are include	ed and a	greed with stress					
Supports	· ·	a de los s	oportes / Supports	correctly	numbered .								+				
	Numeración correcta de los soportes / Supports correctly numbered . Código de soportes correctamente indicados (STD - SPC - COM - MRS - PRF) / Support code correctly indicated (STD - SPC - COM - MRS - PRF) .									+							
	Codigo de soportes correctamente indicados (STD - SPC - COM - MRS - PRF) / Support code correctiy indicated (STD - SPC - COM - MRS - PRF). Marcado de elementos soldados de los soportes en Iso Spool preliminar correspondiente / Mark-up of welded supports components in the correspondent preliminary Iso Spool.									N/A							
					, 551.00		sion By : (M) Materials		, 510	,				Bv	: M		
	La Linea pertence a alguna o varias categorias de Criticidad. La Linea está listada en la Lista de Lineas Críticas de Materiales. Sus isometricas requieren Verificación evaluativa / The Line helpore to some								N/A	,							
	or several categories of Criticality. The Line is listed in the Critical Material Lines List. The isometrics require exahustive verification. Todos los materiales están identificados en la isométrica y se encuentran listados en el listado de materiales / All materials are identified in the isometric and are listed in the BOM.									V							
	Añadidos elementos especiales de tubería en Línea de acuerdo a PIDs última revisión y lista de especiales de tubería (Verificar en adicional correcta Numeración, criterios de Posicionamiento en diseño si									+							
ials	Añadidos elementos especiales de tubería en Linea de acuerdo a PIDs última revisión y lista de especiales de tubería (Verificar en adicional correcta Numeración, criterios de Posicionamiento en diseño si aplican) / Inclusion of special piping elements in line according to PIDs latest revisión and Special Piping Material List (Verify identification number, piping design location criteria if applicable).								N/A								
Materials	Nº de identificación de válvulas manuales (según PID)/ Identification number of manual valve (according to PID). Pendiente tag punto bajo								+	V							
-	Todas las juntas y pernos colocados según tipo requerido (RF, FF, Bolts, Machine Bolts) / All gaskets and bolts placed according required type (RF, FF, Bolts, Machine Bolts).								+	V							
	Extensión de volante de válvula modelada y reflejada en lista de materiales de la isométrica / Valves axis extension modelled and reflected in Isometric BOM.								+ -	✓							
										+	V						
	Válvulas colocadas según PID y Piping Class / Valves placed according PID an Piping Class .								*		CUIV						
	Revision By : (CHK) Issuer							:hk (2)	CHK 2nd-0	-h. (3)							
	La isométrica verificada por Procesos (SPO) se corresponde a la última revisión / The isometric verified by Process (SPO) corresponds to its last revision .										X X	2nd-0	.hk ···				
									N/A			*	•				
	La isométrica verificada por Instrumentación (SIT) se corresponde a la última revisión / The isometric verified by Instrumentation (SIT) corresponds to its last revision.								N/A								
Final Check									N/A								
inal	La revisión de los documentos para la verificación siguen siendo las actuales / Current revision of documents for checking are still the latest available.								لنتنا								
<u> </u>	La revision de los documentos para la verificación siguen siendo las actuales / Current revisión or documents for checking are still the latest available. El número de revisión y la fecha son correctos / Revisión number and date are correct.								+								
	· · · · · · · · · · · · · · · · · · ·									+	. 🔊						
	Todos los comentarios se han revisado para ser incluidos o descartados / All comments have been checked to be included or discarded. Holds resueltos o en su defecto By-Pass aprobado / Holds resolved or instead By-Pass approved.								+	V							
												<u> </u>	<u> </u>				
SIGNATURES (Name and date)																	
DESI	GN LEADER (LD)	REVIEV		ov 24, 2024			SUPPORTS LEADER	(LSP)				ISSUER	(CHK)	REVIEWED			
DESIGN LEADER (LD) By ALBERTO RUIZ at 3:16 pm, Nov 24, 2021 SUPPORTS LEADER (LSP)								(5)	By ALBERTO RUIZ at 10:48 am, Dec 09, 2021								
STRESS LEADER (LST)		(LST) MATERIALS (M) REVIEWED By Elena Escribano at 10.55 am, Nov 26, 2021 DISCIPLINE LE				IE LEAD (L)	REVIEWED By Gabriel at 12:45 pt	m, Dec 10, 2021									
		оу сини състовно вт 10-20 али, NOV 26, 2021								By Gabriel at 12:45 pm, Dec 10, 2021							

NOTES:

- [1] If "X" marqued, a "HOLD" note should be included in the Holds area for justification.
 [2] 1st checking round: Checker to place a (\(\mathcal{X}\)) or a (\(\mathcal{X}\)) confirming or not Designer verification. A (\(\mathcal{V}\)) or a (\(\mathcal{X}\)) should also be placed to confirm or reject any (\(\mathcal{X}\)) mark placed by the Designer confirming or not the implicit HOLD.
 [3] 2nd checking round: Checker to place a (\(\mathcal{V}\)) to validate the points that were not confirmed in the 1st round and were corrected by respective Specialist.
 [4] If an isometric with HOLD is approved by IFC Leader for issuance, the correspondent By-Pass should be attached.

CONTINUE ON /K1-30-TNR-01004-50-16SS01-NI_01 E 146896 N 186504 EL +108758 F4 G6 B7 E 143840 N 184191 EL +107967 EL +107967 8 (3100.V13C) PALTF. T.O.S. EL+ 107050 _ CONTINUE ON K1-30-CONM-01064-25-16LC01-PFET_01 _125 E 143840 N 183890 EL +107967 F4 G6 B7 8 (/3100.V13A) F4 G6 B7 3 EL +105620 PLATF. T.O.S. EL+ 107050 3 EL +105167 3 EL +106215 F4 G6 B7 E 143716 N 183968 EL +104944

PID Nbr.

Piping Class

PWHT(Y or N)

800178-3000-PID-0021-001

16SS01

MATERIAL LIST - FABRICATION

NO —	N.S. (MM)	DESCRIPTION	<u>IDENT</u>	QIY
1	25	Pipes (Length), EN 10220, BE, Seamless, Serie 1/2MM EN	C46HA5JT	11.6M
2	25 x 25	10216-5 Gr.X2CrNiMo18-14-3, Eq Te, EN 10253-4 Type A, BW Ends, Seamless, -,/2MM EN 10253-4 Gr.X2CrNiMo18-14-3.	C46HAHM1	2
3	25	90Ű Elb LR, EN 10253-4 Type A, BW Ends, Seamless, Type 3D/2MM EN 10253-4 Gr.X2CrNiMo18-14-3,	C46HAGL8	5
4	25	WN Flg, EN 1092-1, RF/BW End, PN 40, Type 11, B1/2MM EN 10222-5 Gr.X2CrNiMo18-14-3,	C46HA5YU	5

MATERIAL LIST - ERECTION

PT NO	N.S. (MM)	DESCRIPTION	IDENT	QTY
5	25	Bld Flg, EN 1092-1, RF, PN 40, Type 05, B1/ EN 10222-5 Gr.X2CrNiMo18-14-3,	C46VGDKL	2
6	25	NM Flat Gk, EN 1514-1, RF as per EN 1092-1, PN 40, -, Thk=2mm, Conformance with TA-Luft, Type Novatec PREMIUM II or e/ Graphite Fiber Reinforced NBR,	C46GJUVN	6
7	12	60 HHx MBlt 1 HHx N&1W, ISO 4017/ISO 4032, Full Length Threaded, Wash. EN ISO 887, 42CrMo4 Galv., EN ISO 7089, Hot Dip G. EN 10269 Gr.42CrMo4/EN 10269 Gr.C45E,	C4RJGVU8	24
8	25		C46WHEFN	3



By Elena Escribano at 10:55 am, Nov 26, 2021

Rev	Date	Description	Prep.	Chk.	Appr.

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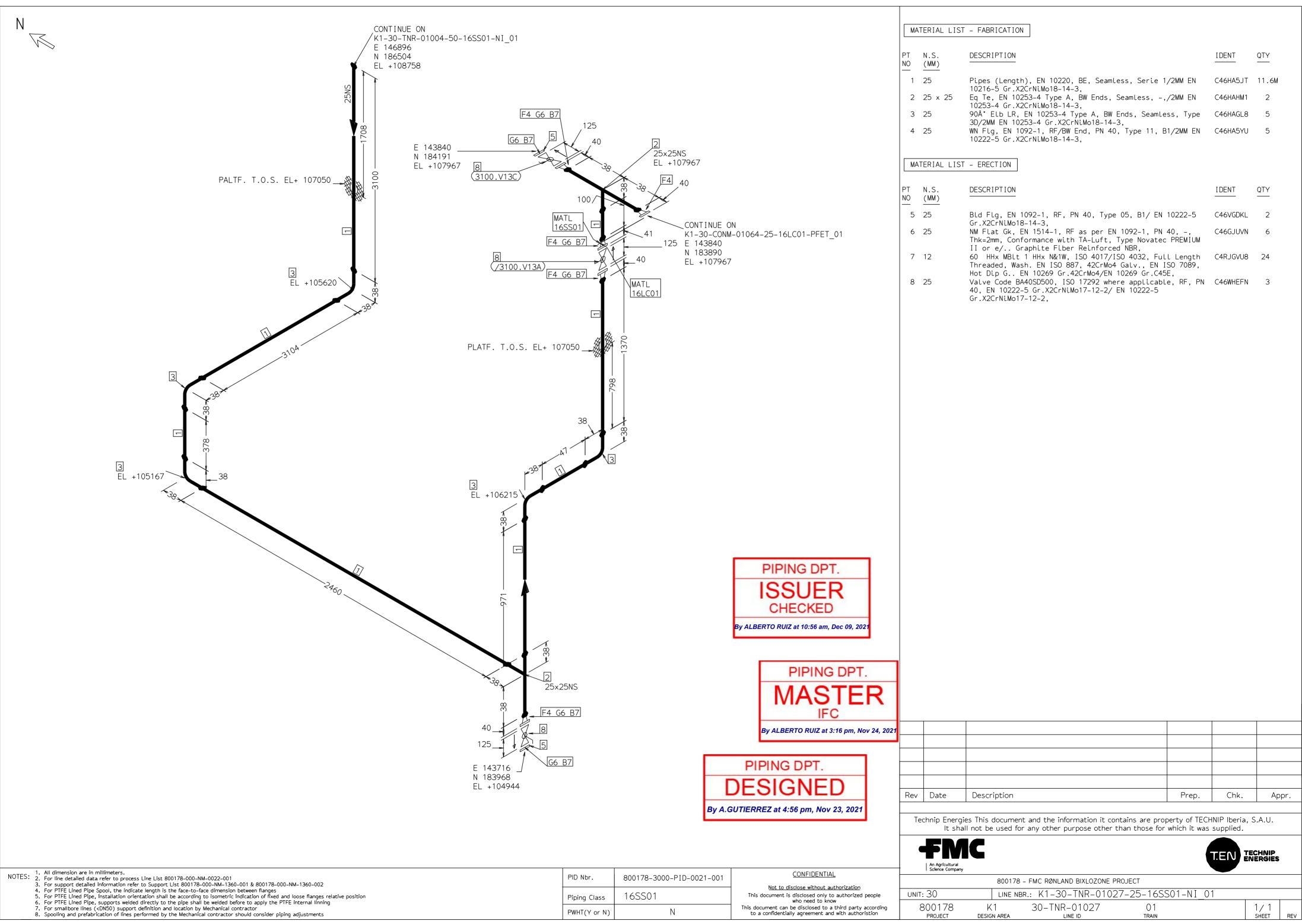
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800178 - FMC RØNLAND BIXLOZONE PROJECT LINE NBR.: K1-30-TNR-01027-25-16SS01-NI 01 **UNIT: 30** 30-TNR-01027 800178 01 1/1 SHEET REV DESIGN AREA TRAIN

NOTES: 1. All dimension are in millimeters. 2. For line detailed data refer to process Line List 800178-000-NM-0022-001



EXTRACTION DAY 23 NOV 2021

E3D NAMEK1-30-TNR-01027-25-16SS01-NI_01