

ISOMETRIC IFC - CHECK LIST

Line Number	021602VT0001	Stress CN / Level	Nº EJ	Level: I
Isometric Number	023A1021602VT0001_01	Process Approval Required	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
		Intrumentation Approval Required (N/A)	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
Information to be attached:				
Master Copy of PID:	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	Nº 800124-026-PID-0021-001	Rev. 0 IFC
PID Modification Sheet:	YES <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	Nº	Rev.
Equipment Vendor Dwg. :	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	Nº 021602TK001	Rev.
Instrument Dwg. :	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>	Nº	Rev.
Project By-Pass ⁽⁴⁾ :	YES <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	Nº	Rev.
SPO Approved Isometric:	YES <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	Rev.	Extraction Date:
SIT Approved Isometric:	YES <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	Rev.	Extraction Date:


TechnipFMC – Butterfly Project

		HOLDS			
		Nº	SHORT DESCRIPTION	RESOLVED (✓)	
Iso Information	Nº de línea según PID y lista de líneas / Line Nbr. according to PID and line list				
	Datos de la línea según lista de líneas / Line data according to line list				
	Clase de tubería según PID y Lista de Líneas / Piping class according to PID and Line List				
	Vinculo E3D con Diagramas (Process Unit, Temp Operación, Numeracion TODAS válvulas manuales) / Link between E3D and Diagrams (Process Unit, Op Temp, ALL manual valves Tagged)				
	Diámetro de la línea indicado en número de línea en el cajetín / 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 <input checked="" type="checkbox"/> 3 <input type="checkbox"/>				
Equipment	Nombre de tubuladuras según PID y plano Vendor / Name of nozzle according to PID and Vendor drawing				
	Rating y diámetro de tubuladuras según plano Vendor / Rating and diameter of nozzles according to vendor drawing				
	Posición y elevación de tubuladuras según plano Vendor / Position and elevation of nozzles according to Vendor drawing				
	Revision By : (D) Designer / (LDG) Design Leader				
	Línea sin colisión (verificación incluyendo la nube de puntos) / Line is clash free (checked including points cloud)				
	Comentarios de SPO a líneas críticas recibidos e implementados antes de extracción final para emisión / Process comments to critical lines received and implemented before final extraction for issuance		✓		
Line Design	Verificación contra P&ID y Lista de Lineas / Check Iso vs P&ID and Line List : Correcta referencia de la continuidad de la isométrica en líneas nuevas, líneas existentes u otra hoja de la isométrica en los extremos de línea y sus ramales, incluyendo elevaciones y coordenadas / Correct continuity isometric reference to new lines, existing lines or other isometric sheet in each end of the line and its branches including elevations and coordinates				
	Verificación contra P&ID / Check Iso vs P&ID : Elementos en linea incluidos, secuencia de picajes, pendiente, sentido de flujo, numeración de instrumentos, cambios de especificación, cumplimiento de notas / in-line components included, branch sequence, slope, flow direction, instrument numbering, pipe class breaks, notes accomplishment				
	Verificación contra P&ID / Check Iso vs P&ID : Longitudes requeridas de entrada y/o salida a equipos, distancias y/o elevaciones mínimas o máximas requeridas, formación de condensados / Required inlet and/or outlet lengths to equipments, minimum 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		✓		
	Verificación contra Planos de Vendor o Hook-up Instrumentacion / Check Iso vs Instrument Vendor Drawings or Hook-up : 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				
	Picajes según tabla de picajes correspondiente / Branch configuration according to correspondent branch table		✓		
Stress	Ventos 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 / Check minimum distance between welds		✓		
	Notas explicativas adicionales incorporadas / Additional clarification notes added		✓		
	Revision By : (ST) Stress Specialist / (LST) Stress Leader				
	El cálculo de stress disponible no está pendiente de revisión en curso / Available stress calculation is not awaiting for revision				
	Los requisitos según el cálculo de stress están incorporados (si son aplicables) / Stress calculation requirements have been added (if applicable)				
Supports	Revision By : (SP) Supports Specialist / (LSP) Supports leader				
	La línea está soportada por completo y la lista de soportes rellenada / Line is completely supported and support list updated				
	Concepto de soporte y separación máxima entre soportes / Support concept and support spans				
	Requerimientos de soportes estan de acuerdo al cálculo de stress y ajustados con el especialista de Stress / Support requirements according to stress calculation note are included and adjusted jointly with stress specialist				
	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)				
Materials	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		
	Revision By : (M) Materials				
	La Linea pertence a alguna o varias categorías de Criticidad. La Linea está listada en la Lista de Lineas Críticas de Materiales. Sus isometricas requieren Verificación exhaustiva / The Line belongs to some or several categories of Criticality. The Line is listed in the Critical Material Lines List. The isometrics require exhaustive verification		N/A		
	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		N/A		
	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 aplican) / Inclusion of special piping elements in line according to PIDs latest review and Special Piping Material List (Verify identification number, piping design location criteria if applicable)		N/A		
	Nº de identificación de válvulas manuales (según PID) / Identification number of manual valve (according to PID)		N/A		
Final Check	Todas las juntas y pernos colocadas según tipo requerido (RF, FF, Bolts, Machine Bolts) / All gaskets and bolts placed according required type (RF, FF, Bolts, Machine Bolts)		N/A		
	Extensión de volante de válvula modelada y reflejada en lista de materiales de la isométrica / Valves axis extension modelled and reflected in Isometric BOM		N/A		
	Válvulas colocadas según PID y Piping Class / Valves placed according PID an Piping Class		N/A		
	Revision By : (CHK) Issuer				
	La isométrica verificada por Procesos (SPO) se corresponde a la última revisión / The isometric verified by Process (SPO) corresponds to its last revision		✓		
	La isométrica verificada por Instrumentación (SIT) se corresponde a la última revisión / The isometric verified by Instrumentation (SIT) corresponds to its last revision				
	Las notas a mano están incorporadas en las isométricas / The hand-made annotation is included				
	La revisión de los documentos para la verificación siguen siendo las actuales / Current revision of documents for checking are still the latest available				
	El número de revisión y la fecha son correctos / The revision number and the date are correct				
	Todos los comentarios se han revisado para se 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				
	By: CHK				
	1st-Chk ⁽²⁾		2nd-Chk ⁽³⁾		
	✓		X		
			✓		

SIGNATURES (Name and date)

DESIGN LEADER (LD)	REVIEWED By oscar at 10:08 am, Feb 18, 2021	SUPPORTS LEADER (LSP)		ISSUER (CHK)	REVIEWED By oscar at 10:08 am, Feb 19, 2021
STRESS LEADER (LST)		MATERIALS (M)	REVIEWED By Jose G. Suarez at 12:30 pm, Feb 18, 2021	DISCIPLINE LEAD (L)	

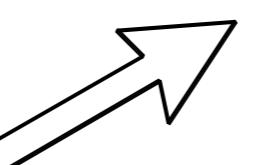
NOTES:

- [1] If "X" marqued, a "HOLD" note should be included in the Holds area for justification.
[2] 1st checking round: Checker to place a (✓) or a (X) confirming or not Designer verification. A (✓) or a (X) should also be placed to confirm or reject any (X) mark placed by the Designer confirming or not the implicit HOLD.
[3] 2nd checking round: Checker to place a (✓) 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.

MATERIAL LIST – ERECTION

PT NO	N.S. (MM)	DESCRIPTION	IDENT	QTY
1 100		GENERIC TRANSMITTER 021602LT001	--	1

N



DIAL FACE W 10.43 U
 021602LT001
 CONTINUE ON
 021602TK001/NOZZ-L1
 E 1018640
 E 1018639 N 1036886
 N 1036886 EL +101898
 EL +101895

PIPING DPT.
ISSUER
 CHECKED

By oscar at 10:19 am, Feb 19, 2021

O	24/02/2021	PA	LP	OMC	IFC – ISSUED FOR CONSTRUCTION
REV	DATED	DWN	CHK	APP	DESCRIPTION

All dimensions to be checked in field prior to construction. Dimensions and routing shall be field adjusted, it is the piping contractors responsibility to check and verify all closing dimensions to equipment and make adjustments as required in field. All dimensions, elevations and coordinates are in millimeter unless noted otherwise. Fieldwelds and overlengths to be determined by piping contractor. Bolt holes to straddle horizontal and vertical centerline unless shown otherwise. Contractor will provide all necessary pipe supports.

NOTES:

For pipes < dn50 supporting to be studied and defined by construction contractor before line fabrication and installation.

REFERENCES / DOCUMENTS

SPEC

10SS21
SYMBOLIC

PROJECT DESCRIPTION/LOCATION



BUTTERFLY PROJECT/KREFELD

SYMBOLIC

SYMBOLIC

SYMBOLIC

PROCESS UNIT

DESIGN AREA

LINE NUMBER

TRAIN SHEET REV

SYMBOLIC

SYMBOLIC

SYMBOLIC

026023A 021602-80-VT-10SS21-0001

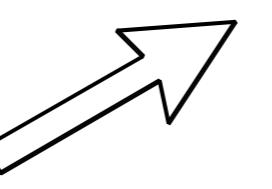
01 1 OF 1

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MATERIAL LIST – ERECTION

PT NO	N.S. (MM)	DESCRIPTION	IDENT	QTY
1 100		GENERIC TRANSMITTER 021602LT001	--	1

N



DIAL FACE W 10.43 U
 021602LT001
 CONTINUE ON
 021602TK001/NOZZ-L1
 E 1018640
 E 1018639 N 1036886
 N 1036886 EL +101898
 EL +101895

PIPING DPT.
MATERIALS
 CHECKED
By Jose G. Suarez at 12:31 pm, Feb 18, 2021

O	24/02/2021	PA	LP	OMC	IFC – ISSUED FOR CONSTRUCTION
REV	DATED	DWN	CHK	APP	DESCRIPTION

All dimensions to be checked in field prior to construction. Dimensions and routing shall be field adjusted, it is the piping contractors responsibility to check and verify all closing dimensions to equipment and make adjustments as required in field. All dimensions, elevations and coordinates are in millimeter unless noted otherwise. Fieldwelds and overlengths to be determined by piping contractor. Bolt holes to straddle horizontal and vertical centerline unless shown otherwise. Contractor will provide all necessary pipe supports.

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REFERENCES / DOCUMENTS

SPEC

10SS21
SYMBOLIC

PROJECT DESCRIPTION/LOCATION



BUTTERFLY PROJECT/KREFELD

SYMBOLIC

SYMBOLIC

SYMBOLIC

PROCESS UNIT

DESIGN AREA

LINE NUMBER

TRAIN SHEET REV

SYMBOLIC

SYMBOLIC

SYMBOLIC

026023A

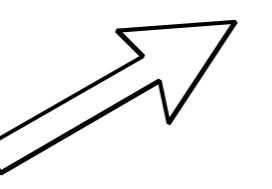
021602-80-VT-10SS21-0001

01 1 OF 1 0

MATERIAL LIST – ERECTION

PT NO.	N.S. (MM)	DESCRIPTION	IDENT	QTY
1-100		GENERIC TRANSMITTER 021602LT001	--	1

N



DIAL FACE W 10.43 U
 021602LT001
 CONTINUE ON 021602TK001/NOZZ-L1
 E 1018640
 E 1018639 N 1036886
 N 1036886 EL +101898
 EL +101895

PIPING DPT.
DESIGNED
By Joaquin Perez-Alonso at 5:35 pm, Feb 17, 2021

PIPING DPT.
DESIGN CHECKED
By oscar at 10:07 am, Feb 18, 2021

O	24/02/2021	PA	LP	OMC	IFC – ISSUED FOR CONSTRUCTION
REV	DATED	DWN	CHK	APP	DESCRIPTION

All dimensions to be checked in field prior to construction. Dimensions and routing shall be field adjusted, it is the piping contractors responsibility to check and verify all closing dimensions to equipment and make adjustments as required in field. All dimensions, elevations and coordinates are in millimeter unless noted otherwise. Fieldwelds and overlengths to be determined by piping contractor. Bolt holes to straddle horizontal and vertical centerline unless shown otherwise. Contractor will provide all necessary pipe supports.

NOTES:

For pipes < dn50 supporting to be studied and defined by construction contractor before line fabrication and installation.

REFERENCES / DOCUMENTS

LINE LIST	30201-042-001000-001
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ISOMETRIC INDEX	30303-042-023000-200
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PIPING SUPPORT	30207-042-021300-001
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SPEC

SYMBOLS

10SS21

SYMBOLS

Insulated Pipe

Insulated and Traced Pipe

PROJECT DESCRIPTION/LOCATION

BUTTERFLY PROJECT/KREFELD



PROCESS UNIT	DESIGN AREA	LINE NUMBER	TRAIN	SHEET	REV
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026023A	021602-80	VT 10SS21-0001	01	1 OF 1	0
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