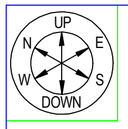
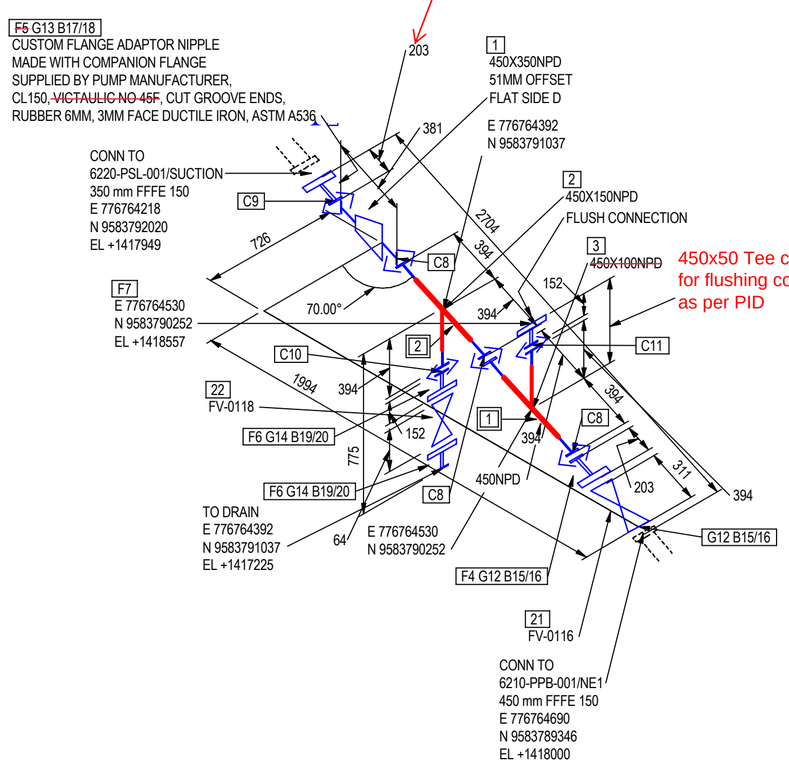


Dimension given is steel to steel, so face of flange to end of pipe. fabrication will have to adjust with flange provided by slurry pump supplier.Meaning 203 mm is the length of a 45F victaulic flange. we will need to fabricate 203mm length of flange with the slurry pump supplier.

Flange supplied by Slurry pump supplier and will be shipped to Rubber lined supplier.



BILL OF MATERIALS / LISTA DE MATERIALES

	PT No	QTY CANT.	SIZE DIM.	DESCRIPTION DESCRIPCIÓN
	1	1	450X350	REDUCER, ECC, VICTAULIC NO. 51 GROOVED TO VICTAULIC 25.01, 6MM RUBBER DUCTILE IRON, A536
	2	1	450X150	TEE, RED, VICTAULIC NO. 25 GROOVED TO VICTAULIC 25.01, 6MM RUBBER DUCTILE IRON, A536
450x50	3	1	~~450X100~~	TEE, RED, VICTAULIC NO. 25 GROOVED TO VICTAULIC 25.01, 6MM RUBBER DUCTILE IRON, A536
	4	1	450	FLANGE, CL150, VICTAULIC NO 45F, CUT GROOVE ENDS, RUBBER 6MM, 3MM FACE DUCTILE IRON, ASTM A536
	~~5~~	~~1~~	~~350~~	~~FLANGE, CL150, VICTAULIC NO 45F, CUT GROOVE ENDS, RUBBER 6MM, 3MM FACE DUCTILE IRON, ASTM A536~~
	6	2	150	FLANGE, CL150, VICTAULIC NO 45F, CUT GROOVE ENDS, RUBBER 6MM, 3MM FACE DUCTILE IRON, ASTM A536
50	7	1	~~100~~	FLANGE, CL150, VICTAULIC NO 45F, CUT GROOVE ENDS, RUBBER 6MM, 3MM FACE DUCTILE IRON, ASTM A536
	8	3	450	COUPLING, FLEXIBLE, STYLE 77 FLEX COUPLING DUCTILE IRON, A536
	9	1	350	COUPLING, FLEXIBLE, STYLE 77 FLEX COUPLING DUCTILE IRON, A536
	10	1	150	COUPLING, FLEXIBLE, STYLE 77 FLEX COUPLING DUCTILE IRON, A536
	11	1	100	COUPLING, FLEXIBLE, STYLE 77 FLEX COUPLING DUCTILE IRON, A536
	12	2	450	GASKET, 1.5MM RING or FULL FACE TO SUIT FLANGES GARLOCK 3000
	13	1	350	GASKET, 1.5MM RING or FULL FACE TO SUIT FLANGES GARLOCK 3000
	14	2	150	GASKET, 1.5MM RING or FULL FACE TO SUIT FLANGES GARLOCK 3000
	15	32	29	BOLT, HEX HD BOLTS c/w HEX HEAD NUT A193 Gr.B7, A194 Gr.2H - 158.75 mm Length
	16	64	29	WASHER, ROUND, FLAT, STEEL, GALV, for 1.125in bolt
	17	12	25	BOLT, HEX HD BOLTS c/w HEX HEAD NUT A193 Gr.B7, A194 Gr.2H - 139.7 mm Length
	18	24	25	WASHER, ROUND, FLAT, STEEL, GALV, for 1in bolt
	19	16	19	BOLT, HEX HD BOLTS c/w HEX HEAD NUT A193 Gr.B7, A194 Gr.2H - 107.95 mm Length
	20	32	19	WASHER, ROUND, FLAT, STEEL, GALV, for 0.75in bolt
	21	1	450	KNIFE GATE VALVE, CLARKSON KGA, FLANGE TYPE (KG01)
	22	1	150	KNIFE GATE VALVE, CLARKSON KGD, WAFER TYPE (KG03)

INGÉNIEUR - ENGINEER
Patrick Dumont
QUÉBEC
2018-09-12

Safety in all we do

GENERAL NOTES

1. FOR PROJECT PIPING STANDARDS, REFER TO DRAWING ECFN-AUS-PI-6000-STD-01001.
2. ALL ISOMETRICS ARE DRAWN TO VICTAULIC STANDARD GROOVE SPECIFICATIONS 25.01.
3. ALL DIMENSIONS INDICATED ARE TO THE FACE OF STEEL.
4. GAPS WHERE VICTAULIC COUPLINGS WILL BE ADDED RESPECTS VICTAULIC STANDARD DIMENSIONS FOR MAXIMUM SEPARATION ALLOWANCE.

FOR RUBBERLINING MANUFACTURING PURPOSE

1. STRAIGHT PIPE SPOOLS AND CUSTOM FITTINGS ARE TO BE FABRICATED TO VICTAULIC STANDARD GROOVE DIMENSIONS FOR RUBBER LINING 25.03.
2. FOR PIPE-TO-FITTING JOINT, FITTINGS ARE TO BE SUPPLIED AS PER VICTAULIC STANDARD GROOVE SPECIFICATIONS 25.01 (3 MM RUBBER TO BE ADDED).
3. FOR FITTING-TO-FITTING JOINT, 12 INCH AND LESS, FITTINGS ARE TO BE SUPPLIED AS PER VICTAULIC STANDARD GROOVE SPECIFICATIONS 25.01 (1.6 TO 3 MM RUBBER TO BE ADDED).
4. FOR FITTING-TO-FITTING JOINT, 14 INCH AND LARGER, FITTINGS ARE TO BE SUPPLIED AS PER VICTAULIC STANDARD GROOVE SPECIFICATIONS 25.03.

LINE NUMBER NÚMERO DE LINEA	6210-450-SPR-L03-0115	SPEC ESP.	L03	P&ID NUMBER NÚMERO P&ID	6210-PID-00001

AURELIAN ECUADOR S.A.

DESIGN TEMP (°C) / TEMPERATURA DE DISEÑO						
DESIGN PRESS (kPa(g)) / PRESION DE DISEÑO						
DESIGN CODE & CLASS / CODIGO Y CLASE DE DISEÑO	1	RE-ISSUED FOR FABRICATION	MR	PD	18-09-07
INSULATION (TYPE/THK) / AISLACIÓN (TIPO/ESPESÓR)	0	ISSUED FOR FABRICATION	MR	PD	18-07-06
TRACING / TRAZADO	C	ISSUED FOR TENDER	MR	PD	18-05-08
NDE	B	ISSUED FOR PROJECT REVIEW	MR	PD	18-04-05
TEST TYPE / PRUEBA TIPO	A	ISSUED FOR INTERNAL REVIEW	MR	PD	18-04-05
TEST PRESS (kPa(g)) / PRUEBA DE PRESIÓN	REV	DESCRIPTION / DESCRIPCION	BY / DE	ENG	DATE/FECHA

DESIGN/DISEÑO	M.ROCHE	18-04-02
DRAWN/DIBUJADO	M.ROCHE	18-04-02
CHECKED/VERIFICADO	A.CHARLEB	18-04-05
ENGINEER/INGENIERO	P.DUMONT	18-04-05

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Ausenco

CLIENT / CLIENTE

MINING SERVICES INC.

TITLE / TITULO

FRUTA DEL NORTE PROJECT
PIPING ISOMETRIC

PROYECTO FRUTA DEL NORTE
ISOMÉTRICOS DE TUBERÍAS

SUB-PROJECT / SUB-PROYECTO: ENGINEERING CONSTRUCTION / INGENIERIA Y CONSTRUCCIÓN

ALL DIMENSIONS IN MM / TODAS LAS DIMENSIONES EN MM

SIZE / TAMANO: A3

REV. 1

DRAWING No

ECFN-AUS-PI-6210-ISO-01015