

	2522					
	DUSLO CPAVOK 4					
	Project	Unit	Doc type	Mat. Code	Serial number	Rev.
	2522	000	JSD	1300	001	4
DUSLO Code: 2260/16/15/TPIT						

Detailed Piping Class

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Specification		D241A		CS 1.5 mm 300# RF - Generic Service						
Basic Material	Carbon steel			Standard Pipe			ASME B31.3 edition 2012			
Rating	300 lbs			Standard Test			ASME B31.3			
Corrosion Allowance	1.5 MM			Branch Table			SW_300_90			
Facing	RF			Branch Design			ASME B31.3			
Fluid Category	NORMAL			Pressure Test						
Ped FI Phase				Control Level						
Ped Fluid Group				Process PWHT			NO			
Ped Fluid Category				Code PWHT			as per code			
				Welding Spec.			-			
				Location			AG			
Notes										
Temperature	DEG C	-25	37.8	93.3	148.9	204.4	235			
Pressure	MPAG	4.6	4.6	4.6	4.52	4.38	4.26			
Schedule / Thickness										
Short Code (Opt.)	ORI (1)		CHE (1)		GLO (1)		90E (1)		WOL (1)	GAS (10130)
	B3F2 (1)		LS10 (1)		LD10 (1)		PL6 (1)		EDL (1)	TC2 (1)
	BAL (1)		45E (1)		HT10 (1)		TL2 (1)		PLU (1)	BG10 (1)
	TOL (1)		DRI (1)		B3F3 (1)		PAD (1)		CPL (541)	SF1 (1)
	BLF (10116)		B3F (1)		GAS (1)		CAP (1)		TEE (1)	TEER (1)
	PC10 (1)		B6F (1)		BLF (1)		GAT (1)		BAJ (1)	LT10 (1)
	DR11 (1)		CRE (711)		FLG (10116)		B3F4 (1)		PIP (1)	SOL (1)
	FC6 (1)		DR12 (1)		FLGR (1)		GAS (10116)		CPL (1)	CRE (1)
	FLG (1)		F8S (1)		FLG (10130)		CPL (714)		BAL (10323)	CAP (541)
	ERE (1)		BLS (1)		SPA (1)		LG10 (1)		DT11 (1)	DT12 (1)
Diameter	.5		.75		1		1.5		2	3
Sch. / Thk.	S-XS		S-XS		S-XS		S-XS		S-STD	S-STD
	4		6		8		10		12	14
	S-STD		S-STD		S-20		S-30		S-STD	S-STD
	16		18		20		24			
	S-XS		S-XS		S-XS		S-30			
Short Code(Opt.)	NIP (728)		NIP (750)		NIP (10753)		NIP (731)			
Diameter	.5		.75		1		1.5			
Sch. / Thk.	S-160		S-160		S-160		S-160			
Short Code(Opt.)	FLG (173)									
Diameter	1		1.5		2					
Sch. / Thk.	14.3MM		15.85MM		15.85MM					

Detailed Piping Class

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Specification		D241A		CS 1.5 mm 300# RF - Generic Service			
Pipes							
		Diameter					
Short Code	Opt	From	To	UoM	Commodity Description	Commodity Code	Notes
PIP	1	.5	1.5	IN	Seamless, Pipes, ASME B36.10, ASTM A333 Gr.6, PE, -, -,	PPPP20L400I0000000	
PIP	1	2	18	IN	Seamless, Pipes, ASME B36.10, ASTM A333 Gr.6, BE, -, -,	PPPP20L40030000000	
PIP	1	20	24	IN	EFW + 100% RT, Pipes, ASME B36.10, ASTM A671 Gr.CC60 Cl.12 + S2, BE, -, -, -,	PPPP20L40530030000	
Fittings							
		Diameter					
Short Code	Opt	From	To	UoM	Commodity Description	Commodity Code	Notes
45E	1	.5	1.5	IN	45 Degree elbow, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, SW Ends, -, 3000 Lbs, -,	DFE420L5C1L0LE0000	
45E	1	2	18	IN	45 Degree elbow Long Radius (R=1.5D), Seamless, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBE420L5C530010000	
45E	1	20	24	IN	45 Degree elbow Long Radius (R=1.5D), Welded + 100% RT, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBE420L5C530030000	
90E	1	.5	1.5	IN	90 Degree elbow, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, SW Ends, -, 3000 Lbs, -,	DFE920L5C1L0LE0000	
90E	1	2	18	IN	90 Degree elbow Long Radius (R=1.5D), Seamless, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBE920L5C530010000	
90E	1	20	24	IN	90 Degree elbow Long Radius (R=1.5D), Welded + 100% RT, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBE920L5C530030000	
CAP	1	.5	1.5	IN	Cap, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, SW End, -, 3000 Lbs, -,	DFCP20L5C1L0LE0000	
CAP	541	.5	1.5	IN	Cap, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, NPTF End, -, 3000 Lbs, -,	DFCP20L5C1R1LE0000	
CAP	1	2	24	IN	Cap, Seamless, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBCP20L5C530010000	
CPL	1	.5	1.5	IN	Full coupling, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, SW Ends, -, 3000 Lbs, -,	DFCF20L5C1L0LE0000	
CPL	541	.5	1.5	IN	Full coupling, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, NPTF Ends, -, 3000 Lbs, -,	DFCF20L5C1R4LE0000	
CPL	714	.5	1.5	IN	Full coupling, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, SW End/NPTF End, -, 3000 Lbs, -,	DFCF20L5C1L1LE0000	
CRE	1	.75 .5	1.5 1	IN IN	Concentric swage, MSS SP-95, ASTM A420 Gr.WPL6, PE, -, -,	DFSCI0L5C5I00000	
CRE	711	.75 .5	1.5 1	IN IN	Concentric swage, MSS SP-95, ASTM A420 Gr.WPL6, PE/NPTM End, -, -,	DFSCI0L5C5I10000	
CRE	1	2 .5	4 1.5	IN IN	Concentric swage, MSS SP-95, ASTM A420 Gr.WPL6, BE/PE, -, -,	DFSCI0L5C5300000	
ERE	1	3 2	18 16	IN IN	Eccentric reducer, Seamless, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBRE20L5C530010000	
ERE	1	20 12	24 20	IN IN	Eccentric reducer, Welded + 100% RT, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBRE20L5C530030000	

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Detailed Piping Class

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Specification D241A CS 1.5 mm 300# RF - Generic Service

Fittings

Short Code	Opt	Diameter		UoM	Commodity Description	Commodity Code	Notes
		From	To				
NIP	10753	.5	1.5	IN	Seamless, Nipple, L = 200mm, ASME B36.10, ASTM A333 Gr.6, NPTM End/PE, -, -,	DFNP20L400R001060000	
NIP	728	.5	1.5	IN	Seamless, Nipple, L = 100mm, ASME B36.10, ASTM A333 Gr.6, PE, -, -,	DFNP20L400I001040000	
NIP	731	.5	1.5	IN	Seamless, Nipple, L = 100mm, ASME B36.10, ASTM A333 Gr.6, NPTM End/PE, -, -,	DFNP20L400R001040000	
NIP	750	.5	1.5	IN	Seamless, Nipple, L = 200mm, ASME B36.10, ASTM A333 Gr.6, PE, -, -,	DFNP20L400I001060000	
PLU	1	.5	1.5	IN	Plug, Solid Round Head Type, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, NPTM End, -, -,	DFPL20L5C1R2030000	
TEE	1	.5	1.5	IN	Equal tee, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, SW Ends, -, 3000 Lbs, -,	DFTE20L5C1L0LE0000	
TEE	1	2	18	IN	Equal tee, Seamless, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBTE20L5C530010000	
TEE	1	20	24	IN	Equal tee, Welded + 100% RT, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBTE20L5C530030000	
TEER	1	.75	1.5	IN	Reducing tee, ASME B16.11, ASTM A350 Gr.LF2 Cl.1, SW Ends, -, 3000 Lbs, -,	DFTR20L5C1L0LE0000	
TEER	1	3	18	IN	Reducing tee, Seamless, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBTR20L5C530010000	
TEER	1	20	24	IN	Reducing tee, Welded + 100% RT, ASME B16.9, ASTM A420 Gr.WPL6, BW Ends, -, -,	DBTR20L5C530030000	

Olets

Short Code	Opt	Diameter		UoM	Commodity Description	Commodity Code	Notes
		From	To				
EDL	1	20	20	IN	Endolet (Flatolet) BW, MSS SP-97, ASTM A350 Gr.LF2 Cl.1, BW Ends, -, -,	LTLEI0L5C1300000	
SOL	1	2	24	IN	Sockolet, MSS SP-97, ASTM A350 Gr.LF2 Cl.1, 3000 Lbs, SW Ends, -, -,	LTLSI0L5C1L0LE0000	
TOL	1	2	24	IN	Threadolet, MSS SP-97, ASTM A350 Gr.LF2 Cl.1, 3000 Lbs, NPTF Ends, -, -,	LTLTIO0L5C1R0LE0000	
WOL	1	6	24	IN	Weldolet, MSS SP-97, ASTM A350 Gr.LF2 Cl.1, BW Ends, -, -,	LTLWI0L5C1300000	

Flanges

Short Code	Opt	Diameter		UoM	Commodity Description	Commodity Code	Notes
		From	To				
BLF	1	.5	24	IN	Blind Flange, ASME B16.5, ASTM A350 Gr.LF2 Cl.1, 300 Lbs, RF, -, -, -,	FGBL25L5C102L50000	

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Specification		D241A		CS 1.5 mm 300# RF - Generic Service				
Flanges								
		Diameter						
Short Code	Opt	From	To	UoM	Commodity Description	Commodity Code	Notes	
BLF	10116	.5	24	IN	Blind Flange, ASME B16.5, ASTM A350 Gr.LF2 Cl.1, 600 Lbs, RF, -, -, -,	FGBL25L5C102L80000		
FLG	1	.5	1.5	IN	Socketweld Flange, ASME B16.5, ASTM A350 Gr.LF2 Cl.1, 300 Lbs, RF/SW End, -, -, -,	FGSW25L5C107L50000		
FLG	10116	.5	1.5	IN	Socketweld Flange, ASME B16.5, ASTM A350 Gr.LF2 Cl.1, 600 Lbs, RF/SW End, -, -, -,	FGSW25L5C107L80000		
FLG	10130	.75	1.5	IN	Socketweld Flange, ASME B16.5, ASTM A350 Gr.LF2 Cl.1, 1500 Lbs, RTJ Face/SW End, -, -, -,	FGSW25L5C10ALB0000		
FLG	173	1	2	IN	Long weldneck Flange, -, Prj Std, ASTM A350 Gr.LF2 Cl.1, RF/BW End, -, 600 Lbs, -, as per DWG No. STC-139C-01	FGWLP0L5C106L8000001		
FLG	1	2	24	IN	Weldneck Flange, ASME B16.5, ASTM A350 Gr.LF2 Cl.1, 300 Lbs, RF/BW End, -, -, -,	FGWN25L5C106L50000		
FLG	10116	2	24	IN	Weldneck Flange, ASME B16.5, ASTM A350 Gr.LF2 Cl.1, 600 Lbs, RF/BW End, -, -, -,	FGWN25L5C106L80000		
FLG	10130	2	24	IN	Weldneck Flange, ASME B16.5, ASTM A350 Gr.LF2 Cl.1, 1500 Lbs, RTJ Face/BW End, -, -, -,	FGWN25L5C109LB0000		
FLGR	1	1.5	1.5	IN	Reducing socketweld Flange, ASME B16.5, ASTM A350 Gr.LF2 Cl.1, 300 Lbs, RF/SW End, -, -, -,	FGRS25L5C107L50000		
ORI	1	.5	.5	IN	Couple of Orifice weldneck Flange w/ 0.5" THD taps, With Jack & Bolt A193 Gr.B7/A194 Gr.2H, -, ASME B16.36, ASTM A350 Gr.LF2 Cl.1, 300 Lbs, RF/BW End, -, 2 Holes per Flange, Round Head Plugs A350 Gr.LF2 Cl.1, -, -,	FFF120L5C106L50I00		
		2	24					
Valves								
		Diameter						
Short Code	Opt	From	To	UoM	Commodity Description	Commodity Code	Notes	
BAL	10323	.5	1.5	IN	Ball Valve with 2 Nipples, Full Bore, Floating Ball, API 608, -, ASTM A105, 800 Lbs, SW Ends w/ 2 PE Nipples, Ends as per ASME B16.11, AISI 316 Ball, AISI 316 Stem, 2 or 3 Pcs Split Body Side Entry, Bolted Connection, -, -, SPW AISI 316/Graphite, Stem Seal: Graphite, -, Seat Rings: AISI 316, Seat Inserts: Graphite, -, Fire Safe as per API 607, LO, -, -, -, -, -, -,	VBAP20C5C2L3L918071F00		
BAL	1	.5	2	IN	Ball Valve with 2 Nipples, Full Bore, Floating Ball, API 608, -, ASTM A105, 800 Lbs, SW Ends w/ 2 PE Nipples, Ends as per ASME B16.11, AISI 316 Ball, AISI 316 Stem, 2 or 3 Pcs Split Body Side Entry, Bolted Connection, -, -, SPW AISI 316/Graphite, Stem Seal: Primary PTFE/Secondary Graphite, -, Seat Rings: RPTFE, Seat Inserts: -, -, Fire Safe as per API 607, LO, -, -, -, -, -, -,	VBAP20C5C2L3L90A070I00		
BAL	1	3	6	IN	Ball Valve Flanged Ends, Full Bore, Long Pattern, Floating Ball, API 608, -, ASTM A216 Gr.WCB, 300 Lbs, RF, Ends as per ASME B16.5, -, AISI 316 Ball, AISI 316 Stem, 2 or 3 Pcs Split Body Side Entry, Bolted Connection, -, -, SPW AISI 316/Graphite, Stem Seal: Primary PTFE/Secondary Graphite, -, Seat Rings: RPTFE, Seat Inserts: -, -, Fire Safe as per API 607, LO, -, -, -, -, -, -,	VBAH20C4000AL536072A00		

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Specification		D241A		CS 1.5 mm 300# RF - Generic Service			
Valves							
Short Code	Opt	Diameter			Commodity Description	Commodity Code	Notes
		From	To	UoM			
BAL	1	8	8	IN	Ball Valve Flanged Ends, Full Bore, Long Pattern, Floating Ball, API 608, -, ASTM A216 Gr.WCB, 300 Lbs, RF, Ends as per ASME B16.5, -, AISI 316 Ball, AISI 316 Stem, 2 or 3 Pcs Split Body Side Entry, Bolted Connection, -, -, SPW AISI 316/Graphite, Stem Seal: Primary PTFE/Secondary Graphite, -, Seat Rings: RPTFE, Seat Inserts: -, -, Fire Safe as per API 607, GO, -, -, -, -, -, -,	VBAH20C4000AL536042A00	
CHE	1	.5	2	IN	Swing Check Valve Female Ends, FB, API 602, ASTM A105, 800 Lbs, Installation: Horizontal or Vertical, SW Ends, Ends as per ASME B16.11, Bolted Cover, -, -, SPW AISI 316/Graphite, -, Renewable Seats, Seats: -, API Trim No 8, -, -, -, -, -, -,	VCGD23C5C2L0L9031A00	
CHE	1	3	24	IN	Swing Check Valve Flanged Ends, -, API 594, ASTM A216 Gr.WCB, 300 Lbs, Installation: Horizontal or Vertical, RF, Ends as per ASME B16.5, -, Bolted Cover, -, -, SPW AISI 316/Graphite, -, Renewable Seats, Seats: -, API Trim No 8, -, -, -, -, -, -,	VCGA20C4000AL50K2200	
GAT	1	.5	2	IN	Gate Valve Female Ends, FB, API 602, -, ASTM A105, 800 Lbs, SW Ends, Ends as per ASME B16.11, Bolted Bonnet, -, -, SPW AISI 316/Graphite, Packing: Graphite, -, API Trim No 8, Renewable Seats, Seats: -, Solid Wedge, -, Stem: OS & Y/RSNRO, -, HO, -, -, -, -, -, -,	VGGE24C5C2L0L921051800	
GAT	1	3	8	IN	Gate Valve Flanged Ends, -, API 600, -, ASTM A216 Gr.WCB, 300 Lbs, RF, Ends as per ASME B16.5, -, Bolted Bonnet, -, -, SPW AISI 316/Graphite, Packing: Graphite, -, API Trim No 8, Renewable Seats, Seats: -, Flexible Wedge, -, Stem: OS & Y/RSNRO, -, HO, -, -, -, -, -, -,	VGGI22C4000AL50F052Y00	
GAT	1	10	24	IN	Gate Valve Flanged Ends, -, API 600, -, ASTM A216 Gr.WCB, 300 Lbs, RF, Ends as per ASME B16.5, -, Bolted Bonnet, -, -, SPW AISI 316/Graphite, Packing: Graphite, -, API Trim No 8, Renewable Seats, Seats: -, Split Wedge, -, Stem: OS & Y/RSNRO, -, GO, -, -, -, -, -, -,	VGGI22C4000AL52F042Y00	
GLO	1	.5	2	IN	Globe Valve Female Ends, FB, API 602, -, ASTM A105, 800 Lbs, SW Ends, Ends as per ASME B16.11, Bolted Bonnet, -, -, SPW AISI 316/Graphite, Packing: Graphite, -, API Trim No 8, Renewable Seats, Seats: -, Swivel Plug Disc, -, Stem: OS & Y/RSRO, -, HO, -, -, -, -, -, -,	VLGE21C5C2L0L920O051300	
GLO	1	3	8	IN	Globe Valve Flanged Ends, -, API 623, -, ASTM A216 Gr.WCB, 300 Lbs, RF, Ends as per ASME B16.5, -, Bolted Bonnet, -, -, SPW AISI 316/Graphite, Packing: Graphite, -, API Trim No 8, Renewable Seats, Seats: -, Swivel Parabolic Disc, -, Stem: OS & Y/RSRO, -, HO, -, -, -, -, -, -,	VLGI25C4000AL50Y051J00	
GLO	1	10	10	IN	Globe Valve Flanged Ends, -, API 623, -, ASTM A216 Gr.WCB, 300 Lbs, RF, Ends as per ASME B16.5, -, Bolted Bonnet, -, -, SPW AISI 316/Graphite, Packing: Graphite, -, API Trim No 8, Renewable Seats, Seats: -, Swivel Parabolic Disc, -, Stem: OS & Y/RSRO, -, GO, -, -, -, -, -, -,	VLGI25C4000AL50Y041J00	
Miscellaneous Items							

	2522		Project	Unit	Doc type	Mat. Code	Serial number	Rev.
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Specification		D241A			CS 1.5 mm 300# RF - Generic Service		
Miscellaneous Items							
Short Code	Opt	Diameter			Commodity Description	Commodity Code	Notes
		From	To	UoM			
BLS	1	12	24	IN	Paddle Blind, ASME B16.48, ASTM A516N Gr.70 + S5, Between RF Flanges, as per ASME B16.5, -, 300 Lbs, -, -, -, -, -	MMFP20L6O101L50100	
DRI	1	3	3	IN	Drip Ring, Prj Std, ASTM A350 Gr.LF2 Cl.1, Between RF Flanges, match between flanges as per ASME B16.5, -, 300 Lbs, 2 Holes 0.75 in SW End, -, -, -, -, as per DWG No. STC-139C-02,	MMDRP0L5C101L50701	
F8S	1	.5	10	IN	Spectacle Blind Fig.8, ASME B16.48, ASTM A350 Gr.LF2 Cl.1, Between RF Flanges, as per ASME B16.5, -, 300 Lbs, -, -, -, -, -	MMF820L5C101L50100	
SPA	1	12	24	IN	Paddle Spacer, ASME B16.48, ASTM A516N Gr.70 + S5, Between RF Flanges, as per ASME B16.5, -, 300 Lbs, -, -, -, -, -	MMFS20L6O101L50100	
Gaskets							
Short Code	Opt	Diameter			Commodity Description	Commodity Code	Notes
		From	To	UoM			
GAS	1	.5	24	IN	Spiral Wound Gasket , -, ASME B16.20, AISI 316/Graphite, RF as per ASME B16.5, 300 Lbs, -, Inner AISI 316/Outer AISI 316, -, -	GKSW21I0090OL500000G00	
GAS	10116	.5	24	IN	Spiral Wound Gasket , -, ASME B16.20, AISI 316/Graphite, RF as per ASME B16.5, 600 Lbs, -, Inner AISI 316/Outer AISI 316, -, -	GKSW21I0090OL800000G00	
GAS	10130	.75	24	IN	Ring joint Gasket, Octagonal Type R, ASME B16.20, Soft Iron, RTJ Faces as per ASME B16.5, 1500 Lbs, -, -, -	GKRJ21000O10LB020000	
Bolts							
Short Code	Opt	Diameter			Commodity Description	Commodity Code	Notes
		From	To	UoM			
BOL	1	.5	4	IN	Stud bolt with 2 heavy hexagonal nuts, Full Length Threaded, ASME B1.1/ASME B18.2.2, A193 Gr.B7/A194 Gr.2H, -, -, -	BTS221A005010000	
Branches							
Short Code	Opt	Diameter			Commodity Description	Commodity Code	Notes
		From	To	UoM			
PAD	1	16	18	IN	Reinforcing Pad 90 Degree, Prj Std, ASTM A333 Gr.6, BE, -, -	BRRPP0L4003000	
PAD	1	10	12	IN			
PAD	1	20	24	IN	Reinforcing Pad 90 Degree, Prj Std, ASTM A671 Gr.CC60 Cl.12 + S2, BE, -, -	BRRPP0L4053000	
PAD	1	10	16	IN			

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