

1	Design Code: ASME B31.8 - 2012				
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5	GENERAL	Units	56" (1422 mm)		
6	Line Pipe Description	-	Onshore - HIB Mother Pipe LSAW		
7	API 5L Grade		X70 - PSL 2		
8	Service		Natural Gas - Non Sour		
9	Specified Minimum Yield Strength	MPa	485		
10	Specified Minimum Tensile Strength	MPa	570		
11	Nominal Pipe Outer Diameter	in / mm	56 / 1422		
12	Design Pressure	barg	100		
13	Design Temperatures (min/max)	°C	-29 to 60		
14	Operating Temperatures (min/max)	°C	-29 to 55		
15	Black Bulb Temperatures (max)	°C	80		
16	Pipeline Design Factor	-	0.72 (Cl. 1 Div.2)	0.6 (Cl. 2)	0.5 (Cl. 3)
17	Corrosion Allowance	mm	0	0	0
18	Nominal Pipe Wall Thickness	mm	20.37	24.44	29.33
19	DIMENSIONS				
20	Wall Thickness Tolerances	mm	+1.5 / -0.5		
21	Maximum Pipe Length	m	16		
22	Minimum Pipe Length	m	12		
23	Minimum Average Pipe Length	m	-		
24	% Short Pipe Length	%	-		
25	OD Tolerances along Pipe Length	mm	± 3		
26	ID Tolerances - Pipe Ends	mm	± 1.6		
27	Out of Roundness - Pipe	mm	14		
28	Out of Roundness - Ends	mm	8		
29	Bevel Angle	Deg	30		
30	Bevel Angle - Tolerance	Deg	+5 / 0		
31	End Bevels - Root Face	mm	1.6		
32	End Bevels - Root Tolerance	mm	±0.8		
33	Straightness (pipe length)	%	0.15		
34	Straightness (1m localised)	mm	3		
35	Cold Expansion Ratio	-	0.003-0.015		
36	Applicable Mechanical Specification	-	A, B		
37	PRESERVATION AND MARKING				
38	Type of Bevel Protectors	-	Required - Metal		
39	Longitudinal Colour Code	-	TBC		
40	End Caps	-	Required		
41	* Wall thickness for HIB mother pipe shall be defined by Vendor.				
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44	TESTING	Units			
45	Mill Hydrotest Pressure (20 sec)	-	100% SMYS		
46	CVN Impact – Pipe Weld, HAZ				
47	Test Temperature	Deg.C	-29		
48	Energy Requirement. Weld/HAZ	Avg. J	60		
49		Min.J	50		
50	CVN Impact – Body - Resistance to Ductile Fracture Propagation, note 1				
51	Test Temperature	Deg.C	-29		
52	Energy Requirement. Pipe Body	Avg. J	130		
53		Min.J	75% of Avg.		
54	DWT Test - Resistance to Ductile Fracture Propagation, note 1				
55	Test Temperature	Deg.C	-29		
56	Shear Fracture Area	Avg. %	85		
57		Min. %	75		
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61	COATING	Units	56/4	56/5	56/6
62	Pipe Description (see table below)	-	4	4	4
63	External Coating Type	-	3LPP	3LPP	3LPP
64	External Coating Thickness	mm	4 mm	4 mm	4 mm
65	Internal Lining Type	-	Epoxy Flow-Coat		
66	Internal Lining Thickness	µm	80	80	80
67	Applicable Coating Specifications	-	D, E	D, E	D, E
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69	<u>Pipe Description:</u>				
70	1. Internally and externally coated linepipe, D.F=0.72 installation				
71	2. Internally and externally coated linepipe, D.F=0.60 installation				
72	3. Internally and externally coated linepipe, D.F=0.50 installation				
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74	4. Bare mother pipe for Hot Induction Bend production, bends for underground installation shall be internally lined (as per referenced specification D) and externally coated with 3LPP (as per referenced specification E) after induction bending process.				
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77	<u>Applicable Project Specifications:</u>				
78	A. Specification for Line Pipes (LLI), Doc.No. K358-ILF-OVA-PLG-ME-SPC-0003				
79	B. Specification for Mainline Hot Bends, Doc.No. K358-ILF-OVA-PLG-ME-SPC-0023				
80	C. Specification for 3-Layer Polyethylene External Coating of Line Pipe, Doc.No. K358-ILF-OVA-PLG-ME-SPC-0004				
81	D. Specification for Internal Lining of Line Pipe, Doc.No. K358-ILF-OVA-PLG-ME-SPC-0002				
82	E. Specification 3 Layer PP Coating, Doc.No. K358-ILF-OVA-PLG-ME-SPC-0002				
83	F. Specification for Painting and Coating, Doc.No. K358-ILF-OVA-GEN-ME-SPC-0025 (for above ground bends at)				
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85	<u>General Notes:</u>				
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87	1. In accordance with API 5L Annex G				
88	2. The test criteria shall also fulfill the requirements stated in Specification for Line Pipes (LLI)				
89	3. Coating requirements shall follow Project Specifications for Coating, Lining and Painting				
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