



China Petroleum Pipeline Bureau
ENGINEERING, DESIGN, PROCUREMENT AND CONSTRUCTION OF 10
INCH 122KM OIL PIPELINE FROM SINENDET (PS26) TO KISUMU (PS28)
TOGETHER WITH TIE - IN FACILITIES AT PS28 FOR THE FUTURE
KISUMU-BUSIA PIPELINE

Data Sheet for Pig Launcher and Receiver

Contract No.: SU/QT/557N/14

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C	For Approval	Zhang Song	Li Jinguo	Zhang Xiaoyan	April. 20, 2015
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Rev.C	1
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1.0 PN 10.0 MPa DN 250 PIG LAUNCHER

General			
Location	PS26	Quantity	1
Service	Launching of pigs	Tag No.	PL-2601
Specification	KPCSK-E-MA-SP-0001		
Code	<input checked="" type="checkbox"/> ASME BPV Code Sect.VIII <input checked="" type="checkbox"/> ASME B31.3		
Painting			
Design Data			
Design codes for barrel		<input checked="" type="checkbox"/> ASME B 31.3 <input type="checkbox"/> ASME BPV Code sect.VIII	
Design codes for closure		<input type="checkbox"/> ASME B 31.3 <input checked="" type="checkbox"/> ASME BPV Code sect.VIII	
Design pressure	10.0 MPa	Hydrostatic pressure(at least 30 min)	15.0 MPa
Design temperature	0~80 °C	Allowance stress	as ASME 31.3
Position	Horizontal	Flange type	WN.RF
Corrosion allowance	2 mm	Rating	CLASS 600
Medium	gasoline, diesel oil, kerosene	Foundation bolts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
PWHT	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Handling frame	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Saddles	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Location of closure pin	Hold
Painting	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	I.D. (barrel)	350mm
Type of quick opening closure	<input checked="" type="checkbox"/> Circumferential lock <input type="checkbox"/> Jaw type		
Wall thickness (barrel)	mm	Max. force for hand opening the closure	<200 N
Net weight of pig launcher	Kg		
Materials			
Items	Description	Materials	
1	Inlet nozzle	SA-105	
2	Flange of inlet nozzle	SA-105	
3	Trap end	API 5L X65 or SA350 LF6	
4	Pressure Instrumentation nozzle	SA-105	
6	Venting nozzle	SA-105	
7	Flange of venting nozzle	SA-105	
8	Nozzle of pressure balance	SA350 Class LF2/ LF6	
9	Flange of pressure balance nozzle	SA-105	

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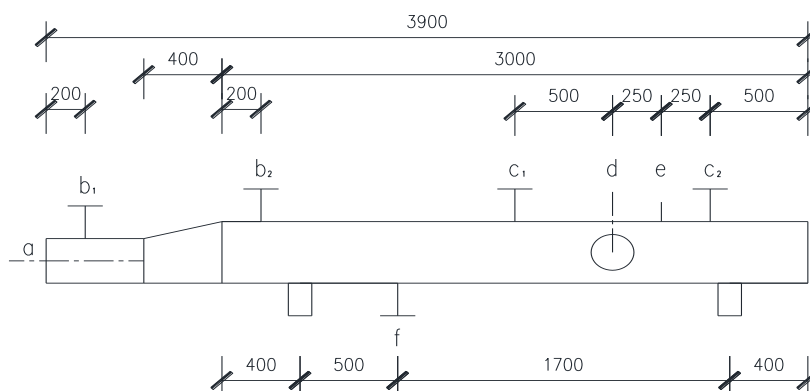
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10	Reducer <input checked="" type="checkbox"/> ECC. RE. <input type="checkbox"/> CONC. RE.	API 5L X52 or equivalent
11	Barrel	SA516Gr.70, API 5L X52 or equivalent
12	Saddles and pad	SA516Gr.70 or equivalent
13	Bolt/nut/gasket	SA193 Gr.B7 /A194 Gr.2H/ 316 SS Spiral wound Graphite Filled

Dimensional Drawing



Unit: mm

Opening Description

NO	Name	Nominal diameter (mm)	Quantity	Type	Rating	Projection	Connecting pipeline	
							Specification	Material
a	Outlet	250	1	Welding	/		φ273.0×7.09	API 5L X65
b1	Pressure balance pipe	50	1	WN.RF	Class 600	200	φ60.3×5.54	API 5L Gr.B
b2	Pressure balance pipe	50	1	WN.RF	Class 600	200	φ60.3×5.54	API 5L Gr.B
c1	Venting	50	1	WN.RF	Class 600	200	φ60.3×5.54	API 5L Gr.B
c2	Venting	50	1	WN.RF	Class 600	200	φ60.3×5.54	API 5L Gr.B
d	Inlet	150	1	WN.RF	/		Φ168.3×9.53	API 5L Gr.B
e	Pressure Instrumentation nozzle	50	1	Welding	Class 600	200	φ60.3×5.54	API 5L Gr.B
f	Drain	80	1	WN.RF	/	200	φ88.9×5.49	API 5L Gr.B

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Notes:

1. Coupling flanges shall be supplied (including bolts, nuts and gaskets), the type and dimensions of flanges should be in accordance with ASME B16.5, the type and dimensions of bolt should be in accordance with ASME B18.2.1, the type and dimensions of nut should be in accordance with ASME B18.2.2, the type and dimensions of gasket should be in accordance with ASME B16.20;
2. The safety interlock system of the quick opening closure shall be supplied with the following functions: The closure and its holding elements are fully engaged in their intended operating position before pressure can be built up in the vessel, Pressure tending to force the closure clear of the vessel shall be released before the closure can be fully opened for access;
3. The type and dimensions of end bevel should as per ASME B31.3;
4. All pipe connection ends should be horizontal or vertical to the ground;
5. The closure can be opened to 180°;
6. The blank of this data sheet shall be filled in by the vendor at bidding period.
7. The above figure is only a sketch, the length of launcher is for reference and the wall thickness (δ) is held.

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2.0 PN 14.0 MPa DN 250 PIG RECEIVER

General			
Location	PS28	Quantity	1
Service	Receiving of pigs	Tag No.	PR-2801
Specification	KPCSK-E-MA-SP-0001		
Code	<input checked="" type="checkbox"/> ASME BPV Code Sect. VIII <input checked="" type="checkbox"/> ASME B31.3		
Painting			
Design Data			
Design codes for barrel		<input checked="" type="checkbox"/> ASME B 31.3 <input type="checkbox"/> ASME BPV Code sect. VIII	
Design codes for closure		<input type="checkbox"/> ASME B 31.3 <input checked="" type="checkbox"/> ASME BPV Code sect. VIII	
Design pressure	14.0 MPa	Hydrostatic pressure(at least 30 min)	21.0 MPa
Design temperature	0~80 °C	Allowance stress	as ASME 31.3
Position	Horizontal	Flange type	WN.RF
Corrosion allowance	2 mm	Rating	CLASS 900
Medium	gasoline, diesel oil, kerosene	Foundation bolts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
PWHT	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Handling frame	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Saddles	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Location of closure pin	Hold
Painting	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	I.D. (barrel)	350 mm
Type of quick opening closure	<input checked="" type="checkbox"/> Circumferential lock <input type="checkbox"/> Jaw type		
Wall thickness (barrel)	mm	Max. force for hand opening the closure	<200
Net weight of pig launcher	Kg		
Materials			
Items	Description	Materials	
1	Inlet nozzle	API 5L X65 or SA350 LF6	
2	Outlet nozzle	SA-105	
3	Flange of outlet nozzle	SA-105	
4	Venting nozzle	SA-105	

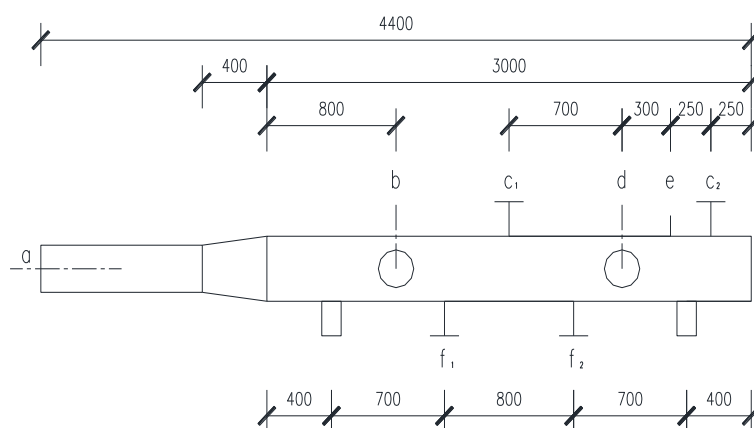
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5	Flange of venting nozzle	SA-105
6	Flange of venting nozzle	SA-105
7	Drain nozzle	SA-105
8	Flange of drain nozzle	SA-105
9	Nozzle of instrument	SA-105
10	Reducer <input type="checkbox"/> ECC. RE. <input checked="" type="checkbox"/> CONC. RE.	API 5L X52 or equivalent
11	Barrel	SA516Gr.70, API 5L X52 or equivalent
12	Saddles and pad	SA516Gr.70 or equivalent
13	Bolt/nut/gasket	SA193 Gr.B7 /A194 Gr.2H/ 316 SS Spiral wound Graphite Filled

Dimensional Drawing



Unit: mm

Opening Description

NO	Name	Nominal diameter (mm)	Quantity	Type	Rating	Projection	Connecting pipeline	
							Specification	Material
a	Inlet	250	1	Welding	/		φ273.0×7.09	API 5L X65
b	Bypass outlet	150	1	WN.RF	/		Φ168.3×9.53	API 5L Gr.B
c1	Venting	50	1	WN.RF	Class 900	200	φ60.3×5.54	API 5L Gr.B
c2	Venting	50	1	WN.RF	Class 900	200	φ60.3×5.54	API 5L Gr.B
d	Outlet	150	1	WN.RF	/		Φ168.3×9.53	API 5L Gr.B
e	Pressure Instrumentation nozzle	50	1	Welding	/	200	φ60.3×5.54	API 5L Gr.B
f1	Drain	50	1	WN.RF	Class 900	200	φ60.3×5.54	API 5L Gr.B

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f2	Drain	50	1	WN.RF	Class 900	200	Φ60.3×5.54	API 5L Gr.B
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Notes:

1. Coupling flanges shall be supplied (including bolts, nuts and gaskets), the type and dimensions of flanges should be in accordance with ASME B16.5, the type and dimensions of bolt should be in accordance with ASME B18.2.1, the type and dimensions of nut should be in accordance with ASME B18.2.2, the type and dimensions of gasket should be in accordance with ASME B16.2;
2. The safety interlock system of the quick opening closure shall be supplied with the following functions: The closure and its holding elements are fully engaged in their intended operating position before pressure can be built up in the vessel, Pressure tending to force the closure clear of the vessel shall be released before the closure can be fully opened for access;
3. The type and dimensions of end bevel should as per ASME B31.3;
4. All pipe connection ends should be horizontal or vertical to the ground;
5. The closure can be opened to 180°;
6. The blank of this data sheet shall be filled in by the vendor at bidding period;
7. The material of handling system shall be ASTM A588 or equivalent.
8. The above figure is only a sketch, the length of launcher is for reference and the wall thickness (δ) is held.

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