



ABU DHABI NATIONAL OIL COMPANY (ADNOC)
GHASHA CONCESSION PROJECTS

HAIL & GHASHA DEVELOPMENT PROJECT
PACKAGE 1 – OFFSHORE FACILITIES

COMPANY PROJECT No: 4700021770 CONTRACTOR PROJECT No: 67-00106

DATA SHEETS FOR CHECK VALVES

COMPANY DOC No: 1-CF0000-28-DSS-0044-00

NPCC SAIPEM
NPCC-SAIPEM JOINT VENTURE

Rev. 00

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Contractor Document Number: CF0000-1060044

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Rev	Date (DD/MM/YYYY)	Status	Status Description	PREPARED	CHECKED	APPROVED 1	APPROVED 2	

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HOLD LIST

HOLD	Section	Description

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1. PROJECT OVERVIEW

1.1 EPC for HAIL & GHASHA Development Project

The Hail & Ghasha Development (HGD) Project is of strategic importance to the Emirate of Abu Dhabi. The Project will develop the untapped oil and gas reserves from the highly sour Hail and Ghasha fields. Production is targeted to start by Q4 2027 with sustainable production of 1 BSCFD of Raw Gas, and max production of 82.5 MSBPD of Oil, 76.3 MSBPD of Condensate, 9000 TPD of Sulphur and 5030 TPD of NGL. In addition, Project will capture 1.52 million tonnes of CO₂ per year taking ADNOC's committed investment for carbon capture capacity.

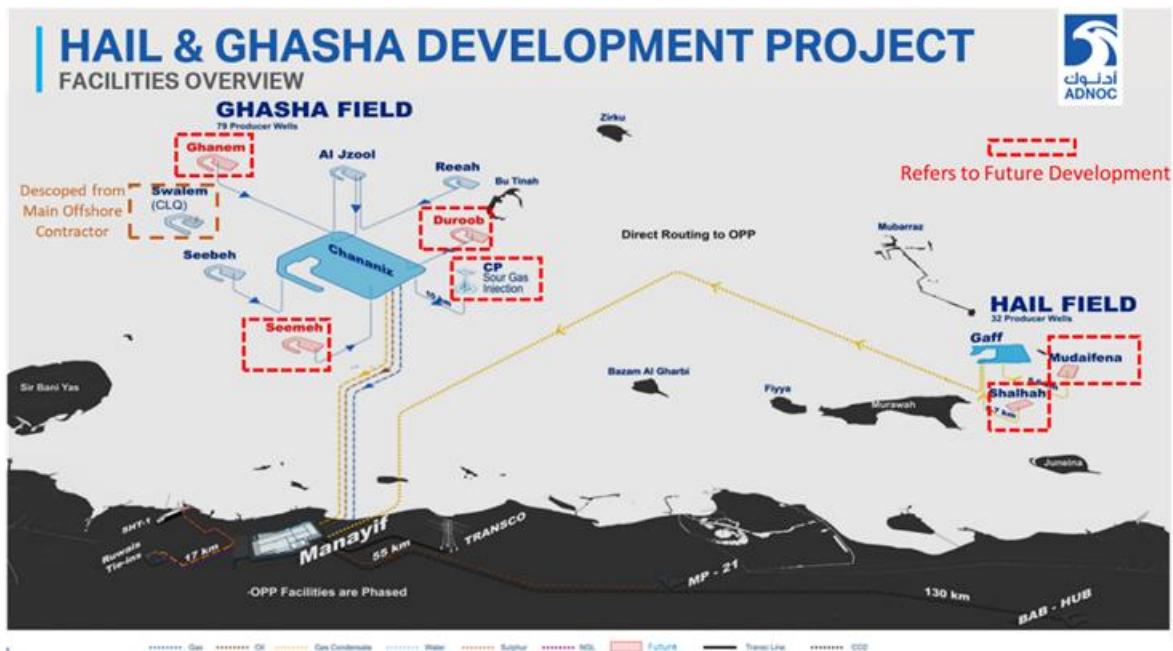
The Hail and Ghasha fields are situated offshore ABU DHABI about 140 km away from ABU DHABI mainland in water depths varying from 0 to 15 meters.

The HGD Project comprises the following:

- Artificial Islands Construction;
- Offshore package – EPC 01: Offshore Drilling Centers (DCs), Subsea Pipelines, Umbilicals, Power Cable Connections, Seawater Intake Structure, Bridges, Risers, Flare Structure, facilities at Ghasha Offshore Processing Plant (“GOP”);
- Onshore package – EPC 02: Manayif Onshore Processing Plant (“OPP”), Manayif Utilities, Offsite Pipelines & Tie-ins, Main Control and Other Buildings.

The HGD Project will be executed in a single phase approach. It will start production from three Drilling Centres (Reeah, Jzool & Seebah) in Ghasha Field to GOP and from Gaff Island in Hail Field to OPP. Remaining Drilling Centres, gas injection, and other associated facilities will be developed in ‘future’ to sustain production from Hail & Ghasha fields.

Figure 1 - Hail & Ghasha Field



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2. PURPOSE

The purpose of this document is to define the datasheet for Check Valves to be considered for ADNOC Hail & Ghasha Development Project.

This document shall be read in conjunction with Specification for Manual Piping & Pipeline Valves, document no. 1-CF0000-28-SPE-0030-00 and the specific requirements of the requisition(s) in which it is incorporated.

3. DEFINITIONS AND ABBREVIATIONS

3.1 Definitions

COMPANY	Abu Dhabi National Oil Company (ADNOC)
CONTRACTOR	Unincorporated Joint Venture NPCC -SAIPEM
PROJECT	Hail and Ghasha Development Project – Package 1: Offshore Facilities

3.1 Abbreviations

ADNOC	Abu Dhabi National Oil Company
AGES	ADNOC Group Engineering Standards and Specifications
AGRU	Acid Gas Removal Unit
BEDD	Basic Engineering Design Data
BPD	Barrel per Day
BSCFD	Billion Standard Cubic Feet per Day
BTEX	Benzene, Toluene, Ethyl benzene, Xylenes
BWPD	Barrels of Water Per Day
CCP	Compression Platform
CLQ	Central Living Quarter
DC	Drilling Centre
EPC	Engineering, Procurement, Construction
GOP	Ghasha Offshore Processing
H&MB	Heat & Material Balance
HGD	Hail & Ghasha Development
HIPPS	High Integrity Pressure Protection System
HP	High Pressure
HPU	Hydrogen Production Unit
LP	Low Pressure
MSBPD	Thousand Standard Barrels per Day
MMSCFD	Million Standard Cubic Feet per Day

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NGL	Natural Gas Liquids
NORM	Naturally Occurring Radioactive Materials
NUA	Normally Unattended Asset
OPP	Onshore Processing Plant
PWT	Produced Water Treatment
SOW	Scope of Work
SRU	Sulphur Recovery Unit
TDS	Total Dissolved Solids
TGTU	Tail Gas Treatment Unit
TSS	Total Suspended Solids
UAE	United Arab Emirates
VRU	Vapour Recovery Unit

4. REFERENCE DOCUMENTS

4.1 AGES, DGS, ADNOC ONSHORE and ADNOC OFFSHORE Codes & Standards

SI. No.	Document No.	Document Title
1	AGES-SP-09-001	Piping Basis of Design
2	AGES-SP-09-002	Piping Material Specification Index
3	AGES-SP-09-003	Specification for Manual Piping and Pipeline Valves
4	AGES-SP-09-005	Specification for Gaskets and Fasteners
5	AGES-SP-09-008	Insulation Specification
6	AGES-SP-09-009	Piping Tie-Ins and Hot Tapping
7	AGES-SP-09-010	Specification for Jacketed piping & Steam Tracing
8	AGES-SP-09-013	Specification for Metallic Pipe, Fittings and Flanges
9	AGES-SP-09-015	Specification for Clad Pipes Fittings and Flanges
10	AGES-GL-07-001	Material Selection Guidelines
11	AGES-SP-07-003	Requirement of Materials in Severe service
12	AGES-SP-07-004	Painting and Coating Specification
13	AGES-SP-07-005	Requirements for Cr-Mo / Cr-Mo-V Steel in High Temperature, High Pressure Hydrogen Service
14	AGES-SP-07-007	Welding & Non Destructive Examination (NDE)
15	AGES-SP-07-009	Galvanizing

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Sl. No.	Document No.	Document Title
16	AGES-SP-07-010	Internal Cleaning of Piping System
17	AGES-SP-07-011	Preservation and Export Packing Specification
18	AGES-PH-08-001	Isolation Vent and Drain Philosophy
19	AGES-GL-08-005	P&IDs and PFDs Development Guideline
20	AGES-GL-13-001	Contractors QAQC Requirement
21	AGES-GL-13-002	Positive Material Identification of Equipment and Piping
22	AGES-SP-13-001	Criticality Rating Specification
23	AGES-SP-13-002	Procurement Inspection & Certification Requirements in Projects
24	AGES-SP-13-003	Traceability of Shop & Field Piping Materials
25	A0-ENG-P-SP-001	Specification for Small Bore Piping Connections
26	A0-IG-C-SP-002	Specification for Water Quality for Hydrostatic Test
27	A0-IG-W-SP-002	Specification for Preheat and Post Weld Heat Treatment of Ferrous Materials
28	A0-Q-PQ-SP-003	Specification For Quality Assurance and Quality Control Requirements for Construction Works
29	DGS-1300-010 (Rev 2)	Piping Systems (Piping Classes)
30	DGS 1300-030, Rev 1	Design General Specification Process and Utility Field / Shop Pressure Testing

4.2 PROJECT DOCUMENTS

Sl. No.	Document No.	Document Title
1	1-CF0000-28-MRL-0100-00	Piping Material Classes – Offshore
2	1-CF0000-25-SPE-9073-00	Specification for Criticality Rating and Inspection Class for Material and Equipment
3	1-CF0000-28-SPE-0027-00	Specification for Fibre Reinforced Plastic Piping and Pipeline Systems (GRE)
4	1-CF0000-59-PRO-9697-00	Preservation Management Procedure
5	1-CF0000-25-SPE-0031-00	Requirement for Materials in Severe Service
6	1-CF0000-28-PHL-0035-00	Philosophy for Piping in H2S Service
7	1-CF0000-25-PHL-0503-00	Materials Selection Guidelines
8	1-CF0000-25-DSS-0040-00	Metallic Material Data Sheet
9	1-CF0000-28-SPE-0030-00	Specification for Manual Piping & Pipeline Valves
10	1-CF0000-40-BOD-0004-00	Fire Protection Design Basis

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SI. No.	Document No.	Document Title
11	1-CF0000-04-PHL-0014-00	P&IDs and PFDs Development Philosophy
12	1-CF0000-25-SPE-0900-00	Specification for Welding and NDT
13	1-CF0000-28-SPE-0025-00	Specification for Pipes, Fittings and Flanges
14	1-CF0000-25-SPE-0702-00	Painting, Coating and Lining Specification
15	1-CF0000-25-SPE-0701-00	Specification for Thermal Insulation of Above Ground Piping and Equipment
16	1-CF0000-25-SPE-0706-00	Galvanizing Specification
17	1-CF0000-25-SPE-0059-00	Traceability of Shop and Field Fabrication Piping Materials
18	1-CF0000-28-SPE-0026-00	Specification for Cladded Pipes, Fittings, and Flanges
19	1-CF0000-28-SPE-0028-00	Specification for High Density Polyethylene (HDPE) for Pipeline and Piping Systems
20	1-CF0000-28-SPE-0029-00	Specification for Gaskets & Stud Bolts and Nuts
21	1-CF0000-16-SPE-0016-00	Project Specification for ON-OFF Valves, Actuators and Master Station
22	1-CF0000-25-SPE-0901-00	Specification for Positive Material Identification
23	1-CF0000-54-PRO-3005-00	QC Requirements for Suppliers of Materials, Equipment and Services
24	1-CF0000-58-PRO-0008-00	Packing, Marking & Shipping Instruction
25	1-CF0000-58-PRO-9706-00	Vendor Inspection Coordination Procedure

4.3 INTERNATIONAL CODES AND STANDARDS

SI. No.	Document No.	Document Title
American Society of Mechanical Engineers (ASME)		
1	ASME B 1.1	Unified Inch Screw Threads
2	ASME B 1.20.1	Pipe Threads General Purpose (Inch)
3	ASME B 16.5	Pipe flanges and Flanged Fittings
4	ASME B 16.10	Face-to-Face and End-to-End dimensions of Valves
5	ASME B 16.20	Metallic Gaskets for Pipe flanges
6	ASME B 16.21	Non-metallic Gaskets for Pipe Flanges
7	ASME B 16.25	Butt Welding Ends
8	ASME B 16.34	Valves – Flanged, Threaded, and Welding End
9	ASME B 16.47	Large Diameter Steel Flanges
10	ASME B 18.2.1	Square and Hex Bolts and Screws (Inch Series)
11	ASME B 18.2.2	Square and Hex Nuts (Inch Series)

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Sl. No.	Document No.	Document Title	
12	ASME B 31.3	Process Piping	
13	ASME B 46.1	Surface Texture (Surface Roughness, Waviness, and Lay)	
ASME Boiler and Pressure Vessel Code			
14	ASME / BPVC	Section VIII (Div. 1) Rules for Construction of Pressure Vessels.	
American Society for Testing of Materials (ASTM)			
15	ASTM A 53	Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless	
16	ASTM A 105	Carbon Steel Forging for Piping Applications	
17	ASTM A 153	Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware	
18	ASTM A 182	Forged or Rolled Alloy Steel Pipe Flanged Forged Fittings and Valves and Parts for High Temperature Service	
19	ASTM A 193	Alloy Steel and Stainless Steel Bolting Materials for High Temperature Service	
20	ASTM A 194	Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both	
21	ASTM A 216	Steel Castings, Suitable for Fusion Welding for High Temperature Service	
22	ASTM A 217	Steel Castings, Martensitic Stainless and Alloy for Pressure Containing Parts Suitable for High Temperature Service	
23	ASTM A 320	Alloy-Steel and Stainless Steel Bolting for Low-Temperature Service	
24	ASTM A 350	Carbon and Low Alloy Steel forgings, Requiring Notch Toughness Testing for Piping Components	
25	ASTM A 351	Castings, Austenitic, for Pressure-Containing Parts	
26	ASTM A 352	Steel Castings, Ferritic and Martensitic, for Pressure-Containing Parts, Suitable for Low-Temperature Service	
27	ASTM A 370	Standard Test Methods and Definitions for Mechanical Testing of Steel Products	
28	ASTM A 494	Castings, Nickel and Nickel Alloy	
29	ASTM A 694	Carbon and Alloy Steel forgings for Pipe Flanges, Fittings, Valves, and Parts for High-Pressure Transmission Service	
30	ASTM A 788	Steel forgings, General Requirements	
31	ASTM A 890	Castings, Iron-Chromium-Nickel-Molybdenum Corrosion-Resistant, Duplex (Austenitic/Ferritic) for General Application	
32	ASTM A 995	Castings, Austenitic-Ferritic (Duplex) Stainless Steel, for Pressure-Containing Parts	
33	ASTM B 148	Aluminium – Bronze Castings	

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Sl. No.	Document No.	Document Title
34	ASTM B 151	Copper-Nickel-Zinc Alloy (Nickel Silver) and Copper-Nickel Rod and Bar
35	ASTM B 265	Titanium and Titanium Alloy Strip, Sheet, and Plate
36	ASTM B 367	Titanium and Titanium Alloy Castings
37	ASTM B 381	Titanium and Titanium Alloy Forgings
American Petroleum Institute (API)		
38	API SPEC 6D	Valves
39	API SPEC 6FA	Fire Test for Valves
40	API STD 594	Check Valves: Flanged, Lug, Wafer and Butt welding
41	API STD 598	Valve Inspection and Testing
42	API STD 602	Gate, Globe, and Check Valves for Sizes DN 100 (NPS 4) and Smaller for the Petroleum and Natural Gas Industries
British Standards Institution (BSI)		
43	BS EN 10204	Metallic Products – Types of Inspection Documents
44	BS EN ISO 10497	Testing of Valves - Fire type-testing requirements
45	BS EN 12266 - Part 1	Industrial Valves - Testing of Metallic Valves - Pressure tests, test procedures and acceptance criteria - Mandatory requirements
46	BS EN 12266 - Part 2	Industrial Valves, Testing of Metallic Valves Part 2, Test Procedures and acceptance criteria – Supplementary Requirements
International Organization for Standardization (ISO)		
47	ISO 15156	Petroleum and natural gas industries Materials for use in H2S-containing Environments in oil and gas production: Part 1: General principles for selection of cracking-resistant materials Part 2: Cracking-resistant carbon and low alloy steels, and the use of cast irons Part 3: Cracking-resistant CRAs (corrosion-resistant alloys) and other alloys.
48	ISO 15848	Industrial valves - Measurement, test and qualification procedures for fugitive emissions Part 1: Classification system and qualification procedures for type testing of valves Part 2: Production acceptance test of valves - Second Edition

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5. ATTACHMENTS

5.1 Attachment 1 – INDEX FOR CHECK VALVES

5.2 Attachment 2 – DATASHEETS FOR CHECK VALVES

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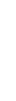
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Title		Sheet No.
General Notes		1 - 2

Seq. No.	Valve Type	Valve ID	Piping Class	Rating	Size Range	Revision	Remarks	Sheet No.
1	PISTON LIFT	CHL-0001	91143303, 15143303	1500	1 TO 1 1/2	00	N/A	3
2	PISTON LIFT	CHL-0002	91313003	1500	1 TO 1 1/2	00	N/A	4
3	PISTON LIFT	CHL-0003	11505001	150	1 TO 1 1/2	00	N/A	5
4	PISTON LIFT	CHL-0005	11132103, 111321S3, 11132303, 31132303	800	3/4 TO 1 1/2	00	N/A	6
5	PISTON LIFT	CHL-0007	11142303, 31142303, 61143303	800	1 TO 1 1/2	00	N/A	7
6	PISTON LIFT	CHL-0008	11312003, 31312003, 61313003	800	3/4 TO 1 1/2	00	N/A	8
7	PISTON LIFT	CHL-0009	113120U3, 313120U3	800	3/4 TO 1 1/2	00	N/A	9
8	PISTON LIFT	CHL-0010	318113N9	300	3/4 TO 1 1/2	00	N/A	10
9	PISTON LIFT	CHL-0011	25143303	2500	1 TO 1 1/2	00	N/A	11
10	PISTON LIFT	CHL-0012	25313003	2500	1 TO 1 1/2	00	N/A	12
11	PISTON LIFT	CHL-0013	31132605	300	1 TO 1 1/2	00	N/A	13
12	PISTON LIFT	CHL-0014	11731003	150	1 TO 1 1/2	00	N/A	14
13	PISTON LIFT	CHL-0015	116110G9, 11731009	150	1 TO 1 1/2	00	N/A	15
14	PISTON LIFT	CHL-1004	11751003	150	1 TO 1 1/2	00	N/A	16
15	PISTON LIFT	CHL-1005	114410N9	150	3/4 TO 1 1/2	00	N/A	17
16	PISTON LIFT	CHL-1006	11145628	150	2 TO 2	00	N/A	18
17	PISTON LIFT	CHL-1007	11731003	150	2 TO 2	00	N/A	19
18	SWING	CHS-0001	25965026	2500	2 TO 4	00	N/A	20
19	SWING	CHS-0002	11975028, 11975068, 11985028	150	2 TO 4	00	N/A	21
20	SWING	CHS-0003	31975028, 31985028, 31985068	300	2 TO 4	00	N/A	22
21	SWING	CHS-0004	61975028, 61985028	600	2 TO 4	00	N/A	23
22	SWING	CHS-0005	91985028	900	3 TO 4	00	N/A	24
23	SWING	CHS-0006	25985028	2500	2 TO 4	00	N/A	25
24	SWING	CHS-0008	25145628	2500	2 TO 12	00	N/A	26
25	SWING	CHS-0009	15145628	1500	2 TO 14	00	N/A	27
26	SWING	CHS-0010	11135328, 11135368	150	2 TO 24	00	N/A	28
27	SWING	CHS-0011	11135628	150	2 TO 24	00	N/A	29
28	SWING	CHS-0012	31135328 (UP TO NPS 12), 31135368	300	2 TO 24	00	N/A	30
29	SWING	CHS-0013	61135628	600	2 TO 14	00	N/A	31
30	SWING	CHS-0014	11145628 (UP TO NPS 16), 111456F8	150	2 TO 24	00	N/A	32
31	SWING	CHS-0015	31145368	300	2 TO 24	00	N/A	33
32	SWING	CHS-0016	31145628	300	2 TO 16	00	N/A	34
33	SWING	CHS-0017	61145328	600	2 TO 24	00	N/A	35
34	SWING	CHS-0018	61145628	600	2 TO 14	00	N/A	36
35	SWING	CHS-0019	91145628	900	3 TO 14	00	N/A	37
36	SWING	CHS-0021	11975028, 11975068	150	6 TO 24	00	N/A	38

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Seq. No.	Valve Type	Valve ID	Piping Class	Rating	Size Range	Revision	Remarks	Sheet No.
37	SWING	CHS-0023	61975028	600	6 TO 16	00	N/A	39
38	SWING	CHS-0024	25985028	2500	6 TO 20	00	N/A	40
39	SWING	CHS-0025	25965026	2500	6 TO 20	00	N/A	41
40	SWING	CHS-0026	11985028	150	6 TO 24	00	N/A	42
41	SWING	CHS-0027	31985028, 31985068	300	6 TO 48	00	N/A	43
42	SWING	CHS-0028	61985028	600	6 TO 48	00	N/A	44
43	SWING	CHS-0029	91985028	900	6 TO 16	00	N/A	45
44	SWING	CHS-1003	318113N9	300	4 TO 24	00	N/A	46
45	SWING	CHS-1004	111321S3	150	2 TO 24	00	N/A	47
46	SWING	CHS-1005	11132303	150	2 TO 24	00	N/A	48
47	SWING	CHS-1006	31132303	300	2 TO 24	00	N/A	49
48	SWING	CHS-1007	31135628, 31135698	300	2 TO 16	00	N/A	50
49	SWING	CHS-1009	61143303	600	2 TO 24	00	N/A	51
50	SWING	CHS-1010	31975028	300	6 TO 24	00	N/A	52
51	SWING	CHS-1011	25965026	2500	24 TO 24	00	N/A	53
52	SWING	CHS-1012	31975068	300	2 TO 4	00	N/A	54
53	SWING	CHS-1013	31975068	300	6 TO 24	00	N/A	55
54	SWING	CHS-1014	11505001	150	2 TO 2	00	N/A	56
55	SWING	CHS-1015	25985028	2500	24 TO 24	00	N/A	57
56	SWING	CHS-1016	31312003	300	2 TO 2	00	DS added Rev. 00	58
57	SWING	CHS-1017	91985028	1500	2 TO 2	00	DS added Rev. 00	59
58	SWING	CHS-1018	91145628	1500	2 TO 2	00	DS added Rev. 00	60
59	DUAL PLATE	CH-0002	111321S3, 11132103, 11132303	150	2 TO 24	00	N/A	61
60	DUAL PLATE	CH-0006	11132608	150	2 TO 6	00	N/A	62
61	DUAL PLATE	CH-0007	31132303	300	2 TO 24	00	N/A	63
62	DUAL PLATE	CH-0008	31132303	300	28 TO 28	00	N/A	64
63	DUAL PLATE	CH-0009	31132605	300	2 TO 16	00	N/A	65
64	DUAL PLATE	CH-0010	25133605	2500	2 TO 12	00	N/A	66
65	DUAL PLATE	CH-0014	311323D8	300	2 TO 24	00	N/A	67
66	DUAL PLATE	CH-0018	11142303	150	2 TO 24	00	N/A	68
67	DUAL PLATE	CH-0019	31142303	300	2 TO 24	00	N/A	69
68	DUAL PLATE	CH-0021	61143303	600	2 TO 24	00	N/A	70
69	DUAL PLATE	CH-0022	91143303	900	3 TO 24	00	N/A	71
70	DUAL PLATE	CH-0023	15143303, 91143303 (ONLY FOR NPS 2)	1500	2 TO 24	00	N/A	72
71	DUAL PLATE	CH-0024	25143303	2500	2 TO 12	00	N/A	73
72	DUAL PLATE	CH-0026	11751003	150	2 TO 6	00	N/A	74
73	DUAL PLATE	CH-0027	11312003	150	2 TO 14	00	N/A	75
74	DUAL PLATE	CH-0028	113120U3	150	2 TO 10	00	N/A	76
75	DUAL PLATE	CH-0029	31312003	300	2 TO 14	00	N/A	77

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76	DUAL PLATE	CH-0030	61313003	600	2 TO 12	00	N/A	78
77	DUAL PLATE	CH-0031	91313003	900	3 TO 16	00	N/A	79
78	DUAL PLATE	CH-0032	91313003	1500	2 TO 2	00	N/A	80
79	DUAL PLATE	CH-0033	25313003	2500	2 TO 12	00	N/A	81
80	DUAL PLATE	CH-0034	11505001	150	2 TO 8	00	N/A	82
81	DUAL PLATE	CH-0036	116110G9	150	2 TO 10	00	N/A	83
82	DUAL PLATE	CH-0040	31985028, 31985068	300	6 TO 24	00	N/A	84
83	DUAL PLATE	CH-1001	11731003	150	2 TO 12	00	N/A	85
84	DUAL PLATE	CH-1005	25965026	2500	2 TO 4	00	N/A	86
85	DUAL PLATE	CH-1006	61985028	600	2 TO 4	00	N/A	87
86	DUAL PLATE	CH-1007	25985028	2500	2 TO 3	00	N/A	88
87	DUAL PLATE	CH-1009	11731009	150	2 TO 24	00	N/A	89
88	DUAL PLATE	CH-1010	31132103	300	2 TO 12	00	N/A	90
89	DUAL PLATE	CH-1011	31975028, 31985028	300	2 TO 4	00	N/A	91
90	DUAL PLATE	CH-1012	31985068	300	3 TO 4	00	N/A	92
91	DUAL PLATE	CH-1014	61985028	600	30 TO 30	00	N/A	93
92	DUAL PLATE	CH-1015	11135628	150	2 TO 2	00	N/A	94
93	DUAL PLATE	CH-1016	11975028	150	2 TO 2	00	N/A	95
94	DUAL PLATE	CH-1017	31975028	300	6 TO 8	00	N/A	96
95	DUAL PLATE	CH-1018	31975068	300	6 TO 8	00	N/A	97
96	DUAL PLATE	CH-1019	91985028	900	4 TO 4	00	N/A	98
97	DUAL PLATE	CH-1020	61145328	600	2 TO 2	00	N/A	99
98	TILTING DISC NON-SLAM TYPE	SP-015-001	31985068	300	8 TO 8	00	DS added Rev. 00	100
99	TILTING DISC NON-SLAM TYPE	SP-015-002	61985028	600	30 TO 30	00	DS added Rev. 00	101
100	TILTING DISC NON-SLAM TYPE	SP-015-011	15143303	1500	6 TO 6	00	DS added Rev. 00	102
101	TILTING DISC NON-SLAM TYPE	SP-015-012	25143303	2500	6 TO 6	00	DS added Rev. 00	103
102	TILTING DISC NON-SLAM TYPE	SP-015-039	31132303	300	4 TO 4	00	DS added Rev. 00	104
103	TILTING DISC NON-SLAM TYPE	SP-015-041	311323D8	300	12 TO 12	00	DS added Rev. 00	105
104	TILTING DISC NON-SLAM TYPE	SP-015-044	311323D8	300	12 TO 12	00	DS added Rev. 00	106
105	TILTING DISC NON-SLAM TYPE	SP-015-103	61985028	600	6 TO 6	00	DS added Rev. 00	107
106	AXIAL FLOW NON-SLAM TYPE	SP-017-001	61985028	600	4 TO 4	00	DS added Rev. 00	108
107	AXIAL FLOW NON-SLAM TYPE	SP-017-002	61985028	600	4 TO 4	00	DS added Rev. 00	109
108	AXIAL FLOW NON-SLAM TYPE	SP-017-003	91985028	900	3 TO 3	00	DS added Rev. 00	110
109	AXIAL FLOW NON-SLAM TYPE	SP-017-004	11731009	150	4 TO 4	00	DS added Rev. 00	111
110	AXIAL FLOW NON-SLAM TYPE	SP-017-005	11731009	150	2 TO 2	00	DS added Rev. 00	112
111	AXIAL FLOW NON-SLAM TYPE	SP-017-006	11731009	150	2 TO 2	00	DS added Rev. 00	113
112	AXIAL FLOW NON-SLAM TYPE	SP-017-007	11731009	150	6 TO 6	00	DS added Rev. 00	114
113	AXIAL FLOW NON-SLAM TYPE	SP-017-008	11132303	150	14 TO 14	00	DS added Rev. 00	115
114	AXIAL FLOW NON-SLAM TYPE	SP-017-009	113120U3	150	6 TO 6	00	DS added Rev. 00	116

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115	AXIAL FLOW NON-SLAM TYPE	SP-017-010	113120U3	150	3 TO 3	00	DS added Rev. 00	117
116	AXIAL FLOW NON-SLAM TYPE	SP-017-011	15143303	1500	6 TO 6	00	DS added Rev. 00	118
117	AXIAL FLOW NON-SLAM TYPE	SP-017-012	25143303	2500	6 TO 6	00	DS added Rev. 00	119
118	AXIAL FLOW NON-SLAM TYPE	SP-017-013	11731009	150	24 TO 24	00	DS added Rev. 00	120
119	AXIAL FLOW NON-SLAM TYPE	SP-017-014	91313003	900	3 TO 3	00	DS added Rev. 00	121
120	AXIAL FLOW NON-SLAM TYPE	SP-017-015	61313003	600	2 TO 2	00	DS added Rev. 00	122
121	AXIAL FLOW NON-SLAM TYPE	SP-017-016	11312003	150	2 TO 2	00	DS added Rev. 00	123
122	AXIAL FLOW NON-SLAM TYPE	SP-017-017	11312003	150	2 TO 2	00	DS added Rev. 00	124
123	AXIAL FLOW NON-SLAM TYPE	SP-017-018	11132303	150	3 TO 3	00	DS added Rev. 00	125
124	AXIAL FLOW NON-SLAM TYPE	SP-017-019	31312003	300	2 TO 2	00	DS added Rev. 00	126
125	AXIAL FLOW NON-SLAM TYPE	SP-017-020	25133605	2500	8 TO 8	00	DS added Rev. 00	127
126	AXIAL FLOW NON-SLAM TYPE	SP-017-021	31132605	300	8 TO 8	00	DS added Rev. 00	128
127	AXIAL FLOW NON-SLAM TYPE	SP-017-022	61985028	600	6 TO 6	00	DS added Rev. 00	129
128	AXIAL FLOW NON-SLAM TYPE	SP-017-023	61985028	600	4 TO 4	00	DS added Rev. 00	130
129	AXIAL FLOW NON-SLAM TYPE	SP-017-024	11975028	150	2 TO 2	00	DS added Rev. 00	131
130	AXIAL FLOW NON-SLAM TYPE	SP-017-025	61135628	600	6 TO 6	00	DS added Rev. 00	132
131	AXIAL FLOW NON-SLAM TYPE	SP-017-026	11975028	150	6 TO 6	00	DS added Rev. 00	133
132	AXIAL FLOW NON-SLAM TYPE	SP-017-027	11975028	150	2 TO 2	00	DS added Rev. 00	134
133	AXIAL FLOW NON-SLAM TYPE	SP-017-028	318113N9	300	16 TO 16	00	DS added Rev. 00	135
134	AXIAL FLOW NON-SLAM TYPE	SP-017-029	318113N9	300	6 TO 6	00	DS added Rev. 00	136
135	AXIAL FLOW NON-SLAM TYPE	SP-017-030	31975028	300	4 TO 4	00	DS added Rev. 00	137
136	AXIAL FLOW NON-SLAM TYPE	SP-017-031	31975028	300	10 TO 10	00	DS added Rev. 00	138
137	AXIAL FLOW NON-SLAM TYPE	SP-017-032	91985028	900	4 TO 4	00	DS added Rev. 00	139
138	AXIAL FLOW NON-SLAM TYPE	SP-017-033	31145628	300	6 TO 6	00	DS added Rev. 00	140
139	AXIAL FLOW NON-SLAM TYPE	SP-017-034	11731009	150	2 TO 2	00	DS added Rev. 00	141
140	AXIAL FLOW NON-SLAM TYPE	SP-017-035	11731003	150	2 TO 2	00	DS added Rev. 00	142
141	AXIAL FLOW NON-SLAM TYPE	SP-017-036	11132303	150	6 TO 6	00	DS added Rev. 00	143
142	AXIAL FLOW NON-SLAM TYPE	SP-017-037	31132303	300	16 TO 16	00	DS added Rev. 00	144
143	AXIAL FLOW NON-SLAM TYPE	SP-017-038	31132303	300	3 TO 3	00	DS added Rev. 00	145
144	AXIAL FLOW NON-SLAM TYPE	SP-017-039	31132303	300	4 TO 4	00	DS added Rev. 00	146
145	AXIAL FLOW NON-SLAM TYPE	SP-017-040	31135328	300	8 TO 8	00	DS added Rev. 00	147
146	AXIAL FLOW NON-SLAM TYPE	SP-017-041	311323D8	300	12 TO 12	00	DS added Rev. 00	148
147	AXIAL FLOW NON-SLAM TYPE	SP-017-042	11731009	150	4 TO 4	00	DS added Rev. 00	149
148	AXIAL FLOW NON-SLAM TYPE	SP-017-043	11731009	150	4 TO 4	00	DS added Rev. 00	150
149	AXIAL FLOW NON-SLAM TYPE	SP-017-044	311323D8	300	12 TO 12	00	DS added Rev. 00	151
150	AXIAL FLOW NON-SLAM TYPE	SP-017-045	61985028	600	4 TO 4	00	DS added Rev. 00	152
151	AXIAL FLOW NON-SLAM TYPE	SP-017-046	61985028	600	4 TO 4	00	DS added Rev. 00	153
152	AXIAL FLOW NON-SLAM TYPE	SP-017-047	11132303	150	3 TO 3	00	DS added Rev. 00	154
153	AXIAL FLOW NON-SLAM TYPE	SP-017-048	31975028	300	4 TO 4	00	DS added Rev. 00	155

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154	AXIAL FLOW NON-SLAM TYPE	SP-017-049	31975028	300	10 TO 10	00	DS added Rev. 00	156
155	AXIAL FLOW NON-SLAM TYPE	SP-017-101	31985068	300	8 TO 8	00	DS added Rev. 00	157
156	AXIAL FLOW NON-SLAM TYPE	SP-017-102	61985028	600	30 TO 30	00	DS added Rev. 00	158
157	AXIAL FLOW NON-SLAM TYPE	SP-017-103	61985028	600	6 TO 6	00	DS added Rev. 00	159
158	AXIAL FLOW NON-SLAM TYPE	SP-017-202	61985028	600	30 TO 30	00	DS added Rev. 00	160

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CONTRACTOR PROJECT No: 67-00106		
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ATTACHMENT-2
DATASHEETS FOR CHECK VALVES
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DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0002

GENERAL SPECIFICATION						
2 PIPE CLASS	: 111321S3, 11132103, 11132303			DESIGN CODE	: API 594 - Type A	
3 VALVE RATING	: ANSI CLASS 150			END CONNECTIONS	: FLANGED TO ASME B16.5, RAISED FACE	
4 DESIGN TEMPERATURE RANGE	: -29 / 350 DEG. C			FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)	
5 DESIGN PRESSURE	: AS PER ASME B16.34			FLANGE FACE FINISH	: SMOOTH FINISH (125 - 250 µin)	
6 SIZE RANGE	: NPS 2 to NPS 24			VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES	
7 NACE REQUIREMENTS	: N/A			CORROSION ALLOWANCE	: 3 MM	
8 SERVICE / FLUID HANDLED	: NON SOUR - (CWR) Chilled water/Cooling Medium Return, (CWS) Chilled water/Cooling Medium Supply, (DF) Diesel Fuel, (FGL) Low pressure Fuel Gas, (HO) Hot Oil, (N2) Nitrogen, (PA) Plant Air, (SLS) Superheated Low Pressure Steam, (UW) Utility water					
9 FLUID COMPOSITION MAXIMUM CONTENT(MOL%)	: H2S: NOTE M		H2O: NOTE M	CO2: NOTE M	BTEX: NOTE M	Chloride mg/Kg 23038
10 MATERIAL SPECIFICATION						
11 BODY	: ASTM A216 Gr. WCB		DISC MATERIAL	: STELLITE upto 4" SIZES : ASTM A105N/A216 Gr.WCB + 3mm SS316L WELD OVERLAY + STELLITE 6 HARD FACED		
12 BODY SEAT	: INTEGRAL WITH STELLITE 6 HARD FACING		SPRING	: INCONEL 718		
13 PINS, HINGED AND OTHER TRIM	: SS 316		EYE BOLT	: CONGRUOUS WITH BODY MATERIAL		
14 TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS						
15 LIFTING LUGS	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE			TESTING CODE	: API 598	
16 SUPPORT (LEGS / SADDLE)	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE			SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00	
17 PAINTING / COATING	: 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-16			OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00	
18 MARKING	: AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00			NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9	
19 ADDITIONAL REQUIREMENTS	: 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00			INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B	
20 FUGITIVE EMISSION REQ.	: CLASS "BH" (N/A)			CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00	

NOTES

A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.	
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.	00
M	Fuel Gas Specification: Water Dew point -30°C at 39.2 bara, HC Dew point -5°C at 39.2 bara, N2 Content 3.5 (Mol.% max), CO2 content 5 (Mol. % max), Total Sulphur 100 (ppmv max) and H2S Content 20 (ppmv max).	00



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0007

GENERAL SPECIFICATION								
2	PIPE CLASS : 31132303	DESIGN CODE	: API 594 - Type A					
3	VALVE RATING : ANSI CLASS 300	END CONNECTIONS	: FLANGED TO ASME B16.5, RAISED FACE					
4	DESIGN TEMPERATURE RANGE : -29 / 350 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)					
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: SMOOTH FINISH (125 - 250 µin)					
6	SIZE RANGE : NPS 2 to NPS 24	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES					
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 3 MM					
8	SERVICE / FLUID HANDLED : NON SOUR - (HO) Hot Oil, (UW) Utility Water							
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NO	H2O: 100	CO2: NO	BTEX: NO	Chloride mg/Kg 250 00			
MATERIAL SPECIFICATION								
11	BODY : ASTM A216 Gr. WCB	DISC MATERIAL <i>Stellite upto 4" sizes</i>	: ASTM A105N/A216 Gr.WCB + 3mm SS316L WELD OVERLAY + STELLITE 6 HARDFACED					
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718					
13	PINS, HINGED AND OTHER TRIM : SS 316	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL					
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS								
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598					
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00					
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-16	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00					
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9					
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B					
20	FUGITIVE EMISSION REQ. : CLASS "BH" <i>(NIA)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00					
NOTES								
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.							
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.							



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0010

1	GENERAL SPECIFICATION							
2	PIPE CLASS : 25133605	DESIGN CODE	: API 594 - Type A					
3	VALVE RATING : ANSI CLASS 2500	END CONNECTIONS	: FLANGED TO ASME B16.5, RTJ FACING					
4	DESIGN TEMPERATURE RANGE : -29 / 85 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)					
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: FULL VERY SMOOTH FINISH (63 µin)					
6	SIZE RANGE : NPS 2 to NPS 12	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES					
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 6 MM					
8	SERVICE / FLUID HANDLED : NON SOUR - (SEA) Seawater [Water Injection piping in accordance with Chapter - IX, B31.3] - NOTE D							
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NO	H2O: 100	CO2: NO	BTEX: NO	Chloride mg/Kg 23038 00			
10	MATERIAL SPECIFICATION							
11	BODY : ASTM A105N	DISC MATERIAL <i>ASTM A216 Gr. WCB (Castings)</i>	<i>Stellite 6 upto 4" sizes</i>	ASTM A105N/A216 Gr.WCB + 3mm SDSS WELD OVERLAY + STELLITE 6 HARD FACED	00			
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718					
13	PINS, HINGED AND OTHER TRIM : UNS S32750	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL					
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS							
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598					
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00					
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-15	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00					
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9					
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00 - NOTE D	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B					
20	FUGITIVE EMISSION REQ. : N/A	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00					
NOTES								
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.							
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.							
D	Valve shall be in accordance with ASME B31.3 Chapter IX, par. K307 - High Pressure Piping							
G	Graphite gaskets or packing shall not be used in seawater service application for primary sealing but may be used as part of the fire-tested design.							



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0014

GENERAL SPECIFICATION			
2 PIPE CLASS	: 311323D8	DESIGN CODE	: API 594 - Type A
3 VALVE RATING	: ANSI CLASS 300	END CONNECTIONS	: FLANGED TO ASME B16.5, RAISED FACE
4 DESIGN TEMPERATURE RANGE	: -29 / 85 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)
5 DESIGN PRESSURE	: AS PER ASME B16.34	FLANGE FACE FINISH	: SMOOTH FINISH (125 - 250 µin)
6 SIZE RANGE	: NPS 2 to NPS 24	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES
7 NACE REQUIREMENTS	: YES - NOTE C	CORROSION ALLOWANCE	: 3 MM
8 SERVICE / FLUID HANDLED	: SOUR NON-TOXIC - (HCN) Hydrocarbon, Sour		
9 FLUID COMPOSITION MAXIMUM CONTENT(MOL%)	: H2S: 0,02	H2O: Presence	CO2: 0,00
		BTEX: 10,33	Chloride mg/Kg NO 00
MATERIAL SPECIFICATION			
11 BODY	: ASTM A216 Gr. WCB	DISC MATERIAL <i>Stellite 6 - up to 4"</i> <i>Incl. 625 - Rest sizes</i>	: ASTM A105N/A216 Gr.WCB + 3mm UNS N06625 WELD OVERLAY + STELLITE 6 HARD FACED 00
12 BODY SEAT	: INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718
13 PINS, HINGED AND OTHER TRIM	: ALLOY 825	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS			
15 LIFTING LUGS	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598
16 SUPPORT (LEGS / SADDLE)	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00
17 PAINTING / COATING	: 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-15	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00
18 MARKING	: AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9
19 ADDITIONAL REQUIREMENTS	: 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B
20 FUGITIVE EMISSION REQ.	: CLASS "BH" <i>(N/A)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00 00
NOTES			
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.		
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.		
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).		



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0019

1	GENERAL SPECIFICATION				
2	PIPE CLASS : 31142303	DESIGN CODE	: API 594 - Type A		
3	VALVE RATING : ANSI CLASS 300	END CONNECTIONS	: FLANGED TO ASME B16.5, RAISED FACE		
4	DESIGN TEMPERATURE RANGE : -45 / 180 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)		
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: SMOOTH FINISH (125 - 250 µin)		
6	SIZE RANGE : NPS 2 to NPS 24	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES		
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 3 MM		
8	SERVICE / FLUID HANDLED : NON SOUR - (FGM) Medium Pressure Fuel Gas				
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NOTE M	H2O: NOTE M	CO2: NOTE M	BTEX: NOTE M	Chloride mg/Kg NO 00
10	MATERIAL SPECIFICATION				
11	BODY : ASTM A352 Gr. LCC	DISC MATERIAL : <i>Stellite 6 - 4" to 4"</i> ASTM A350 Gr.LF2 CL.1 / A352 Gr.LCC + 3mm SS 316L WELD OVERLAY + STELLITE 6 HARDFACED			
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718		
13	PINS, HINGED AND OTHER TRIM : SS 316	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL		
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS				
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598		
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00		
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-15	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00		
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9		
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B		
20	FUGITIVE EMISSION REQ. : CLASS "BH" <i>(N/A)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00		

NOTES

A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.	
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.	00
M	Fuel Gas Specification: Water Dew point -30°C at 39.2 bara, HC Dew point -5°C at 39.2 bara, N2 Content 3.5 (Mol.% max), CO2 content 5 (Mol. % max), Total Sulphur 100 (ppmv max) and H2S Content 20 (ppmv max).	00



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0021

GENERAL SPECIFICATION								
2	PIPE CLASS : 61143303	DESIGN CODE	: API 594 - Type A					
3	VALVE RATING : ANSI CLASS 600	END CONNECTIONS	: FLANGED TO ASME B16.5, RTJ FACING					
4	DESIGN TEMPERATURE RANGE : -45 / 200 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)					
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: FULL VERY SMOOTH FINISH (63 µin)					
6	SIZE RANGE : NPS 2 to NPS 24	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES					
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 3 MM					
8	SERVICE / FLUID HANDLED : NON SOUR - (HC) Hydrocarbon							
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NOTEM	H2O: NOTEM	CO2: NOTEM	BTEX: NOTE M	Chloride mg/Kg NO 00			
MATERIAL SPECIFICATION								
11	BODY : ASTM A352 Gr. LCC	DISC MATERIAL <i>Stellite 6 up to 4"</i>	: ASTM A350 Gr.LF2 CL.1 / A352 Gr.LCC + 3mm SS 316L WELD OVERLAY + STELLITE 6 HARD FACED					
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718					
13	PINS, HINGED AND OTHER TRIM : SS 316	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL					
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS								
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598					
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00					
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-15	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00					
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9					
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B					
20	FUGITIVE EMISSION REQ. : CLASS "BH" <i>(N/A)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00					
NOTES								
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.							
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.							
M	Fuel Gas Specification: Water Dew point -30°C at 39.2 bara, HC Dew point -5°C at 39.2 bara, N2 Content 3.5 (Mol.% max), CO2 content 5 (Mol. % max), Total Sulphur 100 (ppmv max) and H2S Content 20 (ppmv max).							



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0023

1	GENERAL SPECIFICATION							
2	PIPE CLASS : 15143303, 91143303 (ONLY FOR NPS 2)	DESIGN CODE	: API 594 - Type A					
3	VALVE RATING : ANSI CLASS 1500	END CONNECTIONS	: FLANGED TO ASME B16.5, RTJ FACING					
4	DESIGN TEMPERATURE RANGE : -45 / 340 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)					
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: FULL VERY SMOOTH FINISH (63 µin)					
6	SIZE RANGE : NPS 2 to NPS 24	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES					
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 3 MM					
8	SERVICE / FLUID HANDLED : NON SOUR - (HC) Hydrocarbon							
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NOTEM	H2O: NOTEM	CO2: NOTEM	BTEX: NOTE M	Chloride mg/Kg NO 00			
10	MATERIAL SPECIFICATION							
11	BODY : ASTM A352 Gr. LCC	DISC MATERIAL <i>Stellite 6 (PTO Size 4"</i>	: ASTM A350 Gr.LF2 CL.1 / A352 Gr.LCC + 3mm SS 316L WELD OVERLAY + STELLITE 6 HARD FACED					
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718					
13	PINS, HINGED AND OTHER TRIM : SS 316	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL					
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS							
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598					
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00					
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-16	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00					
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9					
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B					
20	FUGITIVE EMISSION REQ. : CLASS "BH" <i>(N/A)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00					
NOTES								
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.							
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.							
M	Fuel Gas Specification: Water Dew point -30°C at 39.2 bara, HC Dew point -5°C at 39.2 bara, N2 Content 3.5 (Mol.% max), CO2 content 5 (Mol. % max), Total Sulphur 100 (ppmv max) and H2S Content 20 (ppmv max).							



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0024

GENERAL SPECIFICATION	
2 PIPE CLASS	: 25143303
3 VALVE RATING	: ANSI CLASS 2500
4 DESIGN TEMPERATURE RANGE	: -45 / 185 DEG. C
5 DESIGN PRESSURE	: AS PER ASME B16.34
6 SIZE RANGE	: NPS 2 to NPS 12
7 NACE REQUIREMENTS	: N/A
8 SERVICE / FLUID HANDLED	: NON SOUR - (HC) Hydrocarbon
9 FLUID COMPOSITION MAXIMUM CONTENT(MOL%)	: H2S: NOTEM H2O: NOTEM CO2: NOTEM BTEX: NOTE M Chloride mg/Kg NO 00
MATERIAL SPECIFICATION	
11 BODY	: ASTM A352 Gr. LCC DISC MATERIAL <i>Stellite 6 up to 4" Size</i> : ASTM A350 Gr.LF2 CL.1 / A352 Gr.LCC + 3mm SS 316L WELD OVERLAY + STELLITE 6 HARD FACED 00
12 BODY SEAT	: INTEGRAL WITH STELLITE 6 HARD FACING SPRING : INCONEL 718
13 PINS, HINGED AND OTHER TRIM	: SS 316 EYE BOLT : CONGRUOUS WITH BODY MATERIAL
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS	
15 LIFTING LUGS	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE TESTING CODE : API 598
16 SUPPORT (LEGS / SADDLE)	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE SEAT LEAKAGE RATE : AS PER 1-CF0000-28-SPE-0030-00
17 PAINTING / COATING	: 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-15 OTHER SUPPLEMENTARY TESTS : AS PER 1-CF0000-28-SPE-0030-00
18 MARKING	: AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00 NDT & HARDNESS REQUIREMENT : 1-CF0000-28-SPE-0030-00 SECTION 9
19 ADDITIONAL REQUIREMENTS	: 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00 INSPECTION CERTIFICATION : AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B
20 FUGITIVE EMISSION REQ.	: CLASS "BH" <i>(N/A)</i> CRITICALITY : 1 AS PER 1-CF0000-25-SPE-9073-00 00
NOTES	
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1. 00
M	Fuel Gas Specification: Water Dew point -30°C at 39.2 bara, HC Dew point -5°C at 39.2 bara, N2 Content 3.5 (Mol.% max), CO2 content 5 (Mol. % max), Total Sulphur 100 (ppmv max) and H2S Content 20 (ppmv max). 00



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0027

1	GENERAL SPECIFICATION				
2	PIPE CLASS : 11312003	DESIGN CODE	: API 594 - Type A		
3	VALVE RATING : ANSI CLASS 150	END CONNECTIONS	: FLANGED TO ASME B16.5, RAISED FACE		
4	DESIGN TEMPERATURE RANGE : -45 / 150 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)		
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: SMOOTH FINISH (125 - 250 µin)		
6	SIZE RANGE : NPS 2 to NPS 14	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES		
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 0 MM		
8	SERVICE / FLUID HANDLED : NON SOUR - (ASD) Asphaltene Dispersant, (CAC) Caustic Concentrated, (CH) Chemical, (CI) Corrosion Inhibitor, (IA) Instrument Air, (MEG) Mono-Ethylene Glycol, (SI) Scale Inhibitor, (FGL) Low Pressure Fuel Gas, (BA) Breathing Air.				
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NO H2O: NO CO2: NO BTEX: NO			Chloride mg/Kg	NO 00
10	MATERIAL SPECIFICATION				
11	BODY : ASTM A351 Gr. CF8M	DISC MATERIAL : <i>Stellite - upto 4"</i> <i>Rest C1. CF8M</i>	: ASTM A182 Gr.316 / ASTM A351 Gr. CF8M + STELLITE 6 HARD FACED		00
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718		
13	PINS, HINGED AND OTHER TRIM : SS 316	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL		
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS				
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598		
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00		
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00		
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9		
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B		
20	FUGITIVE EMISSION REQ. : CLASS "BH" <i>(UNA)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00		00
NOTES					
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.				
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.				



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0028

GENERAL SPECIFICATION			
2 PIPE CLASS	: 113120U3	DESIGN CODE	: API 594 - Type A
3 VALVE RATING	: ANSI CLASS 150	END CONNECTIONS	: FLANGED TO ASME B16.5, RAISED FACE
4 DESIGN TEMPERATURE RANGE	: 3 / 85 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)
5 DESIGN PRESSURE	: AS PER ASME B16.34	FLANGE FACE FINISH	: SMOOTH FINISH (125 - 250 µin)
6 SIZE RANGE	: NPS 2 to NPS 10	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES
7 NACE REQUIREMENTS	: N/A	CORROSION ALLOWANCE	: 0 MM
8 SERVICE / FLUID HANDLED	: NON SOUR - (PW) Potable Water [WRAS Certified], (SEA) Sea Water, (UW) Utility Water - NOTE H		
9 FLUID COMPOSITION MAXIMUM CONTENT(MOL%)	: H2S: NO	H2O: 100	CO2: NO
		BTEX: NO	Chloride mg/Kg 23038
			00
MATERIAL SPECIFICATION			
11 BODY	: ASTM A351 Gr. CF8M	DISC MATERIAL	ASTM A182 Gr.316 / ASTM A351 Gr. CF8M + Rest Gr. CF8M
			: STELLITE 6 HARDFACED
12 BODY SEAT	: INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718
13 PINS, HINGED AND OTHER TRIM	: SS 316	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS			
15 LIFTING LUGS	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598
16 SUPPORT (LEGS / SADDLE)	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00
17 PAINTING / COATING	: 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A 24	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00
18 MARKING	: AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9
19 ADDITIONAL REQUIREMENTS	: 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00 - NOTE H	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B
20 FUGITIVE EMISSION REQ.	: N/A	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00
			00
NOTES			
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.		
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.		
G	Graphite gaskets or packing shall not be used in seawater service application for primary sealing but may be used as part of the fire-tested design.		
H	Valve shall be WRAS Certified. - N/A		



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0029

1	GENERAL SPECIFICATION							
2	PIPE CLASS : 31312003	DESIGN CODE	: API 594 - Type A					
3	VALVE RATING : ANSI CLASS 300	END CONNECTIONS	: FLANGED TO ASME B16.5, RAISED FACE					
4	DESIGN TEMPERATURE RANGE : -45 / 85 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)					
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: SMOOTH FINISH (125 - 250 µin)					
6	SIZE RANGE : NPS 2 to NPS 14	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES					
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 0 MM					
8	SERVICE / FLUID HANDLED : NON SOUR - (ASD) Asphaltene Dispersant, (MEG) Mono-Ethylene Glycol, (SI) Scale Inhibitor							
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NO	H2O: NO	CO2: NO	BTEX: NO	Chloride mg/Kg NO 00			
10	MATERIAL SPECIFICATION							
11	BODY : ASTM A351 Gr. CF8M	DISC MATERIAL <i>Stellite 6 upto size 4"</i>	: ASTM A182 Gr.316 / ASTM A351 Gr. CF8M + STELLITE 6 HARD FACED					
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718					
13	PINS, HINGED AND OTHER TRIM : SS 316	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL					
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS							
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598					
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00					
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00					
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9					
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B					
20	FUGITIVE EMISSION REQ. : CLASS "BH" <i>(HIA)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00					
NOTES								
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.							
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.							



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0030

GENERAL SPECIFICATION								
2	PIPE CLASS : 61313003	DESIGN CODE	: API 594 - Type A					
3	VALVE RATING : ANSI CLASS 600	END CONNECTIONS	: FLANGED TO ASME B16.5, RTJ FACING					
4	DESIGN TEMPERATURE RANGE : 3 / 140 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)					
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: FULL VERY SMOOTH FINISH (63 µin)					
6	SIZE RANGE : NPS 2 to NPS 12	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES					
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 0 MM					
8	SERVICE / FLUID HANDLED : NON SOUR - (CH) Chemical, (Cl) Corrosion Inhibitor, (MEG) Mono-Ethylene Glycol, (Si) Scale Inhibitor							
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NO	H2O: NO	CO2: NO	BTEX: NO	Chloride mg/Kg NO 00			
MATERIAL SPECIFICATION								
11	BODY : ASTM A351 Gr. CF8M	DISC MATERIAL <i>Stellite 6 - up to size 4"</i>	: ASTM A182 Gr.316 / ASTM A351 Gr. CF8M + STELLITE 6 HARD FACED					
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718					
13	PINS, HINGED AND OTHER TRIM : SS 316	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL					
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS								
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598					
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00					
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00					
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9					
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B					
20	FUGITIVE EMISSION REQ. : CLASS "BH" <i>(U/A)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00					
NOTES								
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.							
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.							



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0031

1	GENERAL SPECIFICATION									
2	PIPE CLASS : 91313003	DESIGN CODE : API 594 - Type A								
3	VALVE RATING : ANSI CLASS 900	END CONNECTIONS : FLANGED TO ASME B16.5, RTJ FACING								
4	DESIGN TEMPERATURE RANGE : -45 / 200 DEG. C	FACE TO FACE DIMENSION : API 594-TYPE A (TABLE 2 & 3)								
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH : FULL VERY SMOOTH FINISH (63 µin)								
6	SIZE RANGE : NPS 3 to NPS 16	VALVE CONSTRUCTION : DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES								
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE : 0 MM								
8	SERVICE / FLUID HANDLED : NON SOUR - (MEG) Mono-Ethylene Glycol, (SI) Scale Inhibitor									
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NO	H2O: NO	CO2: NO	BTEX: NO	Chloride mg/Kg	NO 00				
10	MATERIAL SPECIFICATION									
11	BODY : ASTM A351 Gr. CF8M	DISC MATERIAL : STELLITE 6 - UP TO 4" SIZES	ASTM A182 Gr.316 / ASTM A351 Gr. CF8M + STELLITE 6 HARD FACED			00				
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	INCONEL 718							
13	PINS, HINGED AND OTHER TRIM : SS 316	EYE BOLT	CONGRUOUS WITH BODY MATERIAL							
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS									
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE : API 598								
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	AS PER 1-CF0000-28-SPE-0030-00							
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS	AS PER 1-CF0000-28-SPE-0030-00							
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	1-CF0000-28-SPE-0030-00 SECTION 9							
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B							
20	FUGITIVE EMISSION REQ. : CLASS "BH" (N/A)	CRITICALITY	1 AS PER 1-CF0000-25-SPE-9073-00							
NOTES										
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.									
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.									
						00				



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-0034

GENERAL SPECIFICATION								
2	PIPE CLASS : 11505001	DESIGN CODE	: API 594 - Type A					
3	VALVE RATING : ANSI CLASS 150	END CONNECTIONS	: FLANGED TO ASME B16.5, RAISED FACE					
4	DESIGN TEMPERATURE RANGE : 3 / 85 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)					
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: SMOOTH FINISH (125 - 250 µin)					
6	SIZE RANGE : NPS 2 to NPS 8	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES					
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 0 MM					
8	SERVICE / FLUID HANDLED : NON SOUR - (CH) Chemical, (CL) Sodium Hypochlorite							
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NO	H2O: NO	CO2: NO	BTEX: NO	Chloride mg/Kg 23038 00			
MATERIAL SPECIFICATION								
11	BODY : ASTM B367 Gr.C-2	DISC MATERIAL	: ASTM B381 Gr.F2					
12	BODY SEAT : INTEGRAL ASTM B381 Gr.F2	SPRING	: INCONEL 718					
13	PINS, HINGED AND OTHER TRIM : TITANIUM	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL					
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS								
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598					
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00					
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: N/A	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00					
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9					
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B					
20	FUGITIVE EMISSION REQ. : CLASS "BH" (HIA)	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00					
NOTES								
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.							
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.							
					00			



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1001

1	GENERAL SPECIFICATION				
2	PIPE CLASS : 11731003	DESIGN CODE	: API 594 - Type A		
3	VALVE RATING : ANSI CLASS 150	END CONNECTIONS	: FLANGED TO ASME B16.5, FLAT FACE		
4	DESIGN TEMPERATURE RANGE : 3 / 85 DEG. C	FACE TO FACE DIMENSION	: API 594-TYPE A (TABLE 2 & 3)		
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: STOCK FINISH (250-500 µin)		
6	SIZE RANGE : NPS 2 to NPS 12	VALVE CONSTRUCTION	: DUAL PLATE TYPE-A, DOUBLE FLANGED, RETAINERLESS DESIGN, SPRING LOADED PLATES		
7	NACE REQUIREMENTS : N/A	CORROSION ALLOWANCE	: 0 MM		
8	SERVICE / FLUID HANDLED : NON SOUR - (IW) Irrigation Water, (SE) Sewage				
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: NO	H2O: 100	CO2: NO	BTEX: NO	Chloride mg/Kg TBD 00
10	MATERIAL SPECIFICATION				
11	BODY : ASTM A351 Gr. CF8M	DISC MATERIAL : STELLITE 6 upto size 4"	: ASTM A182 Gr.316 / ASTM A351 Gr. CF8M + STELLITE 6 HARD FACED		
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718		
13	PINS, HINGED AND OTHER TRIM : SS 316	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL		
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS				
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598		
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00		
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00		
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9		
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B		
20	FUGITIVE EMISSION REQ. : N/A	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00		

NOTES

A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1005

GENERAL SPECIFICATION			
2 PIPE CLASS	: 25965026	DESIGN CODE	: API 594 00
3 VALVE RATING	: ANSI CLASS 2500	END CONNECTIONS	: BUTT WELDED AS PER ASME B16.25
4 DESIGN TEMPERATURE RANGE	: -45 / 150 DEG. C	FACE TO FACE DIMENSION	: MANUFACTURER STANDARD 00
5 DESIGN PRESSURE	: AS PER ASME B16.34	FLANGE FACE FINISH	: N/A
6 SIZE RANGE	: NPS 2 to NPS 4	VALVE CONSTRUCTION	: DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES 00
7 NACE REQUIREMENTS	: YES - NOTE C	CORROSION ALLOWANCE	: 0 MM
8 SERVICE / FLUID HANDLED	: SOUR TOXIC - (WFX) Well Fluid, Sour		
9 FLUID COMPOSITION MAXIMUM CONTENT(MOL%)	: H2S: 26,83	H2O: 71,64	CO2: 5,79 BTEX: 2,07 Chloride mg/Kg 242560 00
MATERIAL SPECIFICATION			
11 BODY	: ASTM A494 Gr. CW6MC	DISC MATERIAL <i>Stellite 6 up to 4" sizes</i>	: UNS N06625 + STELLITE 6 HARDFACED 00
12 BODY SEAT	: INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718
13 PINS, HINGED AND OTHER TRIM	: ALLOY 625	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS			
15 LIFTING LUGS	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598
16 SUPPORT (LEGS / SADDLE)	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00
17 PAINTING / COATING	: 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: N/A	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00
18 MARKING	: AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9
19 ADDITIONAL REQUIREMENTS	: 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B
20 FUGITIVE EMISSION REQ.	: CLASS "AH" <i>(HIA)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00 00
NOTES			
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.		
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.		
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).		



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1006

1	GENERAL SPECIFICATION				
2	PIPE CLASS : 61985028	DESIGN CODE : API 594			00
3	VALVE RATING : ANSI CLASS 600	END CONNECTIONS : BUTT WELDED AS PER ASME B16.25			
4	DESIGN TEMPERATURE RANGE : -45 / 185 DEG. C	FACE TO FACE DIMENSION : MANUFACTURER STANDARD			00
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH : N/A			
6	SIZE RANGE : NPS 2 to NPS 4	VALVE CONSTRUCTION : DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES			00
7	NACE REQUIREMENTS : YES - NOTE C	CORROSION ALLOWANCE : 0 MM			
8	SERVICE / FLUID HANDLED : SOUR TOXIC - (HCX) Hydrocarbon, Sour, (WFX) Well Fluid, Sour				
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: 52,67	H2O: 100	CO2: 7,65	BTEX: 8,90	Chloride mg/Kg 20906
10	MATERIAL SPECIFICATION				
11	BODY : ASTM A494 Gr. CU5MCuC	DISC MATERIAL : STELLITE 6 UPTO 4" SIZES	UNS N08825 + STELLITE 6 HARD FACED		00
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	INCONEL 718		
13	PINS, HINGED AND OTHER TRIM : ALLOY 825	EYE BOLT	CONGRUOUS WITH BODY MATERIAL		
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS				
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE : API 598			
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	AS PER 1-CF0000-28-SPE-0030-00		
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS	AS PER 1-CF0000-28-SPE-0030-00		
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	1-CF0000-28-SPE-0030-00 SECTION 9		
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B		
20	FUGITIVE EMISSION REQ. : CLASS "AH" (N/A)	CRITICALITY	1 AS PER 1-CF0000-25-SPE-9073-00		00
NOTES					
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.				
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.				
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).				



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1007

GENERAL SPECIFICATION					
2	PIPE CLASS : 25985028	DESIGN CODE	: API 594	00	
3	VALVE RATING : ANSI CLASS 2500	END CONNECTIONS	: BUTT WELDED AS PER ASME B16.25		
4	DESIGN TEMPERATURE RANGE : -45 / 150 DEG. C	FACE TO FACE DIMENSION	: MANUFACTURER STANDARD	00	
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: N/A		
6	SIZE RANGE : NPS 2 to NPS 3	VALVE CONSTRUCTION	: DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES	00	
7	NACE REQUIREMENTS : YES - NOTE C	CORROSION ALLOWANCE	: 0 MM		
8	SERVICE / FLUID HANDLED : SOUR TOXIC - (WFX) Well Fluid, Sour				
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: 28,94	H2O: 82,15	CO2: 7,94	BTEX: 2,07 Chloride mg/Kg 242560	00
MATERIAL SPECIFICATION					
11	BODY : ASTM A494 Gr. CU5MCuC	DISC MATERIAL <i>Stellite 6 upto 4" size</i>	: UNS N08825 + STELLITE 6 HARD FACED	00	
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718		
13	PINS, HINGED AND OTHER TRIM : ALLOY 825	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL		
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS					
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598		
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00		
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00		
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9		
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B		
20	FUGITIVE EMISSION REQ. : CLASS "AH" <i>(HIA)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00	00	
NOTES					
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.				
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.				
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).				



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1011

1	GENERAL SPECIFICATION				
2	PIPE CLASS : 31975028, 31985028	DESIGN CODE	: API 594	00	
3	VALVE RATING : ANSI CLASS 300	END CONNECTIONS	: BUTT WELDED AS PER ASME B16.25		
4	DESIGN TEMPERATURE RANGE : -45 / 150 DEG. C	FACE TO FACE DIMENSION	: MANUFACTURER STANDARD	00	
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: N/A		
6	SIZE RANGE : NPS 2 to NPS 4	VALVE CONSTRUCTION	: DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES	00	
7	NACE REQUIREMENTS : YES - NOTE C	CORROSION ALLOWANCE	: 0 MM		
8	SERVICE / FLUID HANDLED : SOUR TOXIC - (HCX) Hydrocarbon, Sour, (SW) Sour Water, (UW) Utility Water, (WDX) Water Disposal, Sour, (WFX) Well Fluid, Sour			00	
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: 52,13	H2O: 100	CO2: 6,46	BTEX: 8,78 Chloride mg/Kg 222774	00
10	MATERIAL SPECIFICATION				
11	BODY : ASTM A494 Gr. CU5MCuC	DISC MATERIAL <i>Stellite 6 upto size 4"</i>	: UNS N08825 + STELLITE 6 HARD FACED	00	
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718		
13	PINS, HINGED AND OTHER TRIM : ALLOY 825	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL		
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS				
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598		
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00		
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00		
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9		
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B		
20	FUGITIVE EMISSION REQ. : CLASS "AH" <i>(N/A)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00	00	
	NOTES				
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.				
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.				
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).				


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DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1014

GENERAL SPECIFICATION				
2	PIPE CLASS : 61985028	DESIGN CODE	: API 594	00
3	VALVE RATING : ANSI CLASS 600	END CONNECTIONS	: BUTT WELDED AS PER ASME B16.25 - NOTE I	
4	DESIGN TEMPERATURE RANGE : -45 / 185 DEG. C	FACE TO FACE DIMENSION	: MANUFACTURER STANDARD	00
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: N/A	
6	SIZE RANGE : NPS 30 to NPS 30	VALVE CONSTRUCTION	: DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES	00
7	NACE REQUIREMENTS : YES - NOTE C	CORROSION ALLOWANCE	: 0 MM	
8	SERVICE / FLUID HANDLED : SOUR TOXIC - (HCX) Hydrocarbon, Sour, (WFX) Well Fluid, Sour			
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: 52,67	H2O: 100	CO2: 7,65	BTEX: 8,90 Chloride mg/Kg 20906
10	MATERIAL SPECIFICATION			
11	BODY : ASTM A352 Gr. LCC + 3 mm UNS N06625 WELD OVERLAY	DISC MATERIAL	: UNS N08825 + STELLITE 6 HARD FACED	00
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718	
13	PINS, HINGED AND OTHER TRIM : ALLOY 825	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL	
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS			
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598	
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00	
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-15	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00	
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9	
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B	
20	FUGITIVE EMISSION REQ. : CLASS "AH" (HIA)	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00	00
NOTES				
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.			
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.			
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).			
I	Required Inner diameter at BW ends shall be in accordance with Project Specification no. 1-CF0000-28-SPE-0026-00 Appendix 7.			



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1015

1	GENERAL SPECIFICATION				
2	PIPE CLASS : 11135628	DESIGN CODE	: API 594	00	
3	VALVE RATING : ANSI CLASS 150	END CONNECTIONS	: BUTT WELDED AS PER ASME B16.25		
4	DESIGN TEMPERATURE RANGE : 3 / 140 DEG. C	FACE TO FACE DIMENSION	: MANUFACTURER STANDARD	00	
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	: N/A		
6	SIZE RANGE : NPS 2 to NPS 2	VALVE CONSTRUCTION	: DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES	00	
7	NACE REQUIREMENTS : YES - NOTE C	CORROSION ALLOWANCE	: 6 MM		
8	SERVICE / FLUID HANDLED : SOUR TOXIC - (HCX) Hydrocarbon, Sour, (WDX) Water Disposal, Sour				
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: 0,16	H2O: 99,91	CO2: 0,00	BTEX: 0,00 Chloride mg/Kg 242560	00
10	MATERIAL SPECIFICATION				
11	BODY : ASTM A216 Gr. WCB	DISC MATERIAL <i>Stellite 6 up to size 4"</i>	: UNS N06625 WELD OVERLAY + STELLITE 6 HARD FACED	00	
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718		
13	PINS, HINGED AND OTHER TRIM : ALLOY 825	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL		
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS				
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598		
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00		
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-15	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00		
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9		
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B		
20	FUGITIVE EMISSION REQ. : CLASS "AH" <i>(N/A)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00	00	
NOTES					
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.				
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.				
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).				



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1016

		GENERAL SPECIFICATION			
2	PIPE CLASS	: 11975028	DESIGN CODE	: API 594	00
3	VALVE RATING	: ANSI CLASS 150	END CONNECTIONS	: BUTT WELDED AS PER ASME B16.25	
4	DESIGN TEMPERATURE RANGE	: -29 / 150 DEG. C	FACE TO FACE DIMENSION	: MANUFACTURER STANDARD	00
5	DESIGN PRESSURE	: AS PER ASME B16.34	FLANGE FACE FINISH	: N/A	
6	SIZE RANGE	: NPS 2 to NPS 2	VALVE CONSTRUCTION	: DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES	00
7	NACE REQUIREMENTS	: YES - NOTE C	CORROSION ALLOWANCE	: 0 MM	
8	SERVICE / FLUID HANDLED	: SOUR TOXIC - (HCX) Hydrocarbon, Sour, (SW) Sour Water			
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%)	: H2S: 88,36	H2O: 99,91	CO2: 6,52	BTEX: 98,19 Chloride mg/Kg 205210 00
MATERIAL SPECIFICATION					
11	BODY	: ASTM A494 Gr. CU5MCuC	DISC MATERIAL <i>Stellite 6 up to 4"</i>	: UNS N08825 + STELLITE 6 HARD FACED	00
12	BODY SEAT	: INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718	
13	PINS, HINGED AND OTHER TRIM	: ALLOY 825	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL	
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS					
15	LIFTING LUGS	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598	
16	SUPPORT (LEGS / SADDLE)	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00	
17	PAINTING / COATING	: 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00	
18	MARKING	: AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9	
19	ADDITIONAL REQUIREMENTS	: 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B	
20	FUGITIVE EMISSION REQ.	: CLASS "AH" <i>(N/A)</i>	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00	00
NOTES					
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.				
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.				
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).				



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1017

1	GENERAL SPECIFICATION				
2	PIPE CLASS : 31975028	DESIGN CODE : API 594			00
3	VALVE RATING : ANSI CLASS 300	END CONNECTIONS : BUTT WELDED AS PER ASME B16.25 - NOTE I			
4	DESIGN TEMPERATURE RANGE : -29 / 140 DEG. C	FACE TO FACE DIMENSION : MANUFACTURER STANDARD			00
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH : N/A			
6	SIZE RANGE : NPS 6 to NPS 8	VALVE CONSTRUCTION : DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES			00
7	NACE REQUIREMENTS : YES - NOTE C	CORROSION ALLOWANCE : 0 MM			
8	SERVICE / FLUID HANDLED : SOUR TOXIC - (HCX) Hydrocarbon, Sour, (SW) Sour Water, (UW) Utility Water				
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: 21,22	H2O: 100	CO2: 1,56	BTEX: 8,78	Chloride mg/Kg 222774
10	MATERIAL SPECIFICATION				
11	BODY : ASTM A216 Gr. WCB + 3mm UNS N06625 WELD OVERLAY	DISC MATERIAL : UNS N08825 + STELLITE 6 HARD FACED			00
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING : INCONEL 718			
13	PINS, HINGED AND OTHER TRIM : ALLOY 825	EYE BOLT : CONGRUOUS WITH BODY MATERIAL			
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS				
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE : API 598			
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE : AS PER 1-CF0000-28-SPE-0030-00			
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-15	OTHER SUPPLEMENTARY TESTS : AS PER 1-CF0000-28-SPE-0030-00			
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT : 1-CF0000-28-SPE-0030-00 SECTION 9			
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION : AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B			
20	FUGITIVE EMISSION REQ. : CLASS "AH" <i>(N/A)</i>	CRITICALITY : 1 AS PER 1-CF0000-25-SPE-9073-00			00

NOTES

A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.	
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.	00
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).	
I	Required Inner diameter at BW ends shall be in accordance with Project Specification no. 1-CF0000-28-SPE-0026-00 Appendix 7.	



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1018

GENERAL SPECIFICATION					
2	PIPE CLASS : 31975068	DESIGN CODE	API 594	00	
3	VALVE RATING : ANSI CLASS 300	END CONNECTIONS	BUTT WELDED AS PER ASME B16.25 - NOTE I		
4	DESIGN TEMPERATURE RANGE : -29 / 225 DEG. C	FACE TO FACE DIMENSION	MANUFACTURER STANDARD	00	
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH	N/A		
6	SIZE RANGE : NPS 6 to NPS 8	VALVE CONSTRUCTION	DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES	00	
7	NACE REQUIREMENTS : YES - NOTE C	CORROSION ALLOWANCE	0 MM		
8	SERVICE / FLUID HANDLED : SOUR TOXIC - (HCX) Hydrocarbon, (SW) Sour Water, Sour				
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: 0,57	H2O: 99,85	CO2: 0,01	BTEX: 0,00	Chloride mg/Kg 222774 00
MATERIAL SPECIFICATION					
11	BODY : ASTM A216 Gr. WCB + 3mm UNS N06625 WELD OVERLAY	DISC MATERIAL	UNS N08825 + STELLITE 6 HARD FACED	00	
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	INCONEL 718		
13	PINS, HINGED AND OTHER TRIM : ALLOY 825	EYE BOLT	CONGRUOUS WITH BODY MATERIAL		
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS					
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	API 598		
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	AS PER 1-CF0000-28-SPE-0030-00		
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-16	OTHER SUPPLEMENTARY TESTS	AS PER 1-CF0000-28-SPE-0030-00		
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	1-CF0000-28-SPE-0030-00 SECTION 9		
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B		
20	FUGITIVE EMISSION REQ. : CLASS "AH" <i>(UNIA)</i>	CRITICALITY	1 AS PER 1-CF0000-25-SPE-9073-00	00	
NOTES					
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.				
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.				
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).				
I	Required Inner diameter at BW ends shall be in accordance with Project Specification no. 1-CF0000-28-SPE-0026-00 Appendix 7.				



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1019

1	GENERAL SPECIFICATION					
2	PIPE CLASS : 91985028	DESIGN CODE : API 594			00	
3	VALVE RATING : ANSI CLASS 900	END CONNECTIONS : BUTT WELDED AS PER ASME B16.25				
4	DESIGN TEMPERATURE RANGE : -45 / 200 DEG. C	FACE TO FACE DIMENSION : MANUFACTURER STANDARD			00	
5	DESIGN PRESSURE : AS PER ASME B16.34	FLANGE FACE FINISH : N/A				
6	SIZE RANGE : NPS 4 to NPS 4	VALVE CONSTRUCTION : DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES			00	
7	NACE REQUIREMENTS : YES - NOTE C	CORROSION ALLOWANCE : 0 MM				
8	SERVICE / FLUID HANDLED : SOUR TOXIC - (HCX) Hydrocarbon, Sour					
9	FLUID COMPOSITION MAXIMUM CONTENT(MOL%) : H2S: 14,85	H2O: 100	CO2: 2,67	BTEX: 8,90	Chloride mg/Kg 116190	00
10	MATERIAL SPECIFICATION					
11	BODY : ASTM A494 Gr. CU5MCuC	DISC MATERIAL <i>Stellite 6 up to size 4"</i> : UNS N08825 + STELLITE 6 HARDFACED			00	
12	BODY SEAT : INTEGRAL WITH STELLITE 6 HARD FACING	SPRING : INCONEL 718				
13	PINS, HINGED AND OTHER TRIM : ALLOY 825	EYE BOLT : CONGRUOUS WITH BODY MATERIAL				
14	TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS					
15	LIFTING LUGS : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE : API 598				
16	SUPPORT (LEGS / SADDLE) : REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE : AS PER 1-CF0000-28-SPE-0030-00				
17	PAINTING / COATING : 1-CF0000-25-SPE-0702-00 PAINT SYSTEM: A-24	OTHER SUPPLEMENTARY TESTS : AS PER 1-CF0000-28-SPE-0030-00				
18	MARKING : AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT : 1-CF0000-28-SPE-0030-00 SECTION 9				
19	ADDITIONAL REQUIREMENTS : 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION : AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B				
20	FUGITIVE EMISSION REQ. : CLASS "AH" <i>(N/A)</i>	CRITICALITY : 1 AS PER 1-CF0000-25-SPE-9073-00			00	
NOTES						
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.					
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.					
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).					



DUAL PLATE CHECK VALVE DATASHEET

Valve ID: CH-1020

GENERAL SPECIFICATION				
2 PIPE CLASS	: 61145328	DESIGN CODE	: API 594	00
3 VALVE RATING	: ANSI CLASS 600	END CONNECTIONS	: BUTT WELDED AS PER ASME B16.25	
4 DESIGN TEMPERATURE RANGE	: -45 / 95 DEG. C	FACE TO FACE DIMENSION	: MANUFACTURER STANDARD	00
5 DESIGN PRESSURE	: AS PER ASME B16.34	FLANGE FACE FINISH	: N/A	
6 SIZE RANGE	: NPS 2 to NPS 2	VALVE CONSTRUCTION	: DUAL PLATE, BUTT WELDED, RETAINERLESS DESIGN, SPRING LOADED PLATES	00
7 NACE REQUIREMENTS	: YES - NOTE C	CORROSION ALLOWANCE	: 3 MM	
8 SERVICE / FLUID HANDLED	: SOUR TOXIC - (HCX) Hydrocarbon, Sour			
9 FLUID COMPOSITION MAXIMUM CONTENT(MOL%)	: H2S: 34,87	H2O: Presence	CO2: 5,64	BTEX: 8,88 Chloride mg/Kg NO 00
MATERIAL SPECIFICATION				
11 BODY	: ASTM A352 Gr. LCC	DISC MATERIAL <i>Stellite 6 UPTO 4" SIZES</i>	: UNS N08825 + STELLITE 6 HARD FACED	00
12 BODY SEAT	: INTEGRAL WITH STELLITE 6 HARD FACING	SPRING	: INCONEL 718	
13 PINS, HINGED AND OTHER TRIM	: ALLOY 825	EYE BOLT	: CONGRUOUS WITH BODY MATERIAL	
TESTING, INSPECTION AND MISCELLANEOUS REQUIREMENTS				
15 LIFTING LUGS	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	TESTING CODE	: API 598	
16 SUPPORT (LEGS / SADDLE)	: REQUIRED FOR VALVE WEIGHING 250 KG AND ABOVE	SEAT LEAKAGE RATE	: AS PER 1-CF0000-28-SPE-0030-00	
17 PAINTING / COATING	: 1-CF0000-25-SPE-0702-00 : PAINT SYSTEM: A-15	OTHER SUPPLEMENTARY TESTS	: AS PER 1-CF0000-28-SPE-0030-00	
18 MARKING	: AS PER MSS-SP-25 AND 1-CF0000-28-SPE-0030-00	NDT & HARDNESS REQUIREMENT	: 1-CF0000-28-SPE-0030-00 SECTION 9	
19 ADDITIONAL REQUIREMENTS	: 1-CF0000-28-SPE-0030-00 AND 1-CF0000-25-SPE-0031-00	INSPECTION CERTIFICATION	: AS PER AGES-SP-13-002 TABLE A1.1 - NOTE B	
20 FUGITIVE EMISSION REQ.	: CLASS "AH"	CRITICALITY	: 1 AS PER 1-CF0000-25-SPE-9073-00	00
NOTES				
A	This Valve Data sheet shall be read in conjunction with Piping & Pipeline Valve Specification (1-CF0000-28-SPE-0030-00), PROJECT specifications listed above, Metallic Material Data sheet (1-CF0000-25-DSS-0040-00) and the General Notes provided in the data sheet document.			
B	3.2 Certification for all pressure retaining parts & all tests on the final assembly, 3.1 Certification for trims and other metallic parts, 2.2 certification for fasteners, packings & other non pressure parts in line with AGES-SP-13-002 Table A1.1.			
C	Valves in sour service application shall comply with applicable upstream NACE MR 0175 / ISO 15156 and Requirements for Materials in Severe Service (1-CF0000-25-SPE-0031-00).			

