



Brief Presentation

ENERGY EQUIPMENT DIVISION

The Spirit to Walk an Extra Mile...

Our Facilities



Corporate Office & State-of-the-art Manufacturing Facilities

Corporate Office: Manesar, Haryana, India

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Corporate Office:



Sales & Engineering

Manufacturing (Unit – 1), Bawal, Haryana, India



Extended Manufacturing (Unit – 1), Bawal, Haryana, India



Factory Tour : Bawal, Haryana, India

Shop Floor



Factory Tour : Bawal, Haryana, India

Shop Floor



Factory Tour : Bawal, Haryana, India

Shop Floor - Aluminum Domes & IFR



Factory Tour : Bawal, Haryana, India

Shop Floor



Extended Corporate Office (Unit-2): Manesar, Haryana, India

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Manufacturing (Unit – 2), Dubai, UAE

BLISS
AMERICAS



Factory Tour : Dubai, UAE

Shop Floor



Manufacturing (Unit – 4), Kingdom of Saudi Arabia

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AMERICAS



Factory Tour: Kingdom of Saudi Arabia

Shop Floor



Brdr. Christensens, Denmark

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Factory Tour: Denmark

Shop Floor



Energy Equipment Division - Products/Systems



2-3 Phase Separator System - Skid



Indirect Water Bath Heater



Gas Conditioning, Regulating & Metering System



Chemical Injection Skid



Aluminium Internal Floating Roofs



Heater Treater



Geodesic Dome & IFR for Hydrocarbon Storage Tank



Wellhead Control Panel

2-3 Phase Separator System - Skid

Key Highlight

- Primary equipment for separation of Liquid & Gas (Two Phases) or Oil, Water & Gas (Three Phases) from Oil Well Stream.
- Design & manufacture as per API 12J. Specification for Oil & Gas operation.
- Internal Inlet impingement Baffles, Wave Baffles, Flow Straightening Baffles, Weirs, Mist Eliminators & Vortex Breakers provided for effective separations.
- Designed to allow sufficient retention period.
- Controls & Instrumentation provided to accurately measure the Gas, Oil & Water flow rates, regulate the pressure and monitor the levels of Oil, Water in the Separator.



Indirect Water Bath Heater:

Key Highlight

- Designed in full compliance with API 12K specifications. Specification for Indirect Type Oil Field Heaters.
- Natural Draft Burners, directly mounted on Fire Tube.
- Precise temperature control.
- Removable Single or Twin Fire Tube Design.
- Removable Heating Coil for ease of maintenance.
- Burners System complete with Pilot, Main Burner, Gas Train, Spark Igniter.
- Flame Arrestors at Burners Air Intake and Stack Top.
- Heating capacity upto 5 Million K.Cal/Hr.



Gas Conditioning, Regulating & Metering System:

Key Highlight

- Ensures supply of Dry and Dust Free Gas.
- 2 × 100 % Filter Separators together with Indirect Water Bath Heater (as per service requirement) complete with Interconnecting Piping, Valves, Instrumentations, Electrical and PLC based Control Panels for unattended & smooth operation.
- Separation and Removal of Liquid from the Gas Stream.
- Compact, well-engineered skid mounted layout to facilitate easy access to all Valves



Chemical Injection Skid:

Key Highlight

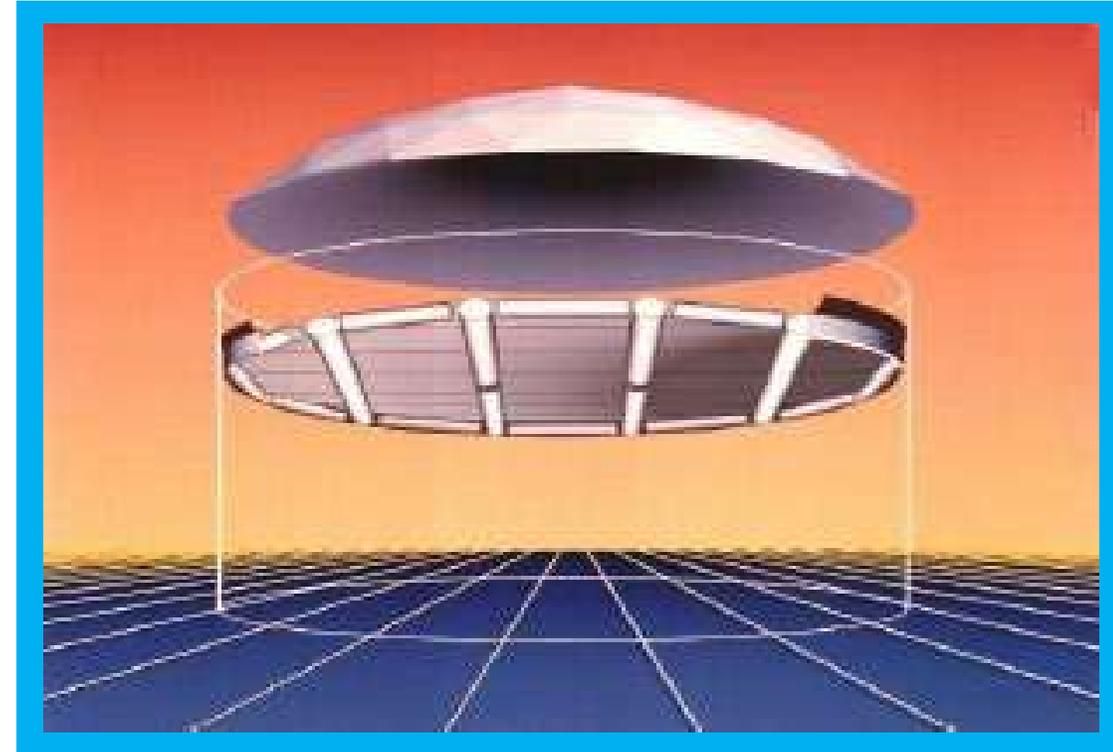
- We specialize in Design and Fabrication of Transportable/Permanent, Skid Mounted Chemical Injection Systems.
- These systems are built to customer requirement and in accordance with international design codes/standards.
- Pump selection, material of construction is selected for compatibility with the process chemical.
- Use of proven system component, 3D modelling to ensure ease of operation and maintenance etc.
- Single point or multipoint Injection Systems.



Internal Floating Roof:

Key Highlight

- Minimizes Vapour Losses of stored liquids, while saving a lot of money.
- Extremely light weight compared to conventional CS IFR.
- No period maintenance required resulting in cost effectiveness.
- No Painting required required resulting in cost effectiveness.
- Well designed to manage vaccum & pressure flow.
- Reduces pollution while ensuring no harmful vapours are let off to the atmosphere.
- Increases safety while ensuring no explosive vapours are trapped.



Heater Treater:

Key Highlight

- Adequately designed for both vertical and horizontal installation.
- Direct type and Indirect Type First time 'Made In India' with such a huge capacity.
- Custom built to suit the process requirement and the client need.
- Fully automated with SDV, PRV, CV, Analyzer, Transmitters, PSV, Duobloc Burnerr, PLC control etc..
- Designed and Manufactured as per international quality norms.
- Lightweight insulation reduces loading weight.
- Resistance to mechanical and thermal shocks.
- Faster start-up and cool down period.



Aluminum Geodesic Dome:

Key Highlight

- Extremely light weight but extremely strong compared to conventional CS dome, hence very low loads on the tank and foundations.
- Non welding type construction.
- Maintains extremely low temperature inside the tank unlike a CS Dome.
- No or very little maintenance required in the dome's lifetime.
- Strong enough to withstand all environmental factors while ensuring the tank contents remain uncontaminated and odors and vapors are contained.
- No need to dispose of water contaminated due to leaky seals or drains
- No standing water reduces the corrosion & loads of steel parts while also reducing risk of collapse due to accumulation.
- Zero risk of rim fires.



Wellhead Control Panel:

Key Highlight

- Modular Design with SS 316 / 316 L
- Construction or as needed.
- Adequate Power & head to meet the well requirement.
- Easy Operation, Maintenance & Serviceability
- First Time 'Made In India'
- Future proofing & Expandable design.
- Safe & Environment protected design.



Projects Executed

Energy Equipment - Heater Treater:



Energy Equipment - Heater Treater:



Heater Treater



Features:

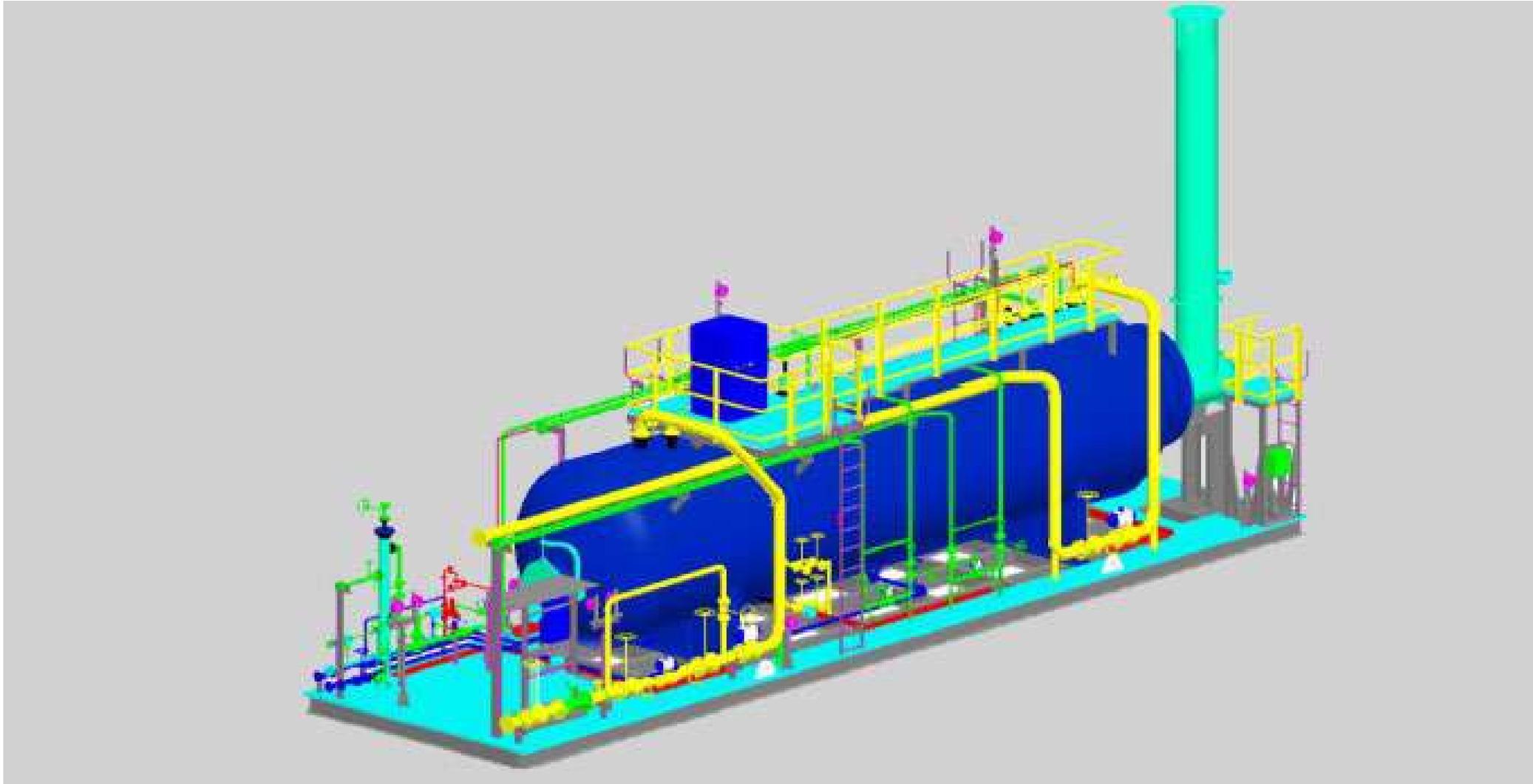
- Adequately designed for both vertical & horizontal installation.
- Direct type & indirect type.
- Custom built to suit the process requirement and the client need.
- Designed & Manufactured as per international quality norms.
- Light weight insulation reduces loading weight.
- Low installation cost, the heater with all instruments & controls can be skid mounted for simple, economical installation & relocation.

Energy Equipment: HT Fabrication



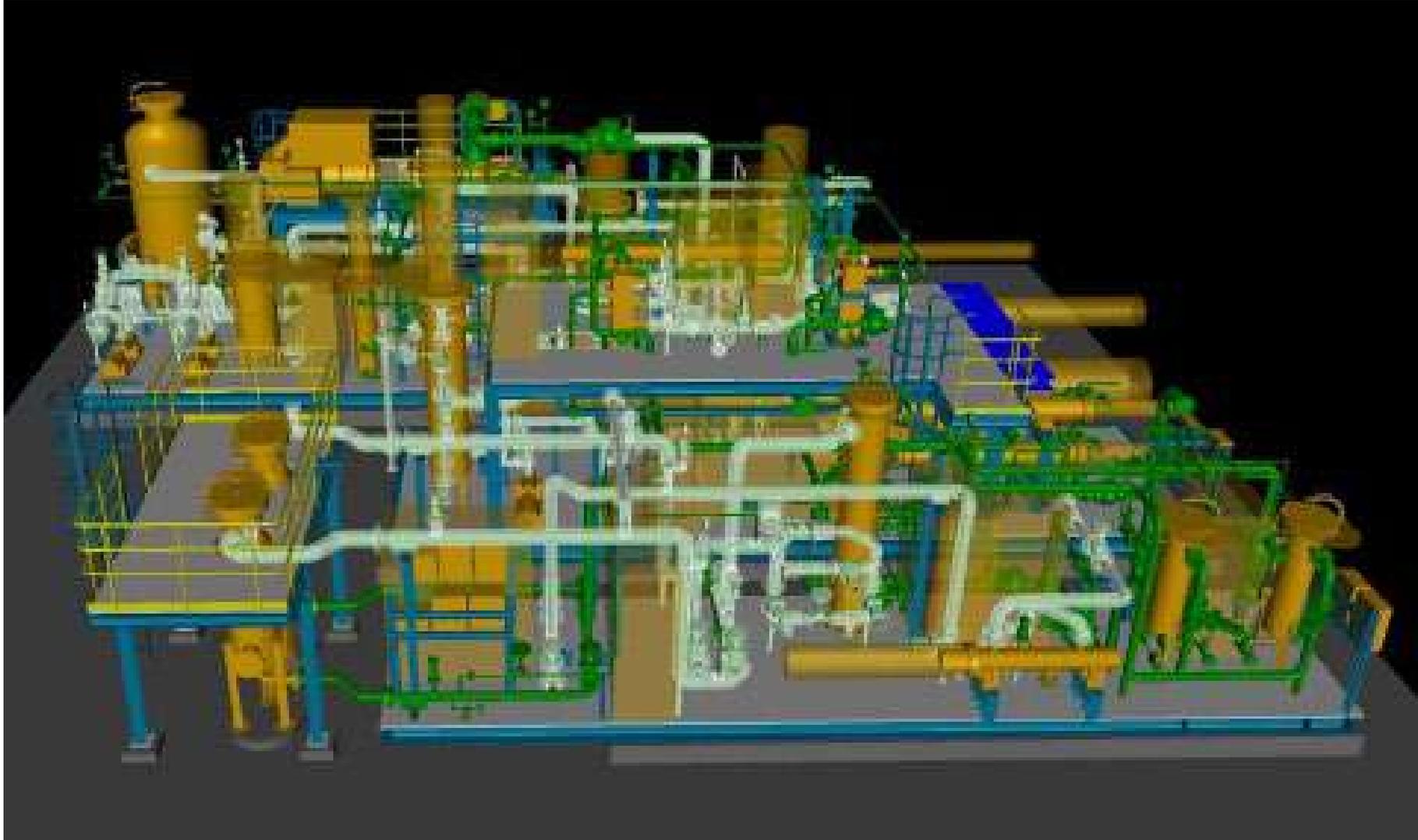
Energy Equipment - Heater Treater:

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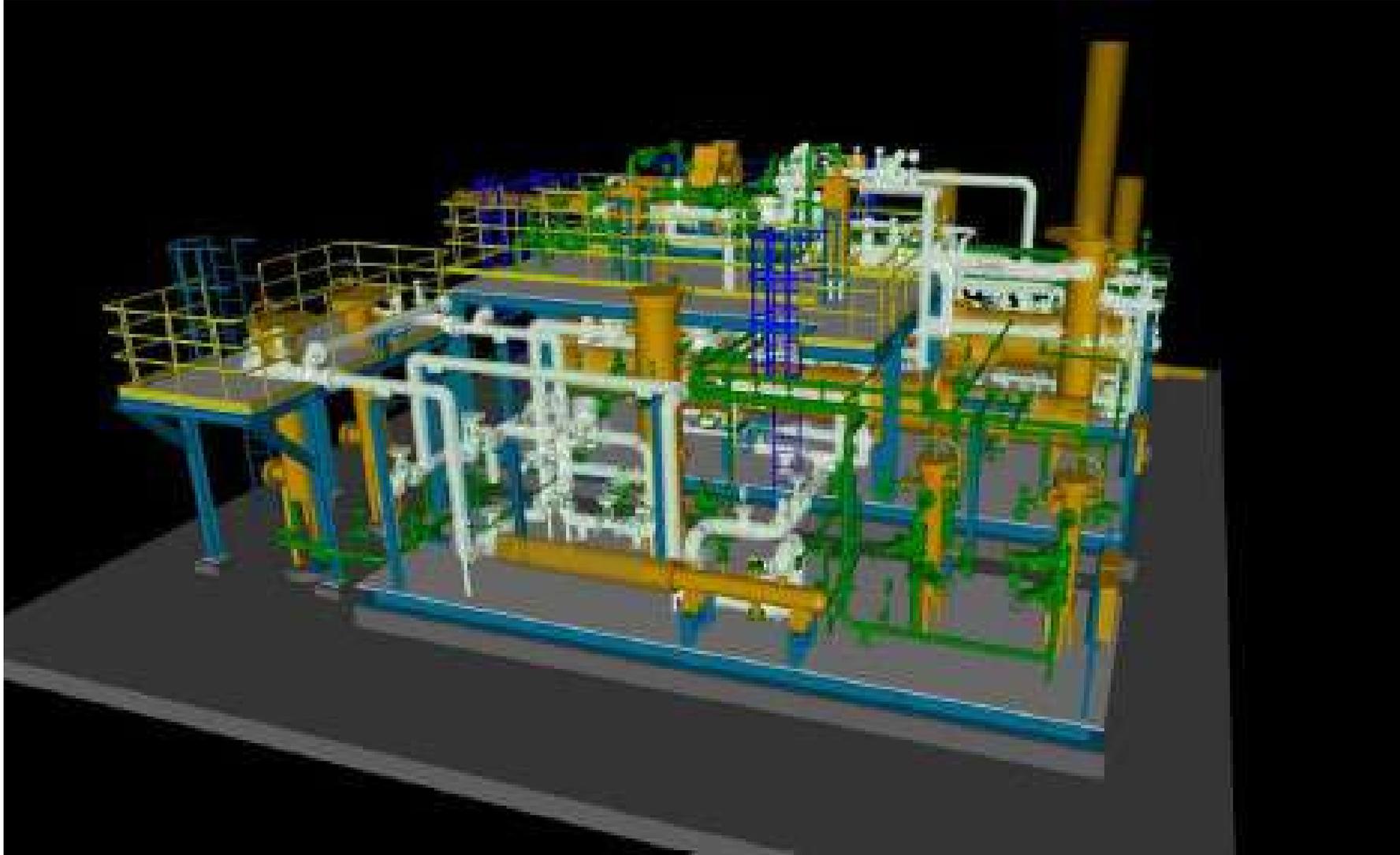
3 D Snapshot Purge Gas Recovery Unit in execution

BLISS
AMERICAS



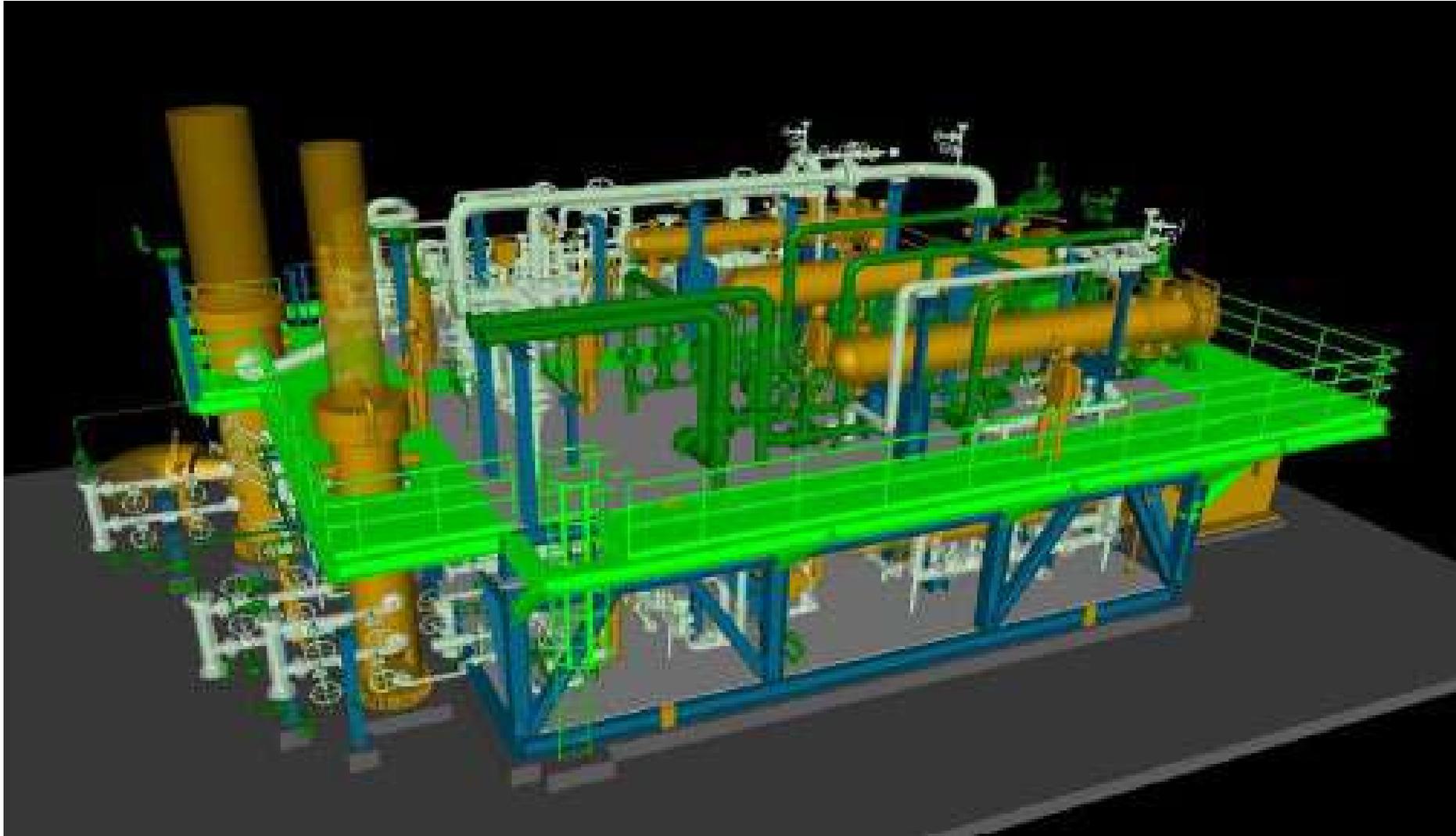
3 D Snapshot Purge Gas Recovery Unit in execution

BLISS
AMERICAS



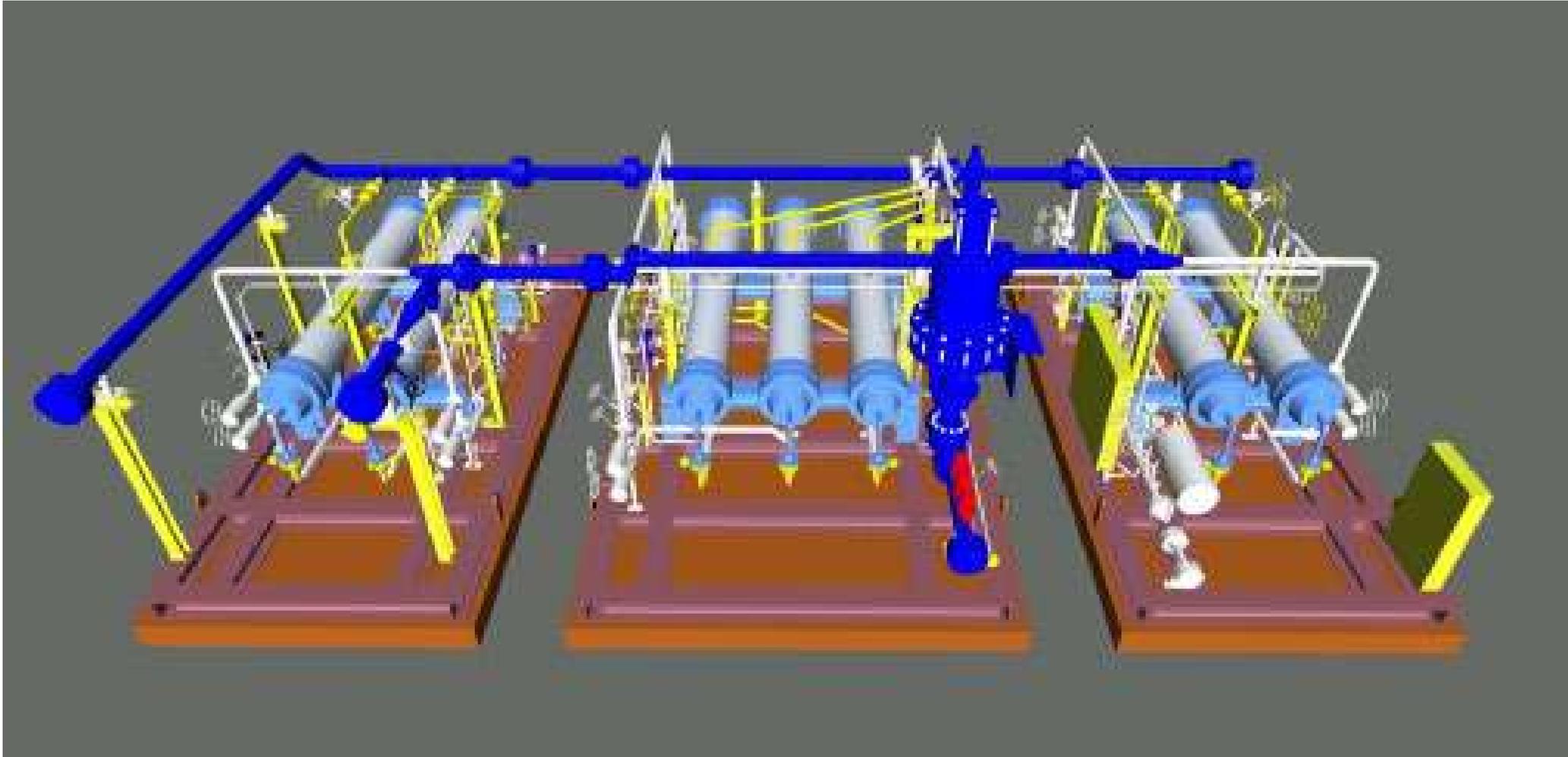
3 D Snapshot HP Hydrogen Recovery Unit in execution

BLISS
AMERICAS



3 D Snapshot HP HRU in execution

BLISS
AMERICAS



Wellhead Control Panel:



Wellhead Control Panel:



Project : Hydrogen Recovery From Syngas For Shell R&D

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Pig Launching & Receiving Station:



Bliss Anand - Modular Assemblies:

Engineered Modules

Chemical Injection Skid

Custody Transfer &
Metering

Transfer Pump

Pig Launchers & Receivers

Process Based Modules

Filter Separation

Indirect Water Bath Heaters

Heater Treater

Surge Relief Systems

De-emulsifiers

Gas Conditioning

Gas Dehydration

Membrane Separation

Turnkey Solutions

Products Loading Terminal

Loading/Unloading Station

Purge Gas Recovery System

Bliss Group - Software:



SOFTWARE
PV Elite
AutoCAD
Solidworks
CFD

IMPLEMENTATION
Pressure Vessel & Heat Exchanger Design
2D & 3D Design & Drafting
Solid Modeling CAD & CAE Software
High end Engineering Software in use

PROVIDERS / LICENSOR
Intergraph CADWorx and Analysis Solutions
Autodesk
Dassault Systemes SolidWorks Corp.
ANSYS



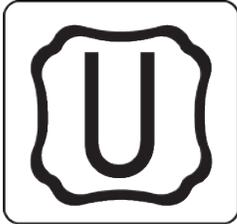
CERTIFICATIONS



Certifications:

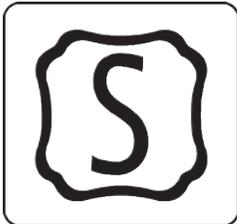


ASME Certifications:



ASME U STAMP

Pressure Vessels Fabrication or weld modifications of unfired pressure vessels require the ASME “U” & National Board Stamp.



ASME S STAMP

Power Boilers (over 15 p.s.i steam, 160 p.s.i. water & temperature exceeding 250 F) shall be stamped ASME (S) & National Board (N.B.).



ASME PP STAMP

Pressure Piping applies to boilers in which steam or other vapor is generated at pressure exceeding 15 psig, and high temperature water boilers intended for operation at pressure exceeding 160 psig and / or temperature exceeding 250 degree F.



EXHIBITS



3D MODEL: HYDROGEN RECOVERY UNIT & PURGE GAS RECOVERY



PROCESS SKID PACKAGE BY BLISS ANAND

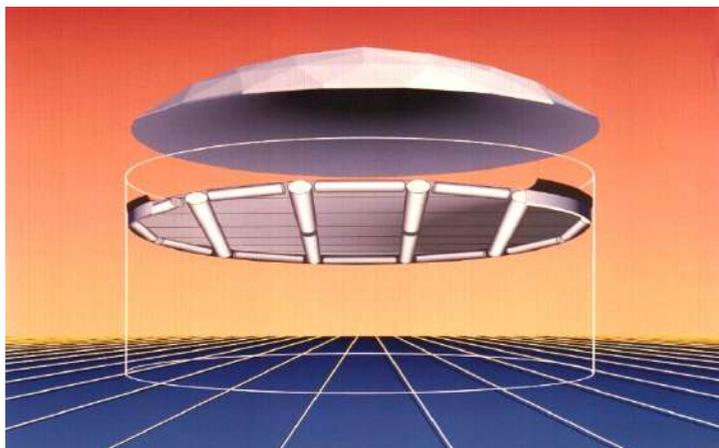
HIGH PRESSURE MEMBRANE PACKAGE FOR HYDROGEN RECOVERY



MEMBRANE PACKAGE FOR PURGE GAS RECOVERY



BLISS : Aluminum Floating Roof & Geodesic Dome in Aluminum



Dome & IFR



AL Floating Roof



AL DOME COVER

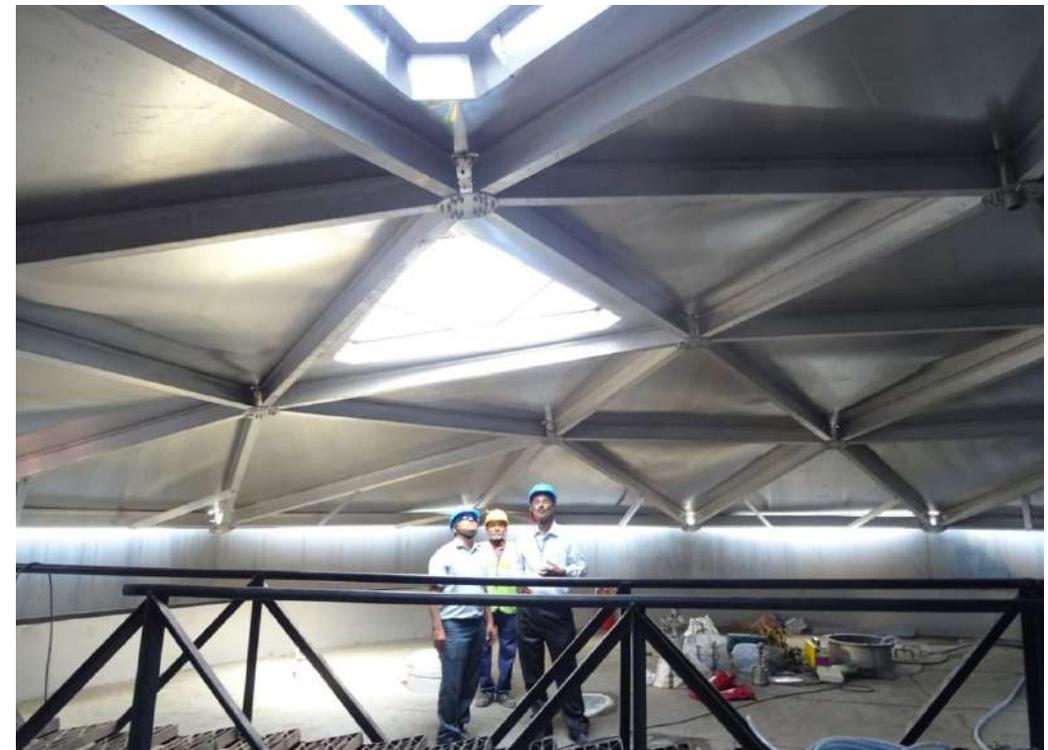


Energy Equipment: Aluminum IFR & Geodesic Dome

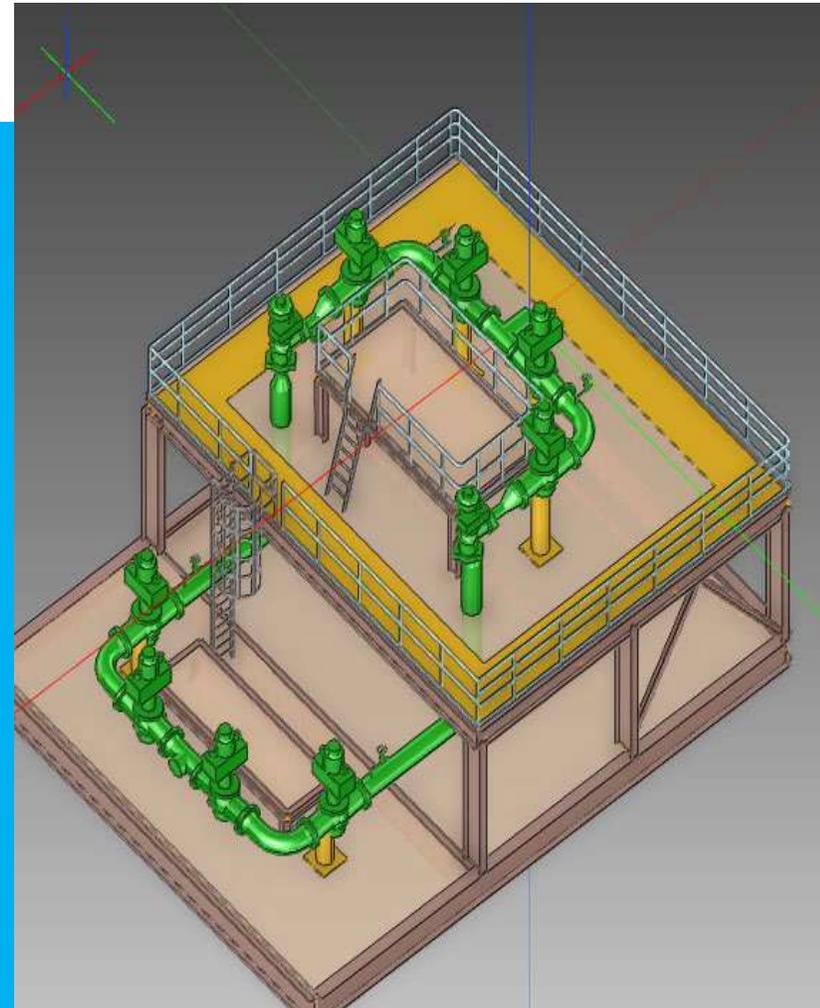
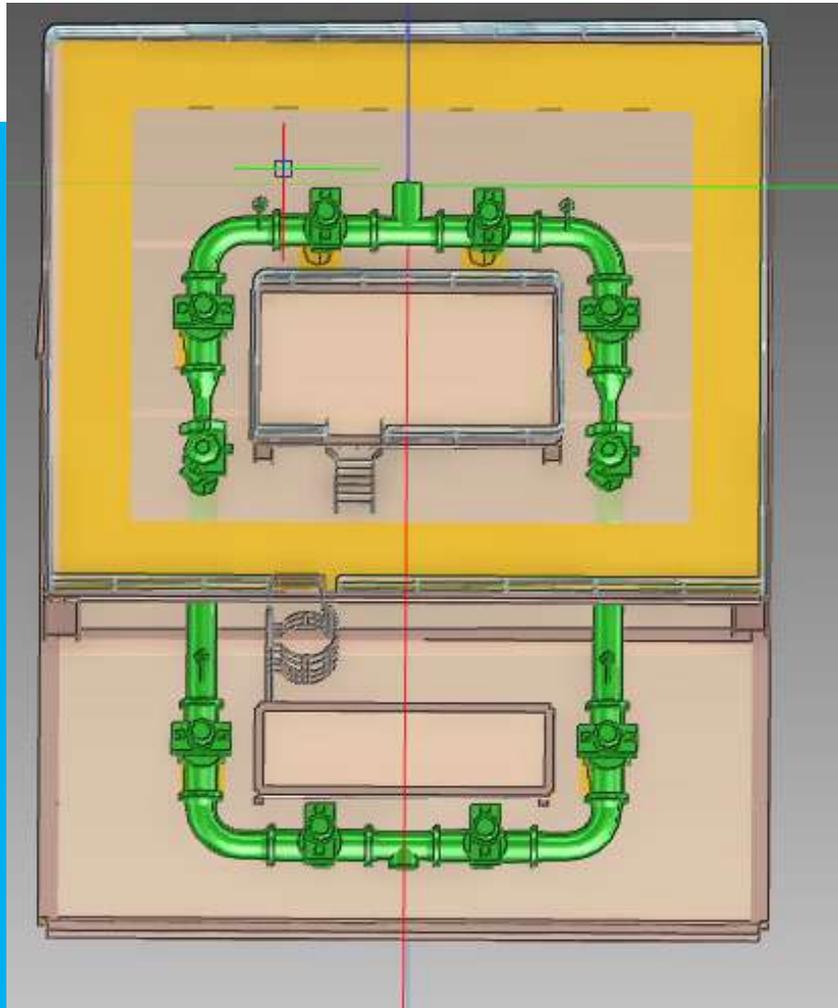
AL Floating Roof



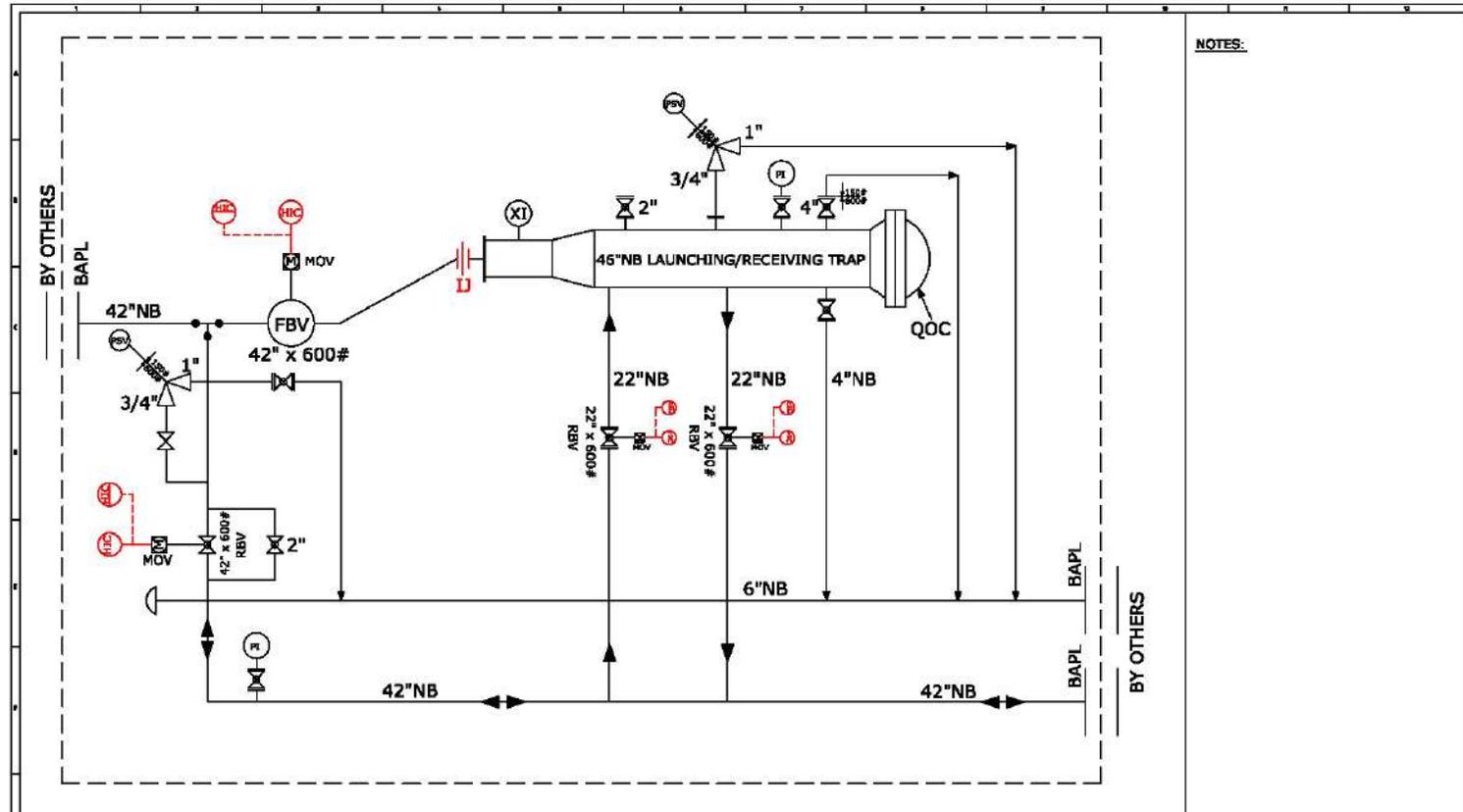
AL DOME



Letdown Skid : With T-Connection & Straight Valve



Exhibits P&I DIAGRAM: PIG LAUNCHING & RECEIVING STATION



NOTES:

LEGENDS		DESIGN CONDITIONS	
	BALL VALVE	DESIGN CODES	: ANSI B31.3 & ASME Section VIII Div.2
	PRESSURE SAFETY VALVE	SERVICE	: CRUDE OIL
	BARRED TEE	DESIGN PRESSURE	: 71.1 Kg/cm ² g
PI	: PRESSURE INDICATOR	DESIGN TEMPERATURE	: 85 Deg. C
PSV	: PRESSURE SAFETY VALVE	DESIGN FACTOR	: 0.72
FBV	: FULL BORE BALL VALVE	CORROSION ALLOWANCE	: 3.0 mm
RBV	: REDUCED BORE BALL VALVE	RATING	: 600#
XI	: PIG SIGNALLER		
QOC	: QUICK OPENING CLOSURE		

00	08/04/2018	ISSUED FOR B D	SD	SK	AKA
REF	DATE	DESCRIPTION	DRAWN BY	CHECKED BY	APPR. BY
BLISS ANAND					
FILENAME:		PROJECT: 42" CRUDE OIL P/L FROM ZUBAIR 2 DEPOT TO P8 DEPOT			
SIGN		CLIENT: STATE COMPANY FOR OIL PROJECTS			
DRN	SD	TITLE:			
CDK	SK	P&I DIAGRAM FOR RECEIVING / LAUNCHING SCRAPER TRAP			
APRD	AKA				
SCALE	ITEM NO.	00-XL-02, 00-XR-01 & 00-XR-02	SHEET NO.	REV	
NTS	DRG. NO.	BA 600P FLD-11033 02	1 OF 1	00	

Exhibits QUALIFIED WELDERS:



 BLISS ANAND PVT LTD <small>ANAND, DIST. BHOPAL, M.P.</small> <small>ANAND, DIST. BHOPAL, M.P.</small>														LIST OF QUALIFIED WELDERS				Doc No. BAPL/ML/WPQ - 2 Rev. No. A Date 22/06/2015 Page Page 1 of 2	
Sl. No.	WELDER NAME	CLOCK NO.	STAMP NO.	WPS #	PQR #	Welding Process	Process Type	Weld Type	Qualified P. No.	Grade	Qualified F No.	Filler / Electrode	Position Qualified	Max. Weld Deposit Qualified	Max. Base Metal Thk. Qualified	CERTIFYING AGENCY			
1	Jacob Joseph	11	W-II	WPS-BA-003	PQR-BA-003	GTAW + SMAW	Manual	Groove	1 to 1	SA 106 Gr-B	5, 4	ER 70 S6, E3018	Flat	1.5 to 9.0 mm	1.5 to 9.0 mm	ABS INDUSTRIAL VERIFICATION (INDIA)/ BAPL			
2	All Akhtar	12	W-AA	WPS-BA-007	PQR-BA-007	GTAW + SMAW	Manual	Groove	1 to 8	SA 312TP316L TO SA 106 Gr-B	5, 5	ER 309L, E309L 16	Flat	1.5 to 9.0 mm	1.5 to 9.0 mm	DET NORSE VERITAS / BAPL			
3	All Akhtar	12	W-AA	WPS-BA-009	PQR-BA-009	GTAW + SMAW	Manual	Groove	1 to 1	SA 333 Gr-B TO SA 333 Gr-B	5, 4	ER 70 S6, E3018-G	Flat	1.5 to 9.0 mm	1.5 to 9.0 mm	ABS INDUSTRIAL VERIFICATION (INDIA)/ BAPL			
4	All Akhtar	12	W-AA	WPS-BA-102	PQR-BA-102	GTAW	Manual	Groove	45 to 45	S8423 TO S8423 (UNSN08875)	43	ER NiCrMo-3	Flat	1.5 to 9.0 mm	1.5 to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
5	Shiv Ratan	13	W-SR	WPS-BA-003	PQR-BA-003	GTAW + SMAW	Manual	Groove	1 to 1	SA 106 Gr-B	5, 4	ER 70 S6, E3018	Flat	9.0 mm	1.5 to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
6	Shiv Ratan	13	W-SR	WPS-BA-007	PQR-BA-007	GTAW + SMAW	Manual	Groove	1 to 8	SA 312TP316L TO SA 106 Gr-B	5, 5	ER 309L, E309L 16	Flat	9.0 mm	1.5 to 9.0 mm	DET NORSE VERITAS / BAPL			
7	Shiv Ratan	13	W-SR	WPS-BA-101	PQR-BA-101	GTAW + SMAW	Manual	Groove	8 to 8	SA 312TP316L TO SA 312TP316L/ SA 182E316L	5, 5	ER 316L, E316L 16	Flat	9.0 mm	1.5 to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
8	Shiv Ratan	13	W-SR	WPS-BA-102	PQR-BA-102	GTAW	Manual	Groove	45 to 45	S8423 TO S8423 (UNSN08875)	43	ER NiCrMo-3	Flat	9.0 mm	1.5 to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
9	Shiv Ratan	13	W-SR	WPS-BA-105	PQR-BA-105	GTAW	Manual	Groove	43 to 43	S8444 (UNS N06625) TO S8 444	43	ER NiCrMo-3	Flat	9.0 mm	1.5 to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
10	Shiv Ratan	13	W-SR	WPS-BA-106	PQR-BA-106	GTAW	Manual	Groove	10H to 10H	SA 790 TO SA 790 (UNS S32750)	6	ER 2594	Flat	9.0 mm	1.5 to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
11	Shiv Ratan	13	W-SR	WPS-BA-111	PQR-BA-111	GTAW	Manual	Groove	8 to 8	SA 312TP UNS S31254	43	ER NiCrMo-3	Flat	9.0 mm	1.5 to 9.0 mm	INDIAN REGISTER OF SHIPPING/ BAPL			
12	Shiv Ratan	13	W-SR	WPS-BA-105	PQR-BA-105	GTAW	Manual	Groove	8 to 8	SA 312TP UNS S31254	43	ER NiCrMo-3	Flat	9.0 mm	1.5 mm to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
13	Mahfuz Alam	14	W-MA	WPS-BA-102	PQR-BA-102	GTAW	Manual	Groove	45 to 45	S8423 TO S8423 (UNSN08875)	43	ER NiCrMo-3	Flat	9.0 mm	1.5 mm to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
14	Mahfuz Alam	14	W-MA	WPS-BA-103	PQR-BA-103	GTAW	Manual	Groove	8 to 8	SA 312TP UNS S31254	43	ER NiCrMo-3	Flat	9.0 mm	1.5 mm to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
15	Mahfuz Alam	14	W-MA	WPS-BA-107	PQR-BA-107	GTAW	Manual	Groove	42 to 42	S8564 TO S8564 (UNSN04400)	42	ER NiCu-7	Flat	9.0 mm	1.5 mm to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
16	Mumtaz Alam	15	W-MU	BAPL/WPS-001	BAPL/PQR-001	GTAW	Manual	Hard Facing Overlay	8	CFBM	72	ERCoCr-A	Flat	No Limit	No Limit	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
17	Mumtaz Alam	15	W-MU	BAPL/WPS-002	BAPL/PQR-002	GTAW	Manual	Groove	1 to 1	WCB	4	E 7018	Flat	24 mm	24 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
								Filet	1 to 1	WCB	4	E 7018	Flat	No limit	No Limit	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
18	Mumtaz Alam	15	W-MU	BAPL/WPS-003	BAPL/PQR-003	GTAW	Manual	Groove	1 to 1	WCB	6	ER 706-2	Flat	24 mm	24 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
								Filet	1 to 1	WCB	6	ER 706-2	Flat	No Limit	No Limit	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
19	Mumtaz Alam	15	W-MU	BAPL/WPS-004	BAPL/PQR-004	GTAW	Manual	Groove	4 to 4	WCB	4	E 801R B2	Flat	24 mm	24 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
								Filet	4 to 4	WCB	4	E 801R B2	Flat	No Limit	No Limit	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
20	Mumtaz Alam	15	W-MU	BAPL/WPS-005	BAPL/PQR-005	GTAW	Manual	Groove	4 to 4	WCB	6	ER80S-82	Flat	24 mm	24 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			
								Filet	4 to 4	WCB	6	ER80S-82	Flat	No Limit	No Limit	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL			

(Signature)

(Signature)

Exhibits Welding Process:

 Master List Of WPS & PQR											Doc No.	BAPL/ML/WPS	
											Rev. No.	C	
											Date	22/04/2016	
											Page	Page 1 of 1	
SRV													
Sl. No.	WPS #	PQR #	Qualification Date	Welding Process	Process Type	Weld Type	Qualified P. No.	Grade	Qualified F No.	Filler / Electrode	Position Qualified Plate	Max. Weld Deposit Qualified	Max. Base Metal Thk. Qualified
1	BAPL/WPS-001	BAPL/PQR-001	29-Nov-12	GTAW	Manual	Hard Facing Overlay	8	CF8M	72	ERCoCr-A	Flat	No Limit	No Limit
2	BAPL/WPS-002	BAPL/PQR-002	29-Nov-12	SMAW	Manual	Groove	1 to 1	WCB	4	E 7018	Flat	24 mm	24 mm
						Fillet	1 to 1	WCB	4	E 7018	Flat	No Limit	No Limit
3	BAPL/WPS-003	BAPL/PQR-003	29-Nov-12	GTAW	Manual	Groove	1 to 1	WCB	6	ER 705-2	Flat	24 mm	24 mm
						Fillet	1 to 1	WCB	6	ER 705-2	Flat	No Limit	No Limit
4	BAPL/WPS-004	BAPL/PQR-004	29-Nov-12	GTAW	Manual	Groove	4 to 4	WC6	4	E 8018 B2	Flat	24 mm	24 mm
						Fillet	4 to 4	WC6	4	E 8018 B2	Flat	No Limit	No Limit
5	BAPL/WPS-005	BAPL/PQR-005	29-Nov-12	GTAW	Manual	Groove	4 to 4	WC6	6	ER805-B2	Flat	24 mm	24 mm
						Fillet	4 to 4	WC6	6	ER805-B2	Flat	No Limit	No Limit
6	BAPL/WPS-006	BAPL/PQR-006	29-Nov-12	GTAW	Manual	Groove	8 to 8	CF8M	5	E 316	Flat	24 mm	24 mm
						Fillet	8 to 8	CF8M	5	E316	Flat	No Limit	No Limit
7	BAPL/WPS-007	BAPL/PQR-007	29-Nov-12	GTAW	Manual	Groove	8 to 8	CF8M	5	ER-316	Flat	24 mm	24 mm
						Fillet	8 to 8	CF8M	5	ER-316	Flat	No Limit	No Limit
8	BAPL/WPS-008	BAPL/PQR-008	20-Dec-2014	GTAW	Manual	Groove	45 to 45	Alloy 20	6	ER320LR	Flat	24 mm	24 mm
LG/ MLG													
9	WPS-BA-003	PQR-BA-003	22.03.2004	GTAW + SMAW	Manual	Groove	1 to 1	SA 106 Gr.B	6, 4	ER 70 SG, E7018	Flat	9.1 mm	9.1 mm
10	WPS-BA-007	PQR-BA-007	15.05.2007	GTAW + SMAW	Manual	Groove	1 to 8	SA 312TP316L TO SA106 GrB	6, 5	ER 309L, E309L-16	Flat	9.0 mm	9.0 mm
11	WPS-BA-009	PQR-BA-009	05.08.2008	GTAW + SMAW	Manual	Groove	1 to 1	SA333 Gr6 TO SA333 Gr6	6, 4	ER 70 SG, E7018-G	Flat	9.0 mm	9.0 mm
12	WPS-BA-101	PQR-BA-101	09.08.2010	GTAW + SMAW	Manual	Groove	8 to 8	SA 312TP316L TO SA 312TP316L/ SA182F316L	6, 5	ER 316L, E316L	Flat	9.0 mm	9.0 mm
13	WPS-BA-102	PQR-BA-102	25.09.2010	GTAW	Manual	Groove	45 to 45	SB423 TO SB423 (UNSN08825)	45	ER NiCrMo-3	Flat	9.0 mm	9.0 mm
14	WPS-BA-103												
15	WPS-BA-105	PQR-BA-105	06.06.2010	GTAW	Manual	Groove	43 to 43	SB444 (UNS N06625) TO SB 444	43	ER NiCrMo-3	Flat	11.0 mm	11.0 mm
16	WPS-BA-106	PQR-BA-106	09.08.2010	GTAW	Manual	Groove	10H to 10H	SA790 TO SA790 (UNS S32750)	6	ER 2594	Flat	1.5 mm to 9.0 mm	9.0 mm
17	WPS-BA-107	PQR-BA-107	22.11.2011	GTAW	Manual	Groove	42 to 42	SB456 TO SB456 (UNSN04400)	42	ER NiCu-7	Flat	9.0 mm	9.0 mm
18	WPS-BA-111	PQR-BA-111	09.08.2010	GTAW	Manual	Groove	8 to 8	SA 312TP UNS S31254	43	ER NiCrMo-3	Flat	1.5 mm to 9.0 mm	9.0 mm



Head - Quality Assurance

Exhibits QUALIFIED WELDERS:



 BLISS ANAND PVT LTD <small>Commission of District</small> <small>Industrial Development</small> <small>Phase III of Sector 29, Gurgaon, Haryana</small>													LIST OF QUALIFIED WELDERS				Doc No.	BAPL/ML/WPQ - 2		
													Rev. No.	A						
													Date	22/06/2015						
													Page	Page 1 of 2						
Sl. No.	WELDER NAME	CLOCK NO.	STAMP NO.	WPS #	PQR #	Welding Process	Process Type	Weld Type	Qualified P. No.	Grade	Qualified F No.	Filler / Electrode	Position Qualified Plate	Max. Weld Deposit Qualified	Max. Base Metal Thk. Qualified	CERTIFYING AGENCY				
21	Mumtaz Alam	15	W-MU	BAPL/WPS-005	BAPL/PQR-006	GTAW	Manual	Groove	8 to 8	CF8M	5	E 316	Flat	24 mm	24 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL				
								Filet	8 to 8	CF8M	5	E316	Flat	No Limit	No Limit	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL				
22	Mumtaz Alam	15	W-MU	BAPL/WPS-007	BAPL/PQR-007	GTAW	Manual	Groove	8 to 8	CF8M	5	ER-316	Flat	24 mm	24 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL				
								Filet	8 to 8	CF8M	5	ER-316	Flat	No Limit	No Limit	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL				
23	Mumtaz Alam	15	W-MU	BAPL/WPS-008	BAPL/PQR-008	GTAW	Manual	Groove	45 to 45	Alloy 20	6	ER320LR	Flat	24 mm	24 mm	ABS INDUSTRIAL VERIFICATION (INDIA)/ BAPL				
24	Satish Chand Meena	16	W-SM	WPS-BA-101	PQR-BA-101	GTAW + SMAW	Manual	Groove	8 to 8	SA 312TP316L TO SA 312TP316L/ SA182E316L	5, 5	ER 316L, E316L	Flat	1.5 to 9.0 mm	1.5 to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL				
25	Satish Chand Meena	16	W-SM	WPS-BA-111	PQR-BA-111	GTAW	Manual	Groove	8 to 8	SA 312TP UNS S31254	43	ER NiCrMo-3	Flat	1.5 to 9.0 mm	1.5 to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL				
26	Satish Chand Meena	16	W-SM	WPS-BA-105	PQR-BA-105	GTAW	Manual	Groove	43 to 43	SB 444 TO SB 444 (UNS N06625)	43	ER NiCrMo-3	Flat	11.0 mm	1.5 to 11.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL				
27	Jetha Ram	18	W-JR	WPS-BA-101	PQR-BA-101	GTAW + SMAW	Manual	Groove	8 to 8	SA 312TP316L TO SA 312TP316L/ SA182E316L	5, 5	ER 316L, E316L	Flat	1.5 to 9.0 mm	1.5 to 9.0 mm	ABS INDUSTRIAL VERIFICATION (INDIA)/ BAPL				
28	Jetha Ram	19	W-JR	WPS-BA-111	PQR-BA-111	GTAW	Manual	Groove	8 to 8	SA 312TP UNS S31254	43	ER NiCrMo-3	Flat	1.5 to 9.0 mm	1.5 to 9.0 mm	TUV INDUSTRIAL INSPECTION SERVICES (INDIA)/ BAPL				


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Exhibits MASTER LIST OF WPS & PQR:



 Master List Of WPS & PQR											Doc No.	BAPL/ML/WPS	
											Rev. No.	C	
											Date	22/06/2015	
											Page	Page 1 of 1	
SRV													
Sl. No.	WPS #	PQR #	Qualification Date	Welding Process	Process Type	Weld Type	Qualified P. No.	Grade	Qualified F No.	Filler / Electrode	Position Qualified Plate	Max. Weld Deposit Qualified	Max. Base Metal Thk. Qualified
1	BAPL/WPS-001	BAPL/PQR-001	29-Nov-12	GTAW	Manual	Hard Facing Overlay	8	CF8M	72	ERCoCr-A	Flat	No Limit	No Limit
2	BAPL/WPS-002	BAPL/PQR-002	29-Nov-12	GTAW	Manual	Groove Fillet	1 to 1 1 to 1	WC6 WC6	4 4	E 7018 E 7018	Flat	24 mm No Limit	24 mm No Limit
3	BAPL/WPS-003	BAPL/PQR-003	29-Nov-12	GTAW	Manual	Groove Fillet	1 to 1 1 to 1	WC6 WC6	6 6	ER 705-2 ER 705-2	Flat	24 mm No Limit	24 mm No Limit
4	BAPL/WPS-004	BAPL/PQR-004	29-Nov-12	GTAW	Manual	Groove Fillet	4 to 4 4 to 4	WC6 WC6	4 4	E 8018 B2 E 8018 B2	Flat	24 mm No Limit	24 mm No Limit
5	BAPL/WPS-005	BAPL/PQR-005	29-Nov-12	GTAW	Manual	Groove Fillet	4 to 4 4 to 4	WC6 WC6	6 6	ER805-B2 ER805-B2	Flat	24 mm No Limit	24 mm No Limit
6	BAPL/WPS-006	BAPL/PQR-006	29-Nov-12	GTAW	Manual	Groove Fillet	8 to 8 8 to 8	CF8M CF8M	5 5	E 316 E 316	Flat	24 mm No Limit	24 mm No Limit
7	BAPL/WPS-007	BAPL/PQR-007	29-Nov-12	GTAW	Manual	Groove Fillet	8 to 8 8 to 8	CF8M CF8M	5 5	ER-316 ER-316	Flat	24 mm No Limit	24 mm No Limit
8	BAPL/WPS-008	BAPL/PQR-008	20-Dec-2014	GTAW	Manual	Groove	45 to 45	Alloy 20	6	ER320LR	Flat	24 mm	24 mm
LG/ MLG													
9	WPS-BA-003	PQR-BA-003	22.03.2004	GTAW + SMAW	Manual	Groove	1 to 1	SA 106 Gr.B	6, 4	ER 70 S6, E7018	Flat	9.1 mm	9.1 mm
10	WPS-BA-007	PQR-BA-007	15.05.2007	GTAW + SMAW	Manual	Groove	1 to 8	SA 312TP316L TO SA106 GrB	6, 5	ER 309L, E309L-15	Flat	9.0 mm	9.0 mm
11	WPS-BA-009	PQR-BA-009	05.08.2008	GTAW + SMAW	Manual	Groove	1 to 1	SA333 Gr6 TO SA333 Gr6	6, 4	ER 70 S6, E7018-G	Flat	9.0 mm	9.0 mm
12	WPS-BA-101	PQR-BA-101	09.08.2010	GTAW + SMAW	Manual	Groove	8 to 8	SA 312TP316L TO SA 312TP316L/ SA182E316L	6, 5	ER 316L, E316L	Flat	9.0 mm	9.0 mm
13	WPS-BA-102	PQR-BA-102	25.09.2010	GTAW	Manual	Groove	45 to 45	SB423 TO SB423 (UNSN08825)	45	ER NiCrMo-3	Flat	9.0 mm	9.0 mm
14	WPS-BA-103												
15	WPS-BA-105	PQR-BA-105	06.05.2010	GTAW	Manual	Groove	43 to 43	SB444 (UNSN05625) TO SB 444	43	ER NiCrMo-3	Flat	11.0 mm	11.0 mm
16	WPS-BA-106	PQR-BA-106	09.08.2010	GTAW	Manual	Groove	10H to 10H	SA790 TO SA790 (UNS S32750)	6	ER 2594	Flat	1.5 mm to 9.0 mm	9.0 mm
17	WPS-BA-107	PQR-BA-107	22.11.2011	GTAW	Manual	Groove	42 to 42	SB456 TO SB456 (UNSN04400)	42	ER NiCu-7	Flat	9.0 mm	9.0 mm
18	WPS-BA-111	PQR-BA-111	09.08.2010	GTAW	Manual	Groove	8 to 8	SA 312TP UNS S31254	43	ER NiCrMo-3	Flat	1.5 mm to 9.0 mm	9.0 mm


 Rajesh Chandel
 Head - Quality Assurance



Global References & Approvals:



Thank You!

Any Questions?

Website: www.blissamericas.com