



Attock

**TENDER PACKAGE
FOR
SUPPLY OF FIRE FIGHTING
EQUIPMENT AT APL LPG
PLANT MORGAH**

ATTOCK PETROLEUM LIMITED

7th Floor Attock House, Rawalpindi, Pakistan. Ph- 051-5127250-4

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MATERIAL REQUISITION FOR FIRE FIGHTING EQUIPMENTS

CLIENT ATTOCK PETROLEUM LIMITED

PROJECT DEVELOPMENT OF APL LPG PLANT AT MORGAH RAWALPINDI

ITEM FIRE FIGHTING EQUIPMENTS

ITEM	MATERIAL DESIGNATION	QTY.	UNIT	RATE / UNIT SUPPLY		AMOUNT	NOTES / REMARKS
				FOR SITE BASIS			
				A	B		
	THE SUPPLIED FIRE FIGHTING EQUIPMENT SHALL COMPLY WITH THE FOLLOWING DOCUMENTS ATTACHED. ANY DEVIATION SHALL BE CLEARLY HIGHLIGHTED & JUSTIFIED BY THE SUPPLIER. OWNER'S DECISION REGARDING THE DEVIATION SOUGHT BY BIDDER SHALL BE FINAL.						INSPECTION OF SUPPLIED FIRE FIGHTING EQUIPMENT, REVIEW OF CERTIFICATES , DIMENSIONAL, QUALITY, QUANTITY AND PACKING LIST CHECK SHALL BE WITNESSED BY THE 3RD PARTY INSPECTORS FROM A REPUTED INSPECTION COMPANY HIRED BY THE OWNER (IF REQUIRED), SUPPLIER SHALL SUBMIT DETAILED MANUFACTURING SCHEDULE, QUALITY CONTROL PLAN AND INSPECTION AND TEST PROCEDURES ALONGWITH THE BID. FINAL ACCEPTANCE OF FIRE FIGHTING EQUIPMENTS WILL BE SUBJECTED TO APPROVAL FROM THE 3RD PARTY INSPECTION COMPANY AND THE OWNER REPRESENTATIVE (IF REQUIRED). QUOTED EQUIPMENTS SHALL BE LOCAL OR IMPORTED VENDOR SHALL BE RESPONSIBLE TO CONFIRM THE REQUIRED FLOW RATES AS MENTIONED IN DATA SHEET.& SHALL BE RESPONSIBLE TO SUPPLY DIMENSIONAL DRAWINGS.
	DATA SHEETS						
	DSM-001						
	DSM-002						
	DSM-004						
	DSM-005						
	DSM-006						
1.0	FIRE HYDRANT						FLANGES SHALL BE IN ACCORDANCE WITH ASME B 16.5 OTHER WISE THE MATING FLANGES SHALL BE PROVIDED BY THE VENDOR
1.1	FIRE HYDRANT AS PER NFPA STANDARD AS PER ATTACHED DATA SHEET DSM-001 & DRAWING NO 3066-PIP-SD-001.	8	NOS.				
2.0	FIRE MONITOR						
2.1	FIRE MONITOR HYDRANT AS PER NFPA STANDARD AS PER ATTACHED DATA SHEET DSM-002 & DRAWING NO 3066-PIP-SD-001.	3	NOS.				
3.0	FIRE HYDRANT WITH PUMPER CONNECTION						
3.1	FIRE HYDRANT AS PER NFPA STANDARD AS PER ATTACHED DATA SHEET DSM-004 & DRAWING NO 3066-PIP-SD-001.	1	NO.				
4.0	HSE EQUIPMENTS						
	FOLLOWING HSE EQUIPMENTS AS PER NFPA STANDARD, UL & FM APPROVED WHERE MENTIONED AS PER ATTACHED DATA SHEETS DSM-005 .						
1	FIRE HOSE CABINET	8	NOS.				
2	HOSE PIPES (30M)	5	NOS.				
3	HOSE PIPES (15M)	10	NOS.				
4	JET SPRAY NOZZLE	5	NOS.				
5	FIRE EXTINGUISHER DCP 6KG	20	NOS.				
6	MOBILE TROLLEY DCP 50KG	2	NO.				
7(i)	FIRE EXTINGUISHER CO2 5KG	5	NOS.				
7(ii)	FIRE EXTINGUISHER CO2 30KG	2	NO.				
8	FIRST AID BOX	2	NOS.				
8(l)	SAND BUCKET STANDS	4	NOS.				
9	SAFETY HELMETS	30	NOS.				White=8 Nos, Red=4 Nos, Yellow= 14 Nos, Blue= 4 Nos.

MATERIAL REQUISITION FOR FIRE FIGHTING EQUIPMENTS

CLIENT ATTOCK PETROLEUM LIMITED

PROJECT DEVELOPMENT OF APL LPG PLANT AT MORGAH RAWALPINDI

ITEM FIRE FIGHTING EQUIPMENTS

ITEM	MATERIAL DESIGNATION	QTY.	UNIT	RATE / UNIT SUPPLY		AMOUNT	NOTES / REMARKS
				FOR SITE BASIS			
		A		B	C=AXB		
10	STRETCHER	1	NO.				
10(i)	WIND SOCK WITH FRAME	2	NOS.				
11	FIRE BLANKET	3	NOS.				
11(i)	MEGA PHONE	1	NO.				
12	Supply of foam trolley of 120 liter capacity complete with inductor, hose pipe & nozzle with first fill of foam (AFFF).	1	NO.				
13	MAIN ELECTRIC HOOTER	1	NO.				
14	BARRICATION TAPE ROLL (500M)	10	NOS.				
15	EXPLOSIVE METER	1	NO.				
16	EMERGENCY SHOWER		NO.				
17	EMERGENCY LIGHT	2	NOS.				
18	SAFETY CONE 700mm	10	NOS.				
19	FIRE SUIT	2	NOS.				
20	FULL FACE MASK	1	NO.				
21	HALF FACE MASK	1	NO.				
22	BREATHING APPARATUS	2	NO.				
23	FIREFIGHTING RUBBER BOOTS	2	NOS.				
24	FIREFIGHTING GLOVES BASIC	1	NO.				
25	FIREFIGHTING GLOVES STRUCTURAL	1	NO.				
26	FIREFIGHTING HELMET	2	NOS.				
27	TP BRANCHES / NOZZLES	3	NOS.				
28	DEVIDING BREACHING	2	NOS.				
29	WATER CURTAINS	2	NOS.				
29 (i)	RED FLAG FOR VAPOUR CLOUD MARKING	6	NOS.				
30	CRYOGENIC SUIT & HAND GLOVES	5	NOS.				
5.0	<u>SAFETY SIGNS</u>						


MATERIAL REQUISITION FOR FIRE FIGHTING EQUIPMENTS


CLIENT ATTOCK PETROLEUM LIMITED


PROJECT DEVELOPMENT OF APL LPG PLANT AT MORGAH RAWALPINDI


ITEM FIRE FIGHTING EQUIPMENTS


ITEM	MATERIAL DESIGNATION	QTY.	UNIT	RATE / UNIT SUPPLY	AMOUNT	NOTES / REMARKS
				FOR SITE BASIS		
		A		B	C=AXB	
	FOLLOWING SAFETY SIGNS AS PER ATTACHED DATA SHEET DSM-018.					
5.1	Type-1 (24"X18")	2	NOS.			
5.2	Type-2 (24"X36")	25	NOS.			
5.3	Type-3 (72"X48")	6	NOS.			
TOTAL						
GST @ 18%						
TOTAL INCLUDING TAX						


Client		Data Sheet		
 ATTOCK PETROLEUM LIMITED		DATA SHEET FOR FIRE HYDRANT		
		Document No.	Revision	DATE
		DSM-001	0	16-08-2023
1	GENERAL			
2	Location	MORGAH LPG PLANT		
3	Quantity	as per BOQ		
4	Tag Nos.	-		
5	HYDRANT			
6	Material	API 5L Gr.B Sch. Std. / ASTM A-106 Grade B Sch. Std.		
7	Type	Pillar Type (vertical)		
8	Ends	Raised face flange as per ANSI B16.5		
9	Rating	Class 150 #		
10	Body Size	6" N.D. Stand Pipe (Note – 2)		
11	Inlet Flange	6" ANSI 150 RF		
12	Outlet Nozzles	2 Nos. x 2½", bronze instantaneous hose BS 336 coupling c/w PVC blank cap and steel galvanized chain. Each Nozzle to have isolation Ball valve.		
13	Capacity	250 USgpm per Nozzle		
14	Color	Red		
15	HYDRANT BALL VALVE			
16	Body	Brass		
17	Type	Ball (Full Bore)		
18	Location	With Nozzle		
19	Ends	Internal Threaded		
20	Internals	SS		
21	Size	2½" Dia 150 Class		
22	Make	KITZ or equivalent		
23	WORKING PRESSURE			
24	Normal	100 - 160 psi(g)		
25	Minimum	70 psi(g)		
26	Hydrostatic Test Pressure	246 psi(g)		
27				
28	OPTIONS			
29	Painted Finish	External two coats of primer plus two coats of red alkyd enamel RAL 3000 finish, total dry film thickness 125 microns and internal lined with corrosion resistant paint.		
30	Approval	Underwriter laboratories, Lloyds Register or other equivalent international agencies approved by the owner.		
31				
32				
33	Notes:			
34	1. Design & materials should comply with NFPA standard			
35	2. Mounting flange for hydrant will be available at a height of 450 mm (17.7") above ground level. Height of stand pipe shall be such that the outlet nozzles are at a			
36	height of 400 mm from bottom flange of hydrant.			
37				
38				
39				


		Data Sheet		
		DATA SHEET FOR FIRE MONITOR		
		Document No.	Revision	DATE
Client		DSM-001	A	16-08-2023
 ATTOCK PETROLEUM LIMITED	Prepared By	Checked By	Approved By	SHEET
	WA	IN	SAA	1 of 1
FIRE MONITOR				
1.0	GENERAL			
1.1	Location	MORGAH LPG PLANT		
1.2	Quantity	as per BOQ		
1.3	Tag Nos.			
2.0	MONITOR			
2.1	Model / Make	VTA		
2.2	Pick up tube length	N/A		
2.3	Pick up tube size with connection	N/A		
2.4	Material	Carbon Steel (Note-2)		
2.5	Vertical movement	90° upward direction, -45° downward direction		
2.6	Horizontal rotation	360°		
2.7	Ends	Raised face flange as per ANSI B16.5		
2.8	Rating	Class 150 #		
2.9	Inlet	3 " Vendor to Specify		
2.10	Flowrate	upto 750 USgpm		
3.0	WORKING PRESSURE			
3.1	Normal	100 - 140 psi(g)		
3.2	Minimum	70 psi(g)		
3.3	Hydrostatic Test Pressure	246 psi(g)		
3.4	Water throw From Monitor @ 72 psi(g)	Min. 150 ft (under still air) NOTE-3		
3.5	Capacity	500 Usgpm NOTE-3		
4.0	OPTIONS			
4.1	Painted Finish	One coat of hi-build epoxy zinc rich primer of 75 microns, two coats of ultra-build epoxy liner of 125 microns each and one coat of polyurethane finish of 50 microns, giving a total dft of 375 microns and internal lined with corrosion resistant point.		
4.2	Approval	Underwriter laboratories, Lloyds Register or other equivalent international agencies approved by the Owner.		
Notes:				
1. All design & materials requirement should comply with NFPA standard				
2. "VTC" stand for vendor to confirm.				
3. "VTA" stand for vendor to advise.				


Client		Data Sheet		
 ATTOCK PETROLEUM LIMITED		DATA SHEET FOR FIRE HYDRANT WITH PUMPER CONNECTION		
		Document No.	Revision	DATE
		DSM-004	0	16-08-2023
1	GENERAL			
2	Location	MORGAH LPG PLANT		
3	Quantity	as per BOQ		
4	Tag Nos.	-		
5	HYDRANT WITH PUMPER			
6	Material	API 5L Gr.B Sch. Std. / ASTM A-106 Grade B Sch. Std.		
7	Type	Pillar Type with pumper connection(vertical)		
8	Ends/Rating	Raised face flange as per ANSI B16.5/class 150 #		
9	Pumper connection	4 " branch with flanged isolation ball valve (pumper shall connect with coupling)		
10	Body Size	6" N.D. Stand Pipe (Note – 2)		
11	Inlet Flange	6" ANSI 150 RF		
12	Outlet Nozzles	2 Nos. x 2½", bronze instantaneous hose BS 336 coupling c/w PVC blank cap and steel galvanized chain. Each Nozzle to have isolation Ball valve.		
13	Capacity	250 USgpm per Nozzle		
14	Color	Red		
15	HYDRANT BALL VALVE			
16	Body	Brass		
17	Type	Ball (Full Bore)		
18	Location	With Nozzle		
19	Ends	Internal Threaded		
20	Internals	SS		
21	Size	2½" Dia 150 Class		
22	Make	KITZ or equivalent		
23	WORKING PRESSURE			
24	Normal	100 - 160 psi(g)		
25	Minimum	70 psi(g)		
26	Hydrostatic Test Pressure	246 psi(g)		
27				
28	OPTIONS			
29	Painted Finish	External two coats of primer plus two coats of red alkyd enamel RAL 3000 finish, total dry film thickness 125 microns and internal lined with corrosion resistant paint.		
30	Approval	Underwriter laboratories, Lloyds Register or other equivalent international agencies approved by the owner.		
31				
32				
33	Notes:			
34	1. Design & materials should comply with NFPA standard			
35	2. Mounting flange for hydrant will be available at a height of 450 mm (17.7") above ground level. Height of stand pipe shall be such that the outlet nozzles are at a			
36	height of 400 mm from bottom flange of hydrant. pumper shall be placed at a height of 200 mm.			
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET OF FIRE HOSE CABINET			
		Document No.	Revision	Sheet	Date
Client		DSM-005	0	1	17-08-2023
1	Description				
2	Service	Fire water			
3					
4	Space requirement	02 No. 2-1/2 dia Hose Pipes of 30m 01 No. Jet Spary nozzle			
5	Color	Red			
6	Front	Glass			
7	Support	Self Standing			
8	Size	By Vendor			
9	Material	MS Sheet 18 SWG			
10	Make	Local/Imported			
11					
12					
13	Quantity	as per BOQ			
14					
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35	NOTES				
36	2. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET OF FIRE HOSE PIPES (30m)			
		Document No.	Revision	Sheet	Date
		DSM-005	0	2	17-08-2023
1	Description				
2	Service	Fire water			
3					
4	Length	30m			
5	Color	Red			
6	coupling	2-1/2" dia BS 336 Light Alloy, ribbed tail instatenous			
7	Size	65mm			
8	Working Pressure	10 bar			
9	Test Pressure	25 bar			
10	Benefits	Heat Resistance, Weather Resistant, Resistant to Oil & Petrol, Maintenance Free			
11					
12	Make	OSW, Germany/Angus, UK			
13					
14					
15	Quantity	as per BOQ			
16					
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35	NOTES				
36	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET OF FIRE HOSE PIPES (15m)			
		Document No.	Revision	Sheet	Date
		DSM-005	0	3	17-08-2023
1	Description				
2	Service	Fire water			
3					
4	Length	15m			
5	Color	Red			
6	coupling	2-1/2" dia BS 336 Light Alloy, ribbed tail instatenous			
7	Size	65mm			
8					
9	Benefits	Heat Resistance, Weather Resistant, Resistant to Oil & Petrol, Maintenance Free			
10	Working Pressure	10 bar			
11	Test Pressure	25 bar			
12	Make	OSW, Germany/Angus, UK			
13					
14					
15	Quantity	as per BOQ			
16					
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35	NOTES				
36	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET OF JET SPRAY NOZZLE			
		Document No.	Revision	Sheet	Date
		DSM-005	0	4	17-08-2023
1	Description				
2	Service	Fire water			
3					
4	Type	3-Way (Shut, Jet, Fog)			
5	Inlet	Integral 2-1/2" inst. Male to BS 336			
6	Material	Light Alloy			
7	Make	Angus-UK or Equivalent			
8					
9					
10	Quantity	as per BOQ			
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35	NOTES				
36	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 Attock TTOCK PETROLEUM LIMITED		DATA SHEET FOR DRY CHEMICAL EXTINGUISHER (6 KG)			
		Document No.	Revision	Sheet	Date
		DSM-005	0	5	17-08-2023
1	Description 6 Kg				
2	Fire Class	B,C			
3	Class Rating	80-B:C (Note-1)			
4	Weight of Extinguisher Agent	6 KG			
5	Specification	DCP			
6	Type	Stored Pressure Type			
7	Discharge Time	10-25 sec			
8	Horizontal Range of Stream	5-20 ft			
9	Material of Shell Construction	High Quality aluminum or steel corrosion resistant coating			
10	Colour	Red			
11	Applicable Code	NFPA 10			
12	Make	Gloria, Germany or Equivalent			
13	Quantity	as per BOQ			
14					
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35	NOTES				
36	1. Vendor will confirm UL class rating of extinguisher with respect to Extinguisher agent capacity.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET FOR DCP MOBILE TROLLEY 50 KG)			
		Document No.	Revision	Sheet	Date
		DSM-005	0	6	17-08-2023
1	Description				
2	Fire Class	B,C			
3	Class Rating	80-B:C (Note-1)			
4	Weight of Extinguisher Agent	50 KG			
5	Specification	DCP			
6					
7					
8	Type	Stored Pressure Type, Trolley Mounted			
9	Discharge Time	10-25 sec			
10	Horizontal Range of Stream	5-20 ft			
11	Material of Shell Construction	High Quality aluminum or steel corrosion resistant coating			
12	Colour	Red			
13	Applicable Code	NFPA 10			
14	Make	Gloria, Germany or Equivalent			
15					
16					
17	Quantity	as per BOQ			
18					
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35	NOTES				
36	1. Vendor will confirm UL class rating of extinguisher with respect to Extinguisher agent capacity.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED Attock		DATA SHEET FOR CARBON DIOXIDE EXTINGUISHER (5 KG)/(30KG)			
		Document No.	Revision	Sheet	Date
		DSM-005	0	7	17-08-2023
1	Description				
2	Fire Class	C			
3	Class Rating	10 B:C (Note -1)			
4	Weight of Extinguisher	5 KG			
5	Extinguishing Agent	CO2			
6					
7	Type	Stored Pressure Type			
8	Discharge Time	8 to 30 sec			
9	Horizontal Range of Stream	3 to 8 ft			
10	Material of Shell Construction	High Quality aluminum or steel corrosion resistant coating			
11	Colour	Red			
12	Applicable Code	NFPA 10			
13					
14	Quantity	as per BOQ			
15					
16					
17	Description				
18	Fire Class	C			
19	Class Rating	10 B:C (Note -1)			
20	Weight of Extinguisher	30 KG Trolley mounted			
21	Extinguishing Agent	CO2			
22					
23	Type	Stored Pressure Type			
24	Discharge Time	8 to 30 sec			
25	Horizontal Range of Stream	3 to 8 ft			
26	Material of Shell Construction	High Quality aluminum or steel corrosion resistant coating			
27	Colour	Red			
28	Applicable Code	NFPA 10			
29					
30	Quantity	as per BOQ			
31					
32					
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34					
35	NOTES				
36	1. Vendor will confirm UL class rating of extinguisher with respect to Extinguisher agent capacity.				
37	2. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET FOR FIRST AID BOX			
		Document No.	Revision	Sheet	Date
		DSM-005	0	8	17-08-2023
1	Description				
2	Bandage 2"	6 Nos.			
3	Finger Bandage	3 Nos.			
4	Bandage Triangular	1 No.			
5	Cotton Wool	1 Roll			
6	Lint Un-Medicated	1 No.			
7	Gauze Cotton 4"x4" (Pkt of 10)	1 Packet			
8	Gauze Cotton 2"x2" (Pkt of 10)	1 Packet			
9	Adhesive Strip	25 Nos.			
10	Field Dressing	3 Nos.			
11	Cane for Tighting	2 Nos.			
12	Safety Pins	6 Nos.			
13	Scissors	1 No.			
14	Probe Iron	1 No.			
15	Acrifilin Lotion	1 No.			
16	Tenture Iodine	1 No.			
17	Mercurochrome Lotion	1 No.			
18	Burnol	1 No.			
19	Eye Ointment	1 No.			
20	Iodex	1 No.			
21					
22					
23	Quantity (Boxes)	as per BOQ			
24					
25					
26					
27					
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35	NOTES				
36	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 Attock TTOCK PETROLEUM LIMITED		DATA SHEET FOR HELMETS			
		Document No.	Revision	Sheet	Date
		DSM-005	0	9	17-08-2023
1	Description for Protective Helmets				
2	Material	Polyethylene shell & suspension system			
3	Sizes	Small , Standard and Large			
4	Approvals	ANSI/ISEA Z89.1-2014 (Class C)			
5	Benefits	Shock Absorption & Penetration as per EN 397 Sweat band: Cotton Core Self-adjusting chain straps ensure a comfortable fit			
6	Customization	VTS			
8	Colors	as per BOQ			
9	Make	MSA V-Guard			
10	Quantity	as per BOQ			
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35	NOTES				
36	1. Vendor must specify the Model No of Protective Helmets.				
37	2. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET FOR STRETCHER & WIND SOCKS			
		Document No.	Revision	Sheet	Date
		DSM-005	0	10 & 10(i)	17-08-2023
1	Description For Stretcher				
2	Overall length	VTS			
3	Length of bed	VTS			
4	Width	VTS			
5	Height (when opened)	VTS			
7	Application	To carry injured persons to a first-aid post or hospital.			
8	Type	Foldable			
9	Quantity	as per BOQ			
10					
11					
12					
13					
14					
15					
16					
17	Description for Wind Socks				
18	Frame Rod 6mm	1 No's			
19	Pipe 20mm (Dia)	1 No's			
20	Swivel Nut 3/4"	2 Nos			
21	Parachute (Length 3" , Red color)	1 No's			
22	Pole 1/2" (Diax Length 5")	1 No's			
23	Color	Standard			
24					
25	Total Quantity for Wind Socks	as per BOQ			
26					
27					
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET FOR FIRE BLANKET & MEGA PHONE			
		Document No.	Revision	Sheet	Date
		DSM-005	0	11 & 11(i)	17-08-2023
1	Description For Fire Blanket				
2	Dimensions of Fire Blanket	(1.2X 1.8)			
3	Blanket Cover	yes			
4	Length	1.8m			
5	width	1.2m			
7	Material	As per NFPA Standards			
8	Minimum Absorption Temperature	400~500 degree C			
9	Quantity	as per BOQ			
10					
11					
12					
13					
14					
15					
16					
17	Description For Mega Phone				
18	Power Source	Dry Cells			
19	Features	(1) Built-in Siren (2) Volume Control			
20	Application	Fire / Rescue Emergencies			
21	Audible Range	100m (Approx)			
22					
23	Quantity	as per BOQ			
24					
25					
26					
27					
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42	NOTES				
43	1. Vendor must specify Model of the Mega Phone.				
44	2. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED Attock		DATA SHEET FOR MOBILE FOAM TROLLEY			
		Document No.	Revision	Sheet	Date
		DSM-005	0	12	17-08-2023
1	Description For Mobile Foam Unit				
2					
3	Capacity	120 Litres (FP-70 foam supply included)			
4	Construction	Foam Tank is Made of Fibre Glass Mounted on a Steel Frame. The Tank has Connection For Foam Filling , Dip tube [made of stainless steel] drain valve and pick up tube [made of flexible vinyl hose]			
5	Trolley	Suitable for manual pulling : steel frame with 2 solid rubber tyres of 12" dia , with support foot at the front ; also provided hose cradle for carrying hose and foam making branch pipe			
6	Foam Inductor	Fitted on Top of foam tank , connected to foam pick up Dip tube (stainless steel) through flexible pick up tube (vinyl) capacity : 225 Liters per minutes Main Body made of aluminium / brass ; one side fitted with 2.5' female instantaneous brass coupling and other side with 2.5" male instantaneous brass coupling			
7	Foam Branch Pipe	Low Expansion , Water Capacity of 225 Liters per minutes			
8	Performance	Range 15-20 m at 7 Bar Running time approx. 17 minutes			
9	Code / Standard	NFPA 11C			
10	Color	VTC			
11	Accessories				
12					
13					
14	Quantity	as per BOQ			
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31	NOTES				
32	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET FOR ELECTRIC HOOTER			
		Document No.	Revision	Sheet	Date
		DSM-005	0	13	17-08-2023
1	Description				
2	Alarm Type	Electric 220V			
3	Operation	Electrical Operated			
4	Range	upto 1.5Km			
5					
7	Material	As per NFPA Standards			
8	Quantity	as per BOQ			
9					
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED Attock		DATA SHEET FOR BARRICATION TAPE			
		Document No.	Revision	Sheet	Date
		DSM-005	0	14	17-08-2023
1	Description				
2	Barrication Tape Packing	Roll			
3	length	500m			
4	Width	3"			
5	Color	Red/White-Yellow, Black			
7					
8	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		DATA SHEET FOR EXPLOSIVE METER			
		Document No.	Revision	Sheet	Date
		DSM-005	0	15	17-08-2023
1	Description				
2	Type	Battery operated			
3	Primary Detection	LEL, O2, CO, H2S, Combustable Gases			
4	Battery Type	Rechargable			
5	Make	MSA USA			
7	Instruction Manual	Yes			
8	Warranty	01 Years minimum			
9	Working Area	Class 1 Div. 1			
10	Calibration cap Assembly	Yes			
11	Quantity	as per BOQ			
12					
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		Emergency Shower			
		Document No.	Revision	Sheet	Date
		DSM-005	0	16	17-08-2023
1	Description				
2	Standard	ANSI Z358.1-2014			
3	Minimum Requirements	- 2~3 bar water supply pressure			
4		- Self draining unit			
5		- Hand operation (Foot operation optional)			
7		- Testing lever			
8		- Overhead shower rose			
9		- Open eye bath with twin nozzle and dust cover			
10		- Eye bath flow regulator			
11		- 1 1/4" flanged inlet			
12		- 1 1/4" flanged outlet			
13					
14	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		Emergency Light/Torch			
		Document No.	Revision	Sheet	Date
		DSM-005	0	17	17-08-2023
1	Description				
2	Standard	LED TORCH SF-5 (DAYSUN SF-5)			
3	Minimum Requirements	- Light Source: CREE XP-E LED			
4		- Light Output: 47lm (Low) / 114lm (High)			
5		- Run Time: 27hrs. 23 mins. (Low) / 6hrs. 30 mins. (High)			
7		- Beam Distance: 73m (Low) / 114m (High)			
8		- IP Rating: IP67			
9		- Aluminum Heat Sink to Enhance LED Efficiency			
10		- Tough & Durable Casing, High Impact Lens			
11		- Battery: 4 x AA			
12		- Fire & Rescue, Industrial, Utilities, Emergency Response Sporting Goods,			
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14	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		Safety Cone (700mm)			
		Document No.	Revision	Sheet	Date
		DSM-005	0	18	17-08-2023
1	Description				
2		Fluorescent Safety Cones (700mm)			
3	Minimum Requirements	- Nominal Cone size-700mm			
4		- Overall height (H) -680-715mm			
5		- Maximum thickness of base including any feet (B)-80mm			
7		- Maximum dimension of base (D)-500			
8		-Minimum width of base (W) -320mm			
9					
10	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		Fire Suit			
		Document No.	Revision	Sheet	Date
		DSM-005	0	19	17-08-2023
1	Description				
2	Standard	BDUS1/6K NOMEX IIIA (UL Listed)			
3	Minimum Requirements	- Material: Nomex "UL" Listed Fabric According to NFPA 2112			
4		- Outer Shell Material: 100% Nomex111 a Plain Weave Fabric			
5		- Inner Shell: NOMEX 111A 65% FR Rayon 35% Plain Weave Fabric, PTEE Film with laminating			
7		- Cuff: 100% NOMEX 111A			
8		- Sewing Thread: 100% NOMEX 111A			
9		- Tested in accordance with UL standards			
10		- Protective clothing components for protection of Fire Fighter against flash fire			
11		- NFPA-National Fire Protection Association Standards NFPA 2112			
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14	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		Full Face Mask			
		Document No.	Revision	Sheet	Date
		DSM-005	0	20	17-08-2023
1	Description				
2	Standard	Class 3 to EN 136:1998 and Directive 89/686/EEC (PPE).			
3	Minimum Requirements	- Full Face Mask, Negative Pressure, with threaded connector			
4		- Face blank with double revert seal, ergonomic:			
5		- Visor, panoramic and wide visibility			
7		- Group that holds in one single body the exhale membrane, the gasket/ valve holder and the exhale membraner			
8		- Inner nose cup			
9		- Head harness, five arms			
10		- Neck strap			
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14	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		Half Face Mask			
		Document No.	Revision	Sheet	Date
		DSM-005	0	21	17-08-2023
1	Description				
2	Standard	EN 140:1998 meeting with Directive 89/868/EC (PPE)			
3	Minimum Requirements	- DUETTA is an ideal facepiece for use in the handling of chemical products			
4		- Soft sealing flap			
5		- Filtering cartridges can moreover hold special pre-filters			
7		- Limitations for use			
8		Filter respirators cannot be used in environments where the oxygen content of the air is less than 17% in volume			
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14	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		Breathing Apparatus			
		Document No.	Revision	Sheet	Date
		DSM-005	0	22	17-08-2023
1	Description				
2	Standard	TYPE APPROVAL CE TO EN137 AND MED APPROVED			
3	Minimum Requirements	- COMPLIES WITH SOLAS CHAPTER II REG 17 C/W			
4		- CYL-1200			
5		- 6.0 LITRE, 200 BAR, STEEL CYLINDER,			
7		- CE SPECIFICATION, PAINTED TO BS SPECIFICATION,			
8		-COMPLETE WITH CYLINDER VALVE FITTED WITH SAFETY LOCKING HAND WHEEL.			
9		1200 LITER FREE AIR CAPACITY PROVIDING TOTAL			
10		DURATION OF 60 MINUTES			
11		MAKE : SCOTT			
12	ORIGIN : U. K.				
13					
14	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		Firefighting Rubber Boots			
		Document No.	Revision	Sheet	Date
		DSM-005	0	23	17-08-2023
1	Description				
2	Standard	NFPA 1971-2013 Edition.			
3	Minimum Requirements	- UPPER: Flame/Heat Resisting Rubber			
4		- CONSTRUCTION: Vulcanized Rubber/Shoe Fit Engineered			
5		- OUTSOLE: Flame/Heat Resisting White "Traction Cleat"			
7		- LINING: 3.5 mm Polyester Needled Felt with Heel reinforcement			
8		-INSOLE: Removable Super knit Covered Polyurethane			
9		-MIDSOLE: Stainless Steel Puncture Resisting Bottom Plate			
10		-SHANK: Steel Triple Ladder Shank			
11		-ANSI 75 Oversized Steel Toe.			
12		-Puncture Resisting Bottom Plate.			
13		-Cushioned Shin Guard.			
14	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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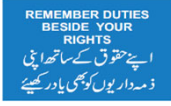





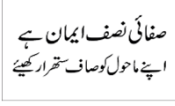

















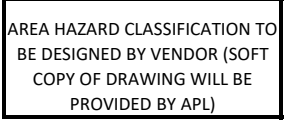
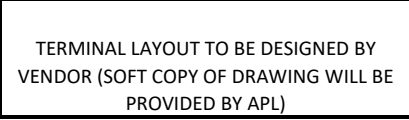

Client		Data Sheet			
 ATTOCK PETROLEUM LIMITED		Firefighting Gloves (Structural)/Firefighting Helmet			
		Document No.	Revision	Sheet	Date
		DSM-005	0	24	17-08-2023
1	Description				
2	Standard	EN659:2003 + A1:2008 Protective Gloves for Structural Fire Fighting			
3	Minimum Requirements	- Designed specifically for open moor land and wildland firefighting duties.			
4		- OUTER PALM: 100% PYROHIDE® cowhide grain leather.			
5		- OUTER BACK: 100% Nomex® Delta TA			
7		- LINING: 100% Kevlar® with glass-fibre			
8		-CUFF: 54% Kevlar®, 44% Nomex®, 2% Elastane, THREAD: 100% Nomex®			
9		-Manufactured to EN659:2003 + A1:2008 Protective Gloves for Structural Fire Fighting			
10		-PYROHIDE® leather shell—the No. 1 choice for UK fire-fighters (supplied to 51 of UK's 61 brigades)			
11					
12					
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14	Quantity	as per BOQ			
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20	Description				
21	Firefighting Helmet	As per Standards			
22					
23	Quantity	as per BOQ			
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42	NOTES				
43	1. Mentioned description of the item are minimum requirements for vendor.				
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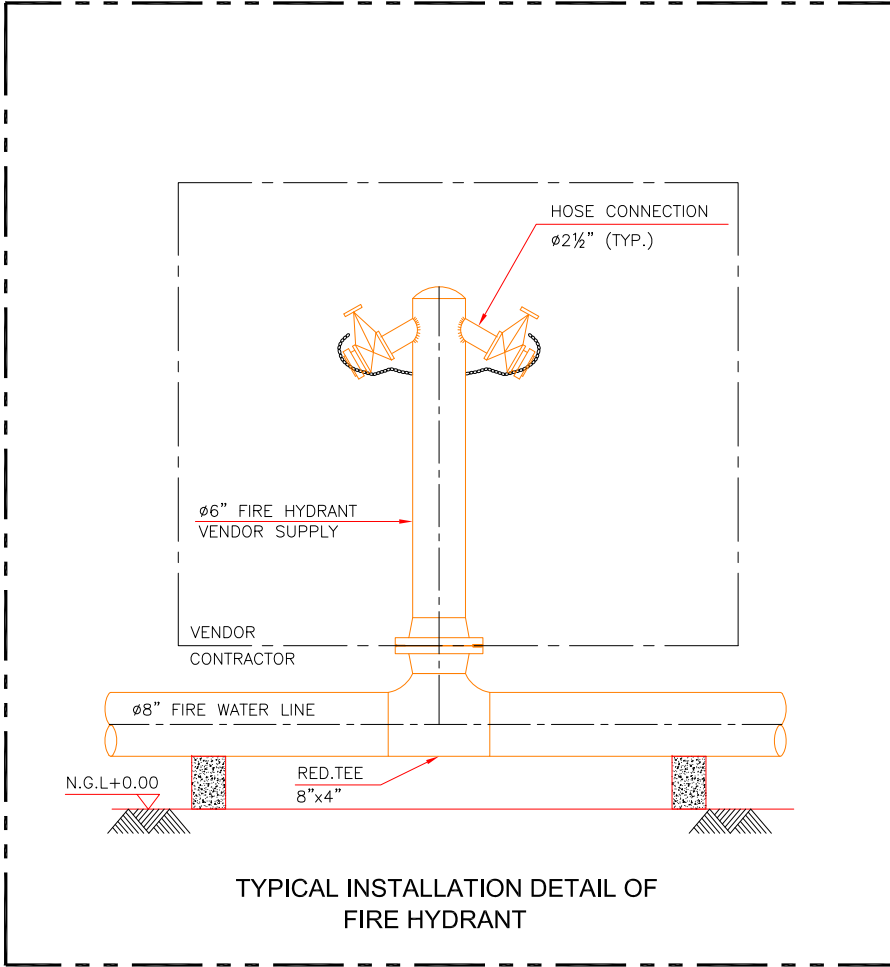
ATTOCK PETROLEUM LIMITED		DATA SHEET FOR TP NOZZLE			
		Document No	Revision	Sheet	Date
		DSM-005	0	27	17-8-2023
1	Description of TP Nozzle				
2	Made		Made of Gunmetal /SS 304		
3	Material of Shell Construction		High Quality steel corrosion resistant		
4	Type		Triple Purpose (spray, jet and shut off nozzle)		
5	Size		2.5"		
6	Operating Pressure		10 bar		
7	Working Pressure		3-18 Bar		
8	Maximum Flow of Spray		240 L/M		
9					
10	Warranty		Minimum 2 years replacement warranty in case of complain		
11					
12					
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14	NOTES				
15	1. Vendor can specify related models				
16	2. Mentioned description of the item are minimum requirements for vendor.				
17					
18					

ATTOCK PETROLEUM LIMITED		DATA SHEET FOR DIVIDING BREECHES			
		Document No	Revision	Sheet	Date
		DSM-005	0	28	17-8-2023
1	Description of Dividing Breeches				
2	Description	Dividing Breech having 1 x 2.5 inch Male instantaneous inlet and 2 x 2.5 Inch female instantaneous outlet.			
3	Design				
4	Made	Gun Metal & Aluminum,			
5	Material of Shell Construction	High Quality steel corrosion resistant coating			
6	Type	Two way			
7	Dia	2.5"			
8	Color	Red			
9	Test Pressure	22.5bar (326psi)			
10	Working Pressure	15 Bar (217 psi)			
12	Maximum Flow of Spray				
NOTES					
	1. Vendor can specify related models				
	2. Mentioned description of the item are minimum requirements for vendor.				

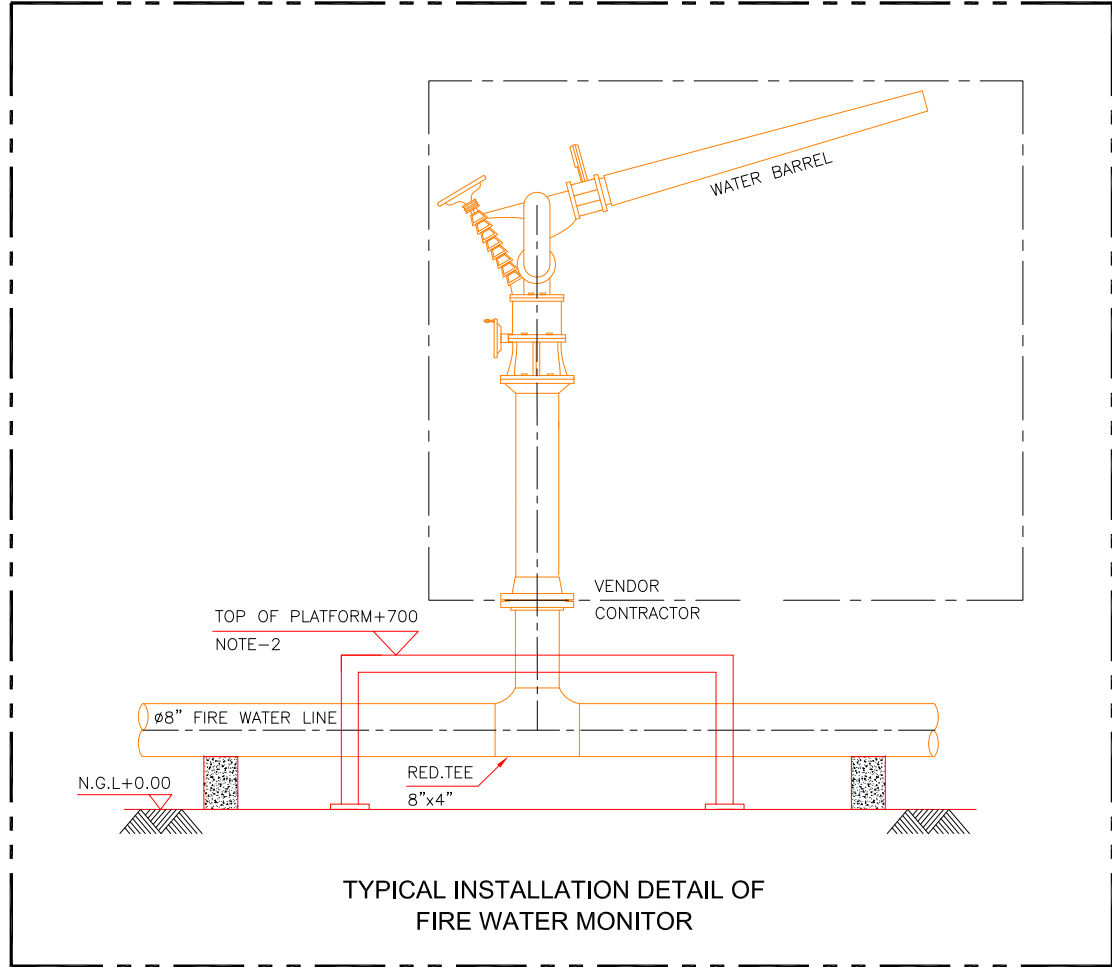
ATTOCK PETROLEUM LIMITED		DATA SHEET FOR CURTAIN NOZZLE			
		Document No	Revision	Sheet	Date
		DSM-005	0	29	17-8-2023
1	Description of Water Curtain Nozzle				
2	Description		Protection and shielding to shield personnel and equipment against radiant heat, harmful gases, and flames.		
3	Model		Hydro shield		
4	Fluid		All type of water		
5	Inlet		2½" Gunmetal Instantaneous		
6	Material		Light Alloy or Gunmetal Options		
7	Flow @ 5 Bar (LPM)		1400 LPM		
8	Curtain Height - 5 Bar		7 metres		
9	Curtain Width - 5 Bar		26 metres		
10					
11					
12	Color		Red - RAL Red Painted Body		
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19	NOTES				
20	1. Vendor can specify related models				
21	2. Mentioned description of the item are minimum requirements for vendor.				
22	The Range				

ATTOCK PETROLEUM LIMITED		DATA SHEET FOR CRYOGENIC SUIT AND GLOVE		
		Document No	Revision	Sheet
		DSM-005	0	30
		Date		
		17-8-2023		
1	Description of Cryogenic Suit and Glove			
2	Material – Coverall & Gloves		Composite low temperature resistant materials	
3	Design			
4	Applicable temperature		-160°C to -250°C	
	Mask		Free Style	
5	Material		High Quality low temperature resistant materials	
6				
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NOTES				
	1. Vendor can specify related material			
	2. Mentioned description of the item are minimum requirements for vendor.			

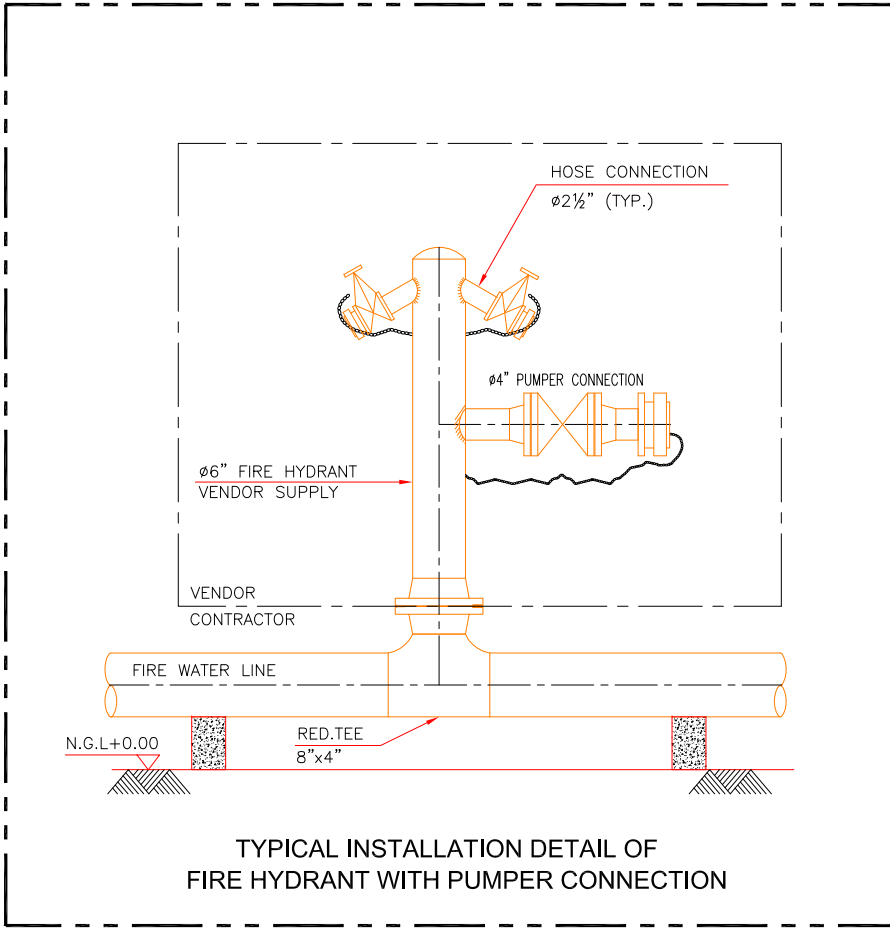
	A	B	C	D	E	F	G	H	I	J	K	L
1	Client					Data Sheet						
2	 ATTOCK PETROLEUM LIMITED					DATA SHEET FOR SAFETY SIGNS						
3						Document No.		Revision		Sheet		Date
4	DSM-006		1		1		17-Aug-2023					
5	Description											
6												
7	Qty 1		Qty 1		Qty 1		Qty 1		Qty 2			
8	Type 2		Type 2		Type 2		Type 2		Type 2			
13												
14	Qty 1		Qty 1		Qty 1		Qty 1		Qty 1			
15	Type 2		Type 2		Type 2		Type 2		Type 2			
19												
20	Qty 1		Qty 1		Qty 1		Qty 1		Qty 1			
21	Type 2		Type 2		Type 2		Type 2		Type 2			
25												
26	Qty 1		Qty 1		Qty 1		Qty 1		Qty 1			
27	Type 2		Type 2		Type 2		Type 2		Type 2			
31												
32	Qty 2		Qty 1		Qty 1							
33	Type 2		Type 2		Type 2							
37												
38	Qty 2		Qty 2		Qty 1				Qty 1			
39	Type 3		Type 3		Type 3				Type 3			
44												
45	Qty 2											
46	Type 1											
50	Type-1		Type-2		Type-3							
51	1. Sign Size 24"x18"		1. Sign Size 24"x36"		1. Sign Size 72"x48"							
52	2. Back: MS Sheet 16SWG		2. Back: MS Sheet 16SWG		2. Back: MS Sheet 16SWG							
53	3. Fixing: 3" dia Single Pipe (Centre)		3. Fixing: 3" dia Single Pipe (Centre)		3. Fixing: On wall with clamps arrangement							
54	4. Pasting Material: Reflective Tape		4. Pasting Material: Reflective Tape		4. Pasting Material: Reflective Tape							
55	5. Tape Grade: Engineering		5. Tape Grade: Engineering		5. Tape Grade: Engineering							
56	6. Pipe Length: 7~8ft		6. Pipe Length: 7~8ft		6. Sign Top Level: Standard (up to 8ft)							
57	NOTES											
58	1. Mentioned description of the item are minimum requirements for vendor.											
59	2. 3 Year warranty of reflective tap should be provided by vendor.											
60	3. Installation of Sign boards is included in scope of supplier.											
61	4. Files for printing will be providing at the time of order finalization, this sheet is for tendering purposes only.											



TYPICAL INSTALLATION DETAIL OF FIRE HYDRANT



TYPICAL INSTALLATION DETAIL OF FIRE WATER MONITOR



TYPICAL INSTALLATION DETAIL OF FIRE HYDRANT WITH PUMPER CONNECTION

ISSUED FOR REVIEW

0	03-08-2021	ISSUED FOR REVIEW	MK	MZK	SMS
REV.	DATE	DESCRIPTION OF REVISION	PREP'D	CHECK	APPR.

PETROCHEMICAL ENGINEERING CONSULTANTS
 C-2, BLOCK NO. 17, GULSHAN-E-IGBAL, NEAR NATIONAL STADIUM, KARACHI-75300, PAKISTAN.
 TEL. +92 (21) 34827780, 34961088, FAX: +92 21 34961089, E-Mail: contact@pec.com.pk web site: www.pec.com.pk

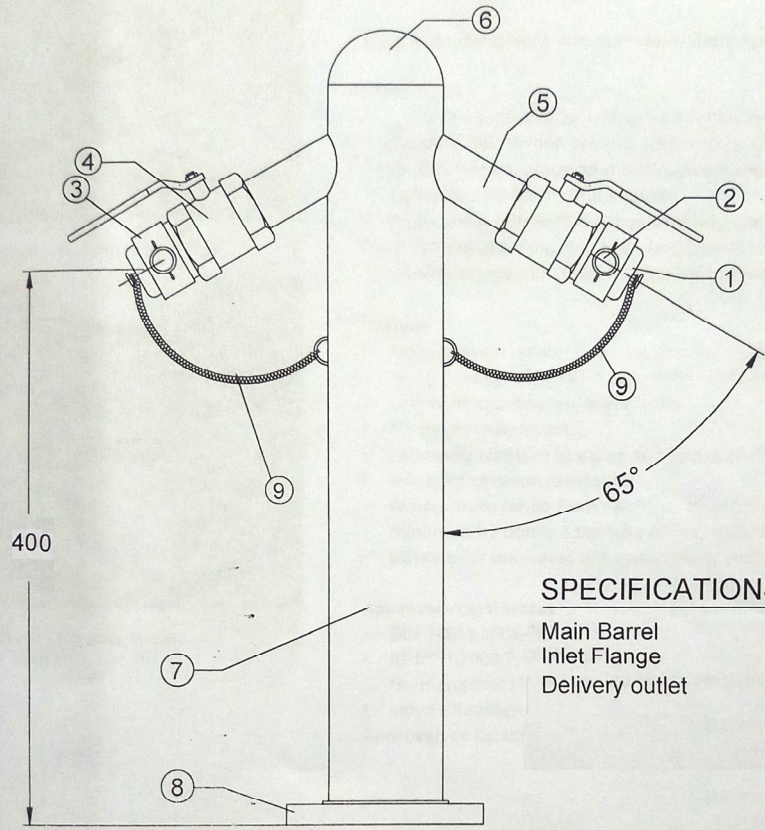
CLIENT : **ATTOCK PETROLEUM LIMITED**

PROJECT : **DETAIL ENGINEERING SERVICES FOR THE DEVELOPMENT OF LPG PLANT AT MORGAH, RAWALPINDI**

TITLE : **SECTION DETAILS**

JOB NO	DRAWING NO	SHEET NO	SCALE	SHEET SIZE	REV
3066	3066-PIP-SD-001	1 OF 1	-	A2	0

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SPECIFICATIONS:

Main Barrel Pipe Ø6", Sch-40
 Inlet Flange 6", Class 150
 Delivery outlet 02 Nos. x 2.5" size

9	Chain	02 Nos.
8	SORF Flange Ø6", Class 150	01 Nos.
7	Pipe Ø6", Sch-40, Mild Steel	01 No.
6	End Cap 6", Sch-40	01 No.
5	Pipe Ø2.5", Sch-40, Mild Steel	02 No.
4	Ball Valve Ø2.5" KITZ MAKE OR EQUIVALENT	02 Nos.
3	Female Coupling 2.5", Instantaneous (BSS-336)	02 Nos.
2	Twisting Stopper	02 Nos.
1	Blank Cap Ø2.5"	02 Nos.
S/#	DESCRIPTION	QTY.