

ت	المواصفات	الكمية
1	<u>FIRE FIGHTING VEHICLE(TANKER)16000 Liter water</u> <u>CHASSIS:</u> MAN or Mercedes Benz or SCANIA Chassis model. 6*4(With GVWR=33Ton) <u>Engine:</u> • 4- stroke diesel engine 6-cylinder direct injection. • Turbo charger with intercooler air to air type • H.P from 360 – 400 HP. • Oil cooling Transmission . • Water cooling system : water forced by circulating heavy duty pump and finned radiator and thermostat (tropical condition) • Oil , fuel and air filters suitable for tropical and dusty area . • Exhaust provided by spark arrestor . • Water separating fuel filter. <u>CAB</u> Type: Forward control type,two door cabin, with two hydraulic jack for tilting <u>Seating:-</u> Driver's seat- 1 seat, air suspended Front seats- one or two seat <u>Doors:-</u> Two doors, with roll-down or electrical switch windows . <u>Dashboard :-</u>the dashboard is equipped with all necessary gauges, pilot lamps , switch <u>Miscellaneous :</u> *Wind shield wipers and washers * Cab interior illumination *Air conditioning system(0-60)c *Heating and ventilation unit *Two rear view mirrors *Two sun visors <u>Control panel :</u> the control panel on dashboard consist : *P.T.O control switch (water pump) *Pilot lamp doors open / closed * Pilot lamp rotating beacons on / off *Public address electronic siren switch <u>Electricity :</u>24 V: 2 batteries each 12 V .all electric equipment will installed to be suitable for oil industry . <u>Wheels and Tires :</u> as manufacturer company standards sizes Front axle: single tires 385/65 R22.5 Rear axle: dual tires 385/80 R22.5 <u>Brake:</u> dual Anti-lock circuit pneumatic brakes with(ABS). <u>Gear box:</u> manual synchronized transmission of 16 speed for wards and one speed reverse. <u>Fuel tank:</u> capacity (300-400) Lit. <u>Clutch:</u> H.D dry single clutch. <u>Steering:</u> L.H.D power assisted-hydraulic. <u>Suspension:</u> heavy duty spring with stabilizer in front and rear axles.	3

Bumpers: rear bumper from metal.

Standard necessities Equipment

1. hydraulic jack
2. tool set
3. spare tire and wheel, (fixed under rear of chassis or on suitable place on chassis)
4. spare part catalogue in English
5. operating catalogue
6. First aid kit.
7. Tire inflating hose 10 mtr

Control panel:

The control panel to be fixed in the vehicles rear pump compartment and to be water proof design and consist :

1. water pump normal pressure gauge in bar
2. water pump man vacuum meter gauge in bar
3. water tank level gauge (electrical)
4. Actuation P.T.O (on-off)switch and pilot light for water pump.
5. Illumination of control panel .
6. Throttle control for engine switch.
7. Control for priming pump .
- 8 . Control for water tank filling via pump.
- 9 . Counter of operation hours .
10. Engine oil pressure warning lamp.
11. Thermometer for engine cooling water.

WATER TANK

* Capacity: (16000) liters

* Material: made of stainless steel S 316 L or galvanized steel (4mm)wall thickness.

Water tank consist :-

1. Inspection manhole: 450 mm diameter covered with hinged spring loaded quick opening life
2. Pressure and vacuum release
3. Over flow venting: provided by over flow dome and over flow pipe .
4. Tank drain: min 1 inch drain pipe with ball valve .
5. Tank filling via pump(two or four) .
6. Tank filling from hydrant : tank filling from hydrant size 2.5 inch male coupling (BS 336) and provided by 2.5 inch ball valve or butter fly valve and non-return valve .
7. Tank level: electrical sensor .
8. Baffle plates : the water tank to be consist baffle plates to prevent a rolling motion of the content with wall radius edge
9. Water suction : the water tank consist water sump and suction pipe to water valve pump with butter fly .
10. The tank roof to be covered with special sand / plastic coating or covered with light alloy chequered plate to prevent slipping with two ladder at rear end and hand

WATER PUMP

1. Pump drive: by the vehicle engine via the P.T.O.
2. Rated capacity(4000-5000) LPM at (10-12) bar.
3. Type: centrifugal type.

4. Material: pump housing and impeller are made of corrosion – resistant high alloy or bronze, pump shaft made of high grade stainless steel.(ASTM A:564)
5. Pump seal: mechanical shaft seal.
6. Priming device: electrical with switch control or automatic and max suction lift 9 m.
7. Location: rear mounted in rear locker.
- 8.Drainage: drainage line with ball valve.
9. Operation ability from (-10 _ 60)c.
10. Outside water suction line: two suction inlets, one each side with butter – fly Valve manually operated size 4" with strainer and blind coupling.
11. Protection automatic over heating valve circulating the water with main tank when the water temperature exceeded 70c.
12. Water tank suction line: size(5- 6) “provided by butter – fly valve manually controlled. with sump and strainer .

QUICK ATTACK HOSE REEL (one or two)

1. Robust and dirt-resistant due to none-corrosion materials with cast aluminum crank drive (pinion and ring gear) .manual hose brake prevent rolling motion of the hose .
2. The hose reel length to be (30-50) m made of rubber hose , non collapsible, 32mm internal diameter .
3. The nozzle to be jet-spray (water & foam) nozzle (select flow) ,and with range 250-400 L/min at 7 bar.

MATERIAL PIPEWORK

All water piping and pump connection s are made of corrosion resistant hot dip galvanized steel or brass or high grade stainless steel with rigid rubber hoses or flexible rubber joints.

PAINTING

Cab and super structure: fire red RAL3000

Vital Spare Parts For Five Years Of Operation For Each Truck As in The attached List

The offer Should include

Fifty Nos Boiler Suit (Overall Size 50 , 52 , 54 , 56 , 60) 10 Each Size Red -Colour For

Each Truck .

-Fifty Nose Safety Shoes (Leather) Brown Colour For Each Truck

- Offer Should Be Attached With Detailed Catalog & Major Equipment &Specification Spare Part List .

-Third party inspection Should be Performed .

Origin:-

Truck Origin Should Be : Germany or Sweden .

SPARE PARTS LIST FOR CHASSIS FOR EACH VEHICLE)

(RECOMMENDED)

ITEM	DESCRIPTION	QTY.
1	STARTER	1
2	ALTERNATOR	1
3	FUEL FILTER	5
4	OIL FILTER	5
5	AIR FILTER	5
6	BELT ENGINE SET	2 SET
7	CLUTCH MASTER Cy.	1
8	KIT CL.MASTER Cy.	1 KIT
9	BOSTER CLUTCH	1
10	KIT BOSTER CLUTCH	1 KIT
11	CLUTCH DISC	1
12	CLUTCH BEARING RELEASE	1
13	PRESSURE PLATE CLUTCH	1
14	SET NOZZLE	1 SET
15	FUEL PUMP	1
16	SOLENOID VALVE INJECTION PUMP	1
17	STARTER SOLENOID	1
18	GASKET SET ENG. OVERALL	1 SET
19	SET OF RELAY AND FUSES	1 SET
20	GENERATOR 24 V	1
21	BRAKE CHAMPER F-R	2
22	BRAKE CHAMPER R-R	2
23	KIT BRAKE CHAMPER F-R	2 KIT
24	KIT BRAKE CHAMPER R-R	2 KIT
25	MAIN VALVE BRAKE	1
26	KIT P.T.O	1 KIT
27	WATER PUMP	1
28	FUEL INJUCTION PUMP	1
29	SWITCH FOR CONTROL PANEL	2 SET

FIRE FIGHTING EQUIPMENT VEHICLE

ITEM	GROUP	DESCRIPTION	QTY.
1	ELECTRICAL	BOTTON FOR PRIMER PUMP	1

SET(3)

2	TANKS	MANHOLE GASKET	2
3	TANKS	ELECTRICAL LEVEL GAUGE	1
4	TANKS	LED FOR LEVEL GAUGE	2
5	W@F system	BUTTERFLY VALVE SIZE 4"	3
6	W@F system	BUTTERFLY VALVE SIZE 2.5"	5
7	W@F system	BUTTERFLY VALVE SIZE 2"	4
8	MONITOR	BUTTERFLY VALVE SIZE 5"	1
9	SPHRICAK DOME COCK		4
10	COMPLETE SET-OF CONTROL PANEL (GAUGES . SWTTCHES . ETC		3
11	COMPLETE SET-OPERATING PRIMER PUMP WITH ELECTRIC MOTOR TYPE		3

SPARE PARTS LIST FOR WATER PUMP IN THE VEHICLE

ITEM	DESCRIPTION	QTY.
1	IMPELLER (SET)	1
2	REAR WEAR RING	1
3	BEARING SPACER	1
4	SEAL THURST WASHER	2
5	FRONT WEAR RING	2
6	IMPELLER NUT	2
7	SHAFT NUT	4
8	SHAFT NUT (BEARING NUT)	2
9	STOP WASHER (BEARING WASHER)	2
10	SEAL THRUST WASHER	2
11	SEAL RING WITH INTERRING	2
12	PUMP SHAFT	1
13	FLOAT WASHER	1
14	CASTLE NUT	1
15	COMPLETE SEAT OF GASKET AND O-RING	2 SET

COMPLETE SELF-OPERATING PRIMER PUMP WITH ELECTRIC MOTOR TYPE
QTY : 1

COMPLETE SELF-OF CONTROL PANEL (GAUGES . SWITCHES . ECT...) QTY : 1

NOTE

Training for operating and maintenance should be submitted for two persons
for each vehicle abroad in the factory

-Delivery term : CIP Missan

20.13.4153

-Certificate of origin should be authorized and stamped by Iraqi council in the country of origin.

GAS FLOWMETER .

ITEM		
1	80 %	المواصفات الفنية
2	10 %	المنشأ
3	5 %	المدة المتعلقة بتنفيذ العقد
4	5 %	الأعمال المنجزة ضمن الاختصاص