



ASHOK LEYLAND



FIRE FIGHTING VEHICLE



HINDUJA GROUP

1518

15 Ton GVW

TECHNICAL INFORMATION

ENGINE : ALH A6DTI2U (Euro 2) turbocharged intercooled diesel
Bore x Stroke : 104 x 113 mm
Max output : 180 PS @ 2400 rpm
Maximum torque : 60Kgm @ 1600 rpm
Air filter : Dry type with cleanable element
Fuel filter : 1.1 lts. dual filter on the pressure side
Fuel tank capacity : 212 ltrs (Rectangle with Lockable Cap)
Cooling type : Pump circulated, pressurised cooling, thermostat controlled with deaeration tank

CLUTCH : 380mm dia Non-asbestos single Plate
Dry type Diaphragm clutch
hydraulically actuated

GEAR BOX : Synchromesh ZF S6-36 (OD)
: I - 6.93, II - 4.43, III - 2.634, IV - 1.513
V - 1.00, VI - 0.838, R-6.22

PROPELLER SHAFT : 1600 series
No. of propeller shafts : 3

REAR AXLE : Fully floating single speed
Hypoid Gear DANA 60 SHO
Axle capacity : 10200 kgs
Axle Ratio : 5.57 : 1

FRONT AXLE : Forged I section reverse Elliot type
Capacity : 6000 kgs

FRAME : All steel ladder type
No. of cross members : 8 nos
Frame dimensions : 229 x 76 x 6.35 mm
(depth x width x thickness)

SUSPENSION : Semi Elliptic multi leaf Shackle
: Ended
Shock absorber : Double acting, telescopic type at front

STEERING : ZF Power Assisted steering

WHEELS & TYRES : 2 nos. in front and 4 nos. in rear
Rim size : B 7.5 HD x 20
Tyre size : 10.00 R20 - 'E' Marked
11.00 R 22.5 (Alternate)

BRAKES : Full air pressure diaphragm operated on all wheels dual line circuit system
Parking brake : Pneumatically controlled on rear wheels only
Additional Exhaust Brake & Auto Slack adjuster

ELECTRICAL SYSTEM
Type : 24 V negative earth
Battery : 110 Amp. Hr. (20 Hr. rating)
Alternator max output : 55 Amps

PERFORMANCE DATA
Max speed in top gear : 100 kmph
Max gradeability % : 25

WEIGHTS (Kgs) : Laden Un Laden
Front axle : 5170 3030
Rear axle : 10030 2000
Total : 15200 5030

MAJOR DIMENSIONS
(For chassis in mm)
Wheelbase : 5200 / 3700
Front overhang : 1483 / 1143
Rear overhang : 2388 / 889
Overall length : 9071 / 5732 (Chassis with Cab)
Overall Width : 2400 (Chassis with Cab)
Front track : 1957
Rear track : 1816
Frame width : 864
Overall Ht (Un Laden) : 2725
Min. ground clearance : 258
Turning circle dia : 20.0 / 16.4 Mtr
Angle of Approach : 25 deg (Chassis with Cab)
Angle of Departure : 18 deg / 45 deg (Chassis with Cab)

SPECIAL FEATURES

1. Front and rear Anti roll Bar
2. Cab Heater cum De-mister
3. Electronic Speedometer
4. Load Sensing Valve



ASHOK LEYLAND

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GUINDY, CHENNAI - 600032, INDIA
www.ashokleyland.com

Authorised Dealer



HINDUJA GROUP

**TECHNICAL SPECIFICATION
FOR
MEDIUM FIRE TENDER**

1. CHASSIS:

Type : Ashok Leyland 1518 or Equivalent (16 Ton)

2. PUMP:

i) Make : FIREFLY

Type : Multi Pressure(High / Low pressure)

Mounting : Rear Mounted

Discharge capacity :

Low Pressure: 2250 LPM at 7Kg/cm²

High Pressure: 350 LPM at 35 kg/cm²

Suction Lift : Min. 3 mtr.

Suction size : 100 mm dia.

Delivery size : 2 x 63 mm dia.

Mechanical seal/gland : Mech. seal self adjustment.

ii) PRIMER:

Make : FIREFLY

Type : Reciprocating

Mounting : Integral with the above pump

Material : Gun metal

Priming Capacity : 7 M. within 32 sec.

3. POWER TAKE-OFF :

Make : VAS /FIREFLY

4. WATER TANK:

Tank Shape : Rectangular

Tank Capacity : 5000 ltr.

Tank Location : Mounted & strapped with chassis through 'U' bolts immediately behind the Cabin.

Material of Construction : Fabricated out of SS

Bottom Sheet Thickness : 5 mm

Other Sheet Thickness : 4 mm

No. of lugs : 4

Manhole Size : 450 mm dia. (Min)

Manhole location : On the top of the tank.

Drain plug/drain cock : Not less than 25 mm I.D.

Over flow pipe dia. : 50 mm I.D.

Cleaning Hole Size : At least 250 mm dia.

Cleaning Hole Location : At the bottom of the tank

Water level indicator : Would be provided.

Piping Connections : Connection would be provided in such a way that following operations are possible.

- i. Hydrant - tank
- ii. Hydrant - reel
- iii. Tank - pump - Reel
- iv) Hydrant - pump- reel - off

Baffles Location : Vertically located to prevent surging of water.

Baffles Plate thickness : 3.15 mm

5. HOSE REEL:

- i. One number High Pressure Hose Reel with 45 mtr. long x 19mm dia hose with fog gun (Jet & Spray type) will be provided
- ii. One number Hose Reel with 19mm dia x 60 mtr. long hose with dual purpose shut off nozzle will be provided.

6. FOAM TANK:

Tank Shape : Rectangular

Tank Capacity : 650 ltr.

Tank Location : Mounted & strapped with chassis

Material of Construction : S.S.304

Bottom Sheet Thickness : 3 mm

Other Sheet Thickness : 3 mm

No. of lugs : 2

Manhole Size : 250 mm dia.
Manhole location : On the top of the tank.
Strainer : Provided - Gun metal
Cleaning Hole size : 25 mm dia.
Drain Pipe dia. : Not less than 25 mm dia.
Baffles Plate Thickness : 2.5 mm
Baffles Location : Suitable to prevent surging
Filling Orifice : Not less than 150 mm I.D.
Foam supply : Not our scope

7. **PIPING MATERIAL** : All piping material used by us will be MS galvanized and valves will be of Gunmetal / SS-304

8. **COOLING SYSTEM** : Indirect cooling system of open circuit type consisting of a special Heat Exchanger would be provided.

9. **FOAM COMPOUND PROPORTIONATOR INDUCTOR:**

Make : VIJAY
Type : Manual
Setting : Selector valve 5 point setting

10. **CONTROL PANEL:** The Control Panel shall include the following :

- i. Throttle control for engine.
- ii. Pressure gauge 0 to 1.75 MN/mm²
- iii. Compound gauge (Vaccum – 0 to 75 cm. Hg Pressure – 0 to 0.6 MN/mm²)
- iv. Primer Control
- v. Gauge fore cooling water
- vi. Cooling water circuit control.
- vii. Control for using monitor.
- viii. Water level indicator
- ix. Hydrant connections
- x. Control for using auxiliary foam component pick up tube.
- xi. Controls for flushing out the foam making equipments and its plumbing.

11. FOAM/WATER MONITOR:

Type : Self aspirating type

Make : Vijay

Mounting : On the top of the driver cabin

Operation : Manually lever operated

Discharge rate : 1600 LPM @ 9 kg/Cm² of water.

Material of Construction : Aluminum barrel body with G.M swivel joints.

Max. Horizontal throw Effective distance of not less in mtrs. in still air : than 45 mtr. for water and 40 mtr. for foam

Rotating arrangement : 360o horiz. and 45o up and 15o down in the vertical plane.

12. DRIVER CAB & BODY WORK:

Type : Enclosed single compartment closed type.

Doors : 2 Nos. on either side.

Seat : (1+1) + 1 full seat at rear

MATERIAL:

External : Steel structure Paneled (treated and anti rust coated) M.S square tube of (32mm x 32mm x 1.6 mm) with Alu. Sheet 16SWG

Internal : Alu sheet 16 SWG

Floor : Alu. - Chequered Plate 16 SWG

13. LADDER GALLOWS : Gallows to carry 10.5 mtr. long extension ladders

Lockers : Provide 2 on each side with shutter type doors.

Tool kit container : Will be provided

Stability : The stability of the appliance will be such that when fully equipped and in loaded condition, if the surface on which the appliance stands is tilted to either side, the point at which overturning occurs, is not passed at an angle of 30 deg. in the horizontal.

15. ACCESSORIES:

The following Accessories shall be fitted/provided on the appliance:

1. Grand Light Bar with PA system
2. Fog Lamp - 1 No.
3. Wind screen wipers.
4. Tools (Routine maintenance) – 1 set
5. Siren – 1 no

6. Search light with 30 mtrs cable reel - 1 No.
7. Spot light – 1 no.
8. Inspection Lamp with bracket - 1 No.
9. Tail lamps – 2 nos.
10. Rear reflectors

18. **ELECTRICAL SYSTEM** : Standard fittings, Electrical wiring, Flex box will be provided

19. **WORKMANSHIP & FINISH:** All parts of the appliance shall be of good Workmanship and shall have streamlined finish.

The appliance shall be painted in P.O Red colour.

20. **MARKING:** Fire vehicles will be clearly and permanently marked with the following information :

- i. Manufacturer's name
- ii. Capacity of the pump
- iii. Year of manufacture.

21. **EQUIPMENT:** The following equipment will be supplied with the vehicle.

S.No	Fire Equipment	Qty
1	Suction Hose 4 inch. With metal stainer	1
2	Aluminum extension ladder- 10.5 meteres	1
3	First Aid Box	1
4	Tool Kit and hydraulic jack 10 ton	1
5	Rubber lined delivery hose fitted (20M)	1
6	Fog Nozzle with applicator	1
7	Hose Rubber strap 10	1
8	Shovel GS 200 mm X 240 mm	1
9	Pick Axe fitted with wooden handle	1
10	Sledge hammer 6 kg	1
11	Suction Strainer	1
12	Basket Strainer	1
13	Fire Balnket (1.8 Mtr. X 1.8 mtr.)	1
14	High Voltage gloves	3
15	Set of metric & Imperial Wrenches	1
16	Crow bars	2
17	Large Axe	2

18	Shovels	2
19	Large bolt croppers	2
20	Insulated wire cutter	1
21	Haligon Tool	1
22	Search light complete with reel and Cable	1
23	Search light tripod	1
24	30 Meter general purpose line & bag	1
25	15 meter general purpose line & bag	1
26	Rescue line in a bag	1
27	Ceiling Hook	1
28	Claw hammer	1
29	General purpose Saw (Manual Operator)	1
30	Chain saw	1
31	45mm Delivery hose X 20m long with Storz couplings	4
32	65mm Delivery hose X 20m long with Storzcouplings	8
33	102mm X2.2 M suction hose	4
34	Suction wrenches	2
35	Breathing apparatus with spare cylinder	1
36	65MM double headed standpipe complete with key & Bar	1
37	65MM dividing breeching with instantaneous couplings	1
38	Various adaptors	1
39	Diffusor Branch	2
40	Hand control branch	2
41	Medium expansion foam making branch	2
42	Rechargeable head lamps	2
43	Foam inductor spill	1
44	Fire Suit with gloves, boots, helmets with suitable face shield mad out of material capable of reflecting at least 95% of radiant heat temperatures around 1500 to 2000 C and also afford some protection against direct flame. The suit will be of sufficient size to accommodate a breathing apparatus to users.	1
45	Disc Cutter	1