

# TOWABLE WATER CART

# GENERAL SPECIFICATION:-

- The equipment is to be used for Pumping Potable water into the Aircraft water Tanks.
- The Equipment is to be built on a Towable chassis with swivel Turn Table with applicable brake on front tyres.
- Water cart shall consists of Potable water Tank, a water pump, valves and Gauges, drain valve.

#### CHASSIS:-

- > 4 Wheels Towable chassis of 8'x4'size with Front and Rear axle.
- BRAKEASSY. : Brakes to be provided on front wheels and actuates on decoupling from tow tractor or trolley.
- ➤ CUSHION RUBBER TYRES: Size 4.00 x 8 x 3.75" width tyres with wheel rim dia 198 mm. These tyres have a soft core with hard rubber outside and at the rim ends to stand wear & tear. The front & rear wheel hubs are manufactured with fine grained Cast Iron machined on all sides fitted with taper roller bearings; inner bearing SKF
- > Diesel/Petrol Engine as Prime Mover to complete water servicing. The engine exhaust fitted a spark arrester
- > A battery double-pole isolation switch (main power cut-off switch)

#### WHEELS AND TYRES:-

- > Tyre Size: 4.80X4.00X8, Pneumatic
- > Wheels: 8 inch split rims
- > Brakes: Front wheel tow bar operated.

# **ENGINE:**-

The engine drives the centrifugal pump in order to supply potable water to the aircraft. The engine mounted adjacent to the pump compartment and has an integral tank and an electric starter. A 12 volt battery and supplies power for the engine starter. Operating control for the engine are located on the engine Type of Engine 4 strokes overhead valve one cylinder air-cooled gasoline engine with electric start Horse power, maximum 7Hp @1800RPM with Fuel Capacity 30 Litres.

#### TANKS:-

- The unit will have 1000 litre's tank. The tank will be made of 3 mm thick stainless steel (SS 304) material and will be easily washable. The inside fitting, welding, joints will have a smooth finish in order to avoid accumulation of sediments. The ends will be preferable dished spherically and the corners rounded to at lest a 75mm radius.
- > The bottom of the tank will be sloped towards the lower point and there will be a valve of at least 50 mm (2") diameters to drain the tank by gravity, which would be easily accessible.
- > The manhole diameter shall be atleast 400 mm. The tank fill point shall have a quick connect water fill coupling with cap.
- An atmospheric vent with filter shall be provided. The tank shall have a water level gauge, suitably protected and installed in proximity of the fill hose.



# SS WATER PUMP:-

> The SS water pump delivers water from the water tank to the aircraft. This pump is coupled to the engine and operates whenever the engine is running. The water pump will be directly connected to the outlet of the water tank. The water pump will be of centrifugal type and made of SS to avoid corrosion. The capacity of water pump shall be minimum 80-100 ltr/min at 3.2 Kg sq.cm (45psi) measured at the end of water delivery hose. There shall be a relief valve in the water delivery line.

#### WATER HOSE:-

> The potable delivery hose shall be 10 mtrs. Long and 19mm inside dia, fitted with Roylin Coupling at one end

## **OTHER FEATURES:**

- > The exhaust shall be fitted with spark arrestor and the vehicle shall be fitted with wooden chocks to prevent rolling of vehicle.
- > One (1) 2kg dry powder fire extinguisher.
- > Two sets of Manuals indicating bought out parts and source of supply for these parts.

## LIGHTING SYSTEM:-

> The unit to be provided with normal automotive lighting, yellow colour reflectors with beacon flasher. Adequate lighting will be provided in Area lights to facilitate working at night.





