Technical Data Sheet for Fire Truck with 5000-liter water & 500-Liter Foam Tank

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SUBJECT: This technical specification covers the technical specifications of the Medium Type Fire Truck with Water and Foam Tank, which will be used in the service of its facilities, with EN 1846 Certificate and in accordance with the norm of 2006/42 EC Machinery Directives.

2. UPPER EQUIPMENT SPECIFICATION:

2.1. BODY AND COMPERTMENT:

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2.1.1. The front and rear pump compartments will be constructed with at least 3 mm thick aluminum plates of at least 5754 series with a cross-section suitable for the ground and load. The lower base frame of the rear body pump area will be made of ST-52 sheet metal. The superstructure aluminum frames will be mounted to each other with a bolted system and welded manufacturing will not be performed in any way.
The compartments will be specially designed according to the maximum storage capacity and the location of the auxiliary equipment and accessories that will be supplied with the fire truck.
There will be a total of 4 roller shutters covers in the Front and Rear body compartments and at least 2 of which are side (right/left) and rear locker which accommodating the fire pump closed by an aluminum door which provides extra protection to the pump operator against rain and sun.
The side compartment doors will be opened and closed with a shutter system made of anodized aluminum material and there will be handles with safety locks. The shutters will be water and dust sealed. In addition, when the cabinet shutters are opened, the shutter will gather at the top and form a roll. In this way, the maximum cabinet volume will be achieved, the cabinet volume will be expanded and easy access to equipment and materials will be provided.
To climb the superstructure, a foldable aluminum ladder should be located on the rear right side of the vehicle.
There will be folding steps on the right and left sides of the cabinet. When opened, it will serve as a platform to access the upper shelves, and the inside of these steps will also be suitable for storage to be used when necessary. Flashing type marking lamps will be mounted on the sides of the steps so that the traffic passing by can see them when the steps are opened, and these warning lights will be automatically activated when the steps are opened.

- A sufficient number of hose rack compartments will be made in the rear cabinets for fire hoses.
- The lighting in the Right and Left compartment will be of LED type and will be hidden behind the shutter grooves. The lighting system will automatically turn on when the shutters are opened and will automatically deactivate when they are closed.
- There will be a sufficient number of LED type lighting in the ceiling panel on each compartment and also rear middle section where the pump area is located.

2.1.2. The top of the bodywork will be covered with checguard aluminum sheet, which is corrosion resistant and prevents slipping, so as not to hinder the walking of the personnel.
2.1.3. There will be enough LED type lighting lamps in the pump compartment and will automatically turn on&off when the shutters are opened and closed. The compartment lights and warning system for whether the side lamps, , will be controls from inside the chassis cabin
2.1.4. Firefighting equipment, tools, etc. inside the compartment will be equipped with fixed connections to be easily placed and taken to their places and to prevent the materials from falling while the vehicle is in motion.
2.1.5. All electrical cables passing through the vehicle shall be in a protected cable channel, with connections and connections protected from water that can be interfered with.
2.1.6. There will be a storage cabinet on the right or left on roof to put the suction hoses.
2.1.7. In order to climb onto the body, there will be an access ladder made of aluminum material, compatible with the bodywork, on the rear right of the vehicle.
2.1.8. There will be ladder beam gantries system on the roof of the body work for suitable aluminum ladder which will be deliver along with the vehicle.

3. WATER TANK:

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3.1. The tank to be mounted on the vehicle will have a capacity of at least 5000 liters with the material of Stainless Steel 304 L

Mounting: Heavy duty rubber silent-bloc absorbing any torsion on roughest terrain

3.2. There will be a sufficient number of breakwaters in the water tank to prevent turbulence, and the breakwaters will be of the same quality as the material used in the water tank.

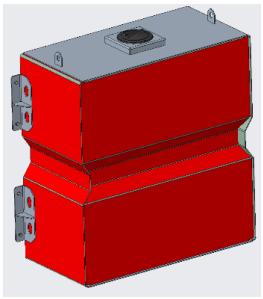
3.3. Existing breakwaters will be in such a way that they do not hinder the entry of personnel for cleaning and repair purposes.

3.4. The tank will have an air discharge (blowdown) pipe, and it will be designed in such a way that the water overflowing from the blowdown pipe does not come to the rear wheels of the vehicle. There will be 1 x 500mm manhole cover for personnel entrance for cleaning purposes on the tank.

3.5. A level indicator will be installed to show the amount of water in the tank, and it can be monitored from the pump control panel.

3.6. For tank filling on both sides of the tank, a hydrant with 2x 2.5inch BS coupling, made of stainless material, strainer and cover will be mounted, and the water inlets will be on the right and left of the water tank.

4. Foam Tank:



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4.1. Foam tank will have a capacity of 500 liters.

4.2. Material will be Stainless Steel 316 L and integrated in water tank

4.3. The tank will be constructed throughout including baffles in stainless steel plate.

4.4. An expansion dome will be incorporated into the top of the tank with a volume of at least 2% of the tank capacity.

4.5. Cover will be provided for inspection or top filling.

5. FIRE PUMP: JOHSTADT TO 3001

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5.1 Water Pump will be driven by PTO.

5.2. JOHSTADT Fire Fighting Centrifugal Pump EN 1028 with normal (10/15 bar) and high pressure pump (40 bar) on a single shaft made of stainless steel, mechanical seal, bearing without oil, central drainage.

5.3. The pump will have a Normal Pressure with a capacity of 3000 lt/min 10 Bar and 250 LPM@40 BAR

5.4. The pump will have an automatic piston priming system.

5.5. The pump will have rear fitted 4x 2.5-inch BS coupling fire outlet.

5.6. One pressure delivery points for hose reel

5.7. One outlet for the Roof Monitor

5.8. One external foam inlet.

5.6. There will be a foam mixing system on the pump that can proportion 3% and 6% venture type Manuel around the pump.

5.7. Suction connection will be 4 inch BS Coupling

5.8. The line extending from the water tank to the water pump will have a 5" butterfly valve.

5.9. There will be a 1.5'' ball valve filling line from the Water Pump to the Water Tank.

5.10. Pump control Panel will be easy to use and will be designed in a schematic way to guide the user. The instrument panel will have the following controlers;

- Normal pressure manometer,
- High Pressure Manometer
- Vacuummeter,
- Pump speed indicator
- Engine RPM
- water level indicator
- Foam level indicator with
- Gas Control Button
- Automatic Suction System Control Button
- Roof Monitor Valve on-off button
- Side lights On-Off button
- Emergency stop push button
- Priming push button.

6. FOAM PROPORTIONING SYSTEM:

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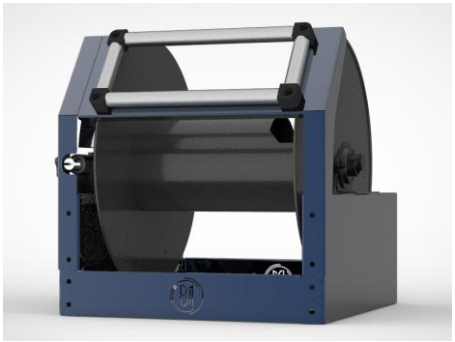
6.1. Foam proportion will be installed manual around the pump for foam proportioning. This system operates on principle of measuring pump and foam concentrate flow rat adjusts the foam mixing device to desired foam flow rate according to selected proportioning rates between 3% to 6% The foam/water solution will be discharged from all outlets of the vehicle. Foam mixing system will be made of corrosion resistant gunmetal and 316L grade stainless steel. Foam system is also capable of using foam from external source if required, suction capacity of external foam suction is 2 meters.

8. HOSE REEL:



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8.1. 2 unit On the right and left side of the pump, there will be 1inch 50-meter high pressure hose reel with 50 m rubber hose with 150 l/min nozzle – jet/spray nozzle
8.3. Handline nozzles will be attached at the end of the hoses.
8.4. While pulling the hose manually and rollback with an electrical system.
8.5. Hose reels will be equipped with guiding reels from the bottom and sides in order to protect the hose from sharp edges.

9. - MONITOR:

Control: manual control by hand wheels

Location: on the upper platform

Flow: 2400 L/min at 10 bar

Nozzle: Suitable for portable foam compound tube attachment.

Throw Range:

65-meter water and 55m Foam & Water mixture.

Rotation: 360°

Elevation: +70°

Depression: -10° (depending on shooting direction)

10. – PAINT:

10.1. The surfaces to be painted in all equipment will be thoroughly cleaned, the necessary places will be putty and after two coats of primer are applied, the exterior bodywork and module components will be Fire Brigade red RAL 3000 (same as the vehicle cabin).

10.2. All light and reflector systems in compliance with the Highway regulations will be installed in appropriate areas.

11. - ELECTRICAL SYSTEM:

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11.1 Superstructure electrical system will be supplied from chassis truck electrical system.

11.2 All cables used in the electrical installation will be color coded.

11.3 There will be an electrical panel to be installed in the rear compartment of the vehicle and the entire electrical system of the upper equipment will be fed through this panel. The panel will be waterproof.

11.4 The relays and fuses used on the electrical installation will be positioned so that they can be easily changed.

11.5 The vehicle is equipped with Red light bar type PA System installed on the top of the cabin, with 100w speaker, microphone, three sound siren with speaker.

11.6. There will be 2-unit RED strop light (Flashing lights) on Chassis truck front grill and rear part of the superstructure.

11.7. Area Lighting external with waterproof side lights for each compartment

11.8. All electrical cables will be ensured by passing them through pipes that are resistant to elastic breakage and bending.

11.9. There will be a sufficient number of LED type lighting in the material cabinets and the pump cabinet, and it will automatically flash when the shutters are opened and closed.
11.10. 5.4 Ton front electrical bumper winch with min. 26m cable.
11.11. 1 battery charger with 230 V plug

12. FIRE FIGHTING EQUIPMENT:

Could be supply and as an optional according to customer requested.