WATER TRUCKS

SPECIALISED SUPPORT EQUIPMENT
ETT Water Trucks

Over years of design, development and improvement, ETT Water Trucks have earned the reputation for being the most durable and reliable equipment in the field. Engineered from the ground up, ETT water trucks make use of high quality components and superior manufacturing techniques to ensure seamless performance in the toughest conditions.

<table>
<thead>
<tr>
<th>ARTICULATED TRUCK</th>
<th>CAPACITY LITRES</th>
<th>CAPACITY US GALLONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 Ton</td>
<td>23 000 L</td>
<td>6 000 gal.</td>
</tr>
<tr>
<td>30 Ton</td>
<td>27 000 L</td>
<td>7 100 gal.</td>
</tr>
<tr>
<td>35 Ton</td>
<td>30 000 L</td>
<td>8 000 gal.</td>
</tr>
<tr>
<td>40 Ton</td>
<td>35 000 L</td>
<td>9 200 gal.</td>
</tr>
<tr>
<td>45 Ton</td>
<td>38 000 L</td>
<td>10 000 gal.</td>
</tr>
<tr>
<td>50 Ton</td>
<td>42 000 L</td>
<td>11 000 gal.</td>
</tr>
<tr>
<td>60 Ton</td>
<td>50 000 L</td>
<td>13 200 gal.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIGID TRUCK</th>
<th>CAPACITY LITRES</th>
<th>CAPACITY US GALLONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 Ton</td>
<td>36 000 L</td>
<td>9 500 gal.</td>
</tr>
<tr>
<td>60 Ton</td>
<td>50 000 L</td>
<td>13 200 gal.</td>
</tr>
<tr>
<td>70 Ton</td>
<td>60 000 L</td>
<td>15 850 gal.</td>
</tr>
<tr>
<td>100 Ton</td>
<td>76 000 L</td>
<td>20 000 gal.</td>
</tr>
<tr>
<td>150 Ton</td>
<td>115 000 L</td>
<td>30 400 gal.</td>
</tr>
<tr>
<td>200 Ton</td>
<td>150 000 L</td>
<td>39 600 gal.</td>
</tr>
<tr>
<td>250 Ton</td>
<td>180 000 L</td>
<td>47 500 gal.</td>
</tr>
<tr>
<td>400 Ton</td>
<td>230 000 L</td>
<td>60 800 gal.</td>
</tr>
</tbody>
</table>
**DYNAMIC STABILITY**

**Maintain Balance**
ETT water trucks are designed to be a balanced sub-system of the truck frame that they are integrated to. Our engineers take great care to ensure that key OEM specifications including axle loadings, weight distribution and centre of mass positions of the standard configuration vehicle are not exceeded by the integrated design.

**Dynamic Stability**
ETT was founded over 20 years ago on the ability to design and manufacture ultra-low centre of mass off-highway tanker trucks. Our proven baffle systems are optimised through computational fluid dynamic analysis to manage payload surge in the tough off-highway conditions. This is a key competitive advantage that continues to this day. Modern ETT water trucks leverage this core capability to offer the lowest centre of mass water truck design per ton of payload in the industry.

**Stability**
ETT Water Trucks feature the lowest centre of mass in the industry.
- ETT water tanks are designed to conform to dynamic payload ratings to ensure machine handling in motion will remain nominal.
- ETT water tanks are designed to conform to chassis load ratings to ensure long machine life and nominal axle loadings.

**Surge Control**
The ETT internal baffle system forms the core of all our water tanks.
- Our baffle systems are specifically designed for maximum tank rigidity and longevity, whilst ensuring minimal fluid surge and slosh.
- Baffle aperture configuration controls fluid movement in all directions and allows large fluid carrying capacity whilst maintaining overall stability.
Corrosion Protection
ETT water tanks undergo comprehensive preparation and treatment to ensure maximum corrosion protection.

INTERNAL TREATMENT
• The tank is internally blasted to remove any impurities that might compromise the treatment.
• After cleaning, the tank is primed and all welds, crevices and corners receive a stripe coat.
• Finally the interior of the tank receives two coats of tank lining ultra-durable epoxy paint.

EXTERNAL TREATMENT
The exterior of the tank is fully blasted, primed and painted with two coats of polyurethane paint in the OEM colour. A detailed paint specification and method statement is available on request.

Filling
• The tank is filled through the large filling chute on the roof of the tank.
• The chute is covered with a steel grid designed to filter out large debris and can also be locked for safety.
• The chute also acts as an access manhole with an internal ladder.
• A self filling and priming kit is also available on request.

Mounting
• ETT water tanks are pinned to the vehicle chassis using the existing bin pivot mounting points.
• The tank rests on elastomeric pads that allow the chassis to naturally flex underneath the tank.
• The front of the tank is pinned to the hoist cylinders.

Access
• The pump compartment at the rear provides convenient ground level access for inspection and maintenance.
• The tank roof can be accessed through a stairway with safety railings.
• The tank is fitted with removable hand rails for safe access to the roof. This allows for easy inspection of roof mounted components and systems.
Spray Control
The ETT CAN Bus Control System delivers high reliability and durability with integrated system monitoring.
- Spray controlled through in cab full colour display providing information such as water level, spray mode and pump status.
- Fully programmable intermittent spray function.
- Ultrasonic water level meter with automatic low level pump cut-off switch.

Pump System
The ETT water pump assembly consists of a high capacity cast iron centrifugal pump and zero-maintenance bearing housing. The pump is driven by a high quality Parker Hydraulic piston motor. Precisely integrated with the truck hydraulics, the pump can run continuously with the addition of a hydraulic oil cooler and in-line oil filter.
- Standard water pump on 36kL and 50kL tanks: 3 200 L/min KSB.
- 76kL tanks and larger feature a 6 400 L/min pump as standard.
- Pump/Motor assembly is of a modular design for easy maintenance and component replacement.
- Parker hydraulic piston motor features soft stop/start system and shaft spider-coupling for increased service life.
- The pump compartment is spacious for easy maintenance and the doors can be locked with a padlock.
ETT Precision Spray
ETT Spray Systems can be precisely tuned to meet client requirements whilst remaining efficient.

The ETT Spray System is precisely set up to maximise water placement and minimise wastage. Flow rates are tuned to output large water droplets that are less susceptible to wind displacement.

Spray width can be adjusted to cover half or entire haul roads, minimising the amount of water wasted on the side of the road.

<table>
<thead>
<tr>
<th>TANK SIZE</th>
<th>SPRAY WIDTH</th>
</tr>
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<tbody>
<tr>
<td>36 000 L</td>
<td>16 m</td>
</tr>
<tr>
<td>50 000 L</td>
<td>18 m</td>
</tr>
<tr>
<td>76 000 L</td>
<td>22 m</td>
</tr>
<tr>
<td>115 000 L +</td>
<td>26 m</td>
</tr>
</tbody>
</table>

ETT Standard Spray Head
The ETT Spray Head is fitted with 3 to 5, heavy duty 1” brass nozzles. The spray head is designed to allow for easy angle adjustment and nozzle replacement and maintenance.

Optional Magnum Spray Head
The Magnum Spray Head Valve allows for precise control over water output. Each spray head can be individually activated to optimise water delivery. Magnum spray heads are constructed from durable marine grade alloys, providing superior performance.

Injection Spray Bar
The optional ETT Injection spray bar sits only 400mm off the ground and injects high speed water into the road surface. The ETT Injection spray bar is ideal for mines or construction sites in windy areas as wind has minimal influence on the spray.

Spray width is not fixed and can easily be adjusted to client specification on all tank sizes.
**Graphic User Interface**
Tank parameters and other vital information is displayed on the full colour back-lit ETT in-cab display. Primary functions such as rear spray bar activation, injection spray bar activation and water cannon activation is also controlled and indicated on the monitor.

**ETT Water Kit**
The ETT water kit is completely modular and can be fitted to old ETT water tanks in need of refurbishment and any water tank from other tank manufacturers.
The water kit consists of:
- Water pump and hydraulic drive motor.
- Rear Spray bars.
- All piping and required valves and connectors.
- Full installation and retrofit.
- The ETT Heavy Duty Water Cannon can also be included in the kit.

**Intermittent Spray**
Haul truck performance and safety on steep grades is paramount in any open cast mining operation.
The ETT Intermittent Spray function ensures safe ascent and descent for heavy vehicles by minimising potential wet road slipping segments by allowing for strategic dry road intervals.
The ETT intermittent spray is fully programmable to meet site requirements and preset programs can be stored and activated for individual pit ramp requirements.

**Firefighting Hoses and Hydrant Valves**
ETT water tanks can be equipped with high quality firefighting equipment for on-site emergencies.
- 3" Lay flat firefighting hoses.
- Hoses stored in lockable compartment with convenient ground level access.
- Straight tip firefighting nozzle.

**Graphic User Interface**
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On-site assembly
ETT water tanks are shipped as a kit for easy on-site assembly. All components and fittings required for installation is supplied with the kit.

Once the tank arrives on site, an ETT technician will arrive to assist with installation, commissioning and technical training.

ETT water tanks are designed for easy installation onto the truck chassis. The unit is pinned to the rear bin pivot points and the front is bolted to the chassis where the hoist cylinders would connect.

Factory installation
Smaller water tanks allow for full assembly at our factory. The fully assembled water truck is then transported as a unit to the destination.

An ETT technician will be available for operator and product maintenance training.

Technical manuals
- Parts list and illustrations.
A printed copy is provided with each product, digital copies are available on request.

Spare parts
The ETT Spares Kit contains select components that are essential for machine operation. The ETT Spares Kit contains essential spare parts that can be kept on site to reduce waiting periods and minimise down time.

Parts Order
In the parts manual included with the water truck is a complete list of all parts and assemblies available for order at parts@ett.com
Firefighting Foam Tank and Nozzle Kit
The firefighting foam kit is available for both manual and remote water cannons. With the remote cannon the foam system can remotely activate from inside the cab.
1. Foam tank 3% of total tank capacity.
2. Stainless steel foam tank integrated into main tank compartment.
3. Compatible with either manual or remote cannon.
4. Foam activation from inside cab with remote cannon.
5. Ground level foam filler pipe.

Heavy Duty Water Cannon
The ETT HEAVY DUTY WATER CANNON features all polished stainless steel construction and high quality seals to ensure reliable operation in the most extreme environments. The fully sealed zero maintenance swivel joints and heavy duty components ensure that the water cannon is always ready for use in emergency situations.

Remote Operated Water Cannon
1. Electric joystick controller in cab.
2. Sealed zero maintenance seals and drive system inside greased swivel joints.
3. Choice of electric or hydraulic drive motors.
4. Motors drive heavy duty worm gears for precise control.

Manual Water Cannon
1. Mounted on the roof of the tank.
2. Easy control with cannon handle.
4. Tank roof can be fitted with railings for operator safety.

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