General Description

The Accubowl Bulk Explosives Vehicle (BEV) is designed to provide a complete range of bulk explosive products direct to the blast hole.

The truck consists of a Volvo FM12 8x4 cab-chassis with a nominal 5,600mm wheel base with agitator bowl, hopper and auger systems mounted on the back.

The truck is designed to incorporate a large bowl to maximise the carrying capacity and thereby minimise turn around times.

Discharge rates are optimised for 250mm diameter and greater blast holes.

Raw Materials blended in the agitator bowl are as follows:

- Ammonium Nitrate Prill
- Bulking Agent
- TITAN® Series Emulsion
- Diesel Fuel

Products

The range of bulk explosives available from the truck comprise ANFO, Heavy ANFO and low density BlastLite® products. All products are discharged through the discharge auger for optimum rate/accuracy.

- ANFO
- Heavy ANFO
- BlastLite
- TITAN BlastLite

Safety Systems

An emergency stop is provided at the main panel in the cab and on the end of the discharge auger.
Nominal Capacities

<table>
<thead>
<tr>
<th>Bin/Tank</th>
<th>Flow Rate Min-Max kg/Min</th>
<th>Density kg/cubic metre</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN/ANFO</td>
<td>14,000</td>
<td>500 – 1,200</td>
</tr>
<tr>
<td>FUEL OIL</td>
<td>1,000</td>
<td>3 – 120</td>
</tr>
<tr>
<td>PRODUCT HOPPER</td>
<td>400</td>
<td>1350</td>
</tr>
<tr>
<td>WATER TANK (Hand Wash)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Control Systems

A complete in-cab control system is provided. The main panel is mounted to the driver’s left and contains all safety shut downs, indicator lights and flow and rate indicators.

It is supplemented by a right-hand side remote panel that contains controls that are required to be used more often. It is mounted in a position based upon ergonomic principles, which allows the operator full control of the loading functions without twisting of the back or neck.

Cab Chassis

The Cab-Chassis selected for this application is a Volvo FM12 - 8x4. This has been selected due to its combination of load carrying capacity and off road tractability.

The chassis has been proven over a period of years service.

The axle ratings allow a large capacity to be carried on the mine site:

Front Axle: 15 Tonnes
Rear Axle: 26 Tonnes

Transmission is selected to give good low speed tractability.

Tyres are Bridgestone 11.00 x 22.5. These are standardised across the fleet. These are mounted on ISO 10 stud rims.
Vehicle History

The Accubowl truck has developed over a number of years of product experience in Australia to meet the challenge of products including the BlastLite Low Density product range in large-scale on-site operations.

The current standard truck has been established as a benchmark design within Dyno Nobel’s Global Operations. The process and control equipment are fabricated and supported through IEE, from Perth WA.

The units are directly supported under DNAP’s SAP based maintenance planning, scheduling and controlling system.

The Accubowl Truck design is fully licensed for operation in all states in Australia.