

QUAD Truck

Technical Information



General Description

The 10.3 Tonne QUAD Bulk Explosives Vehicle (BEV) is specially designed to provide a complete range of bulk explosive products direct to the blasthole, including BlastLite®.

The truck consists of a MAN series 8 x 8 cab-chassis with a nominal 5,600mm wheel base with segregated product bins and pump and auger systems mounted on the back.

The truck is designed to incorporate product bins for maximum flexibility on-shot and thereby minimise turn around times.

Discharge rates are optimised for 100mm diameter and greater blastholes.

Raw Materials carried in the bins are as follows:

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

Properties

Products

The full range of bulk explosives available from the truck comprise ANFO, Heavy ANFO to wet condition emulsion blends.

<u>Product</u>	<u>Discharge Method</u>
ANFO	Auger Discharge
Heavy ANFO	Auger Discharge
BlastLite®	Auger Discharge
Gassed Emulsion	Down Hole Pump
TITAN BlastLite	Auger Discharge

Safety Systems

No flow indication and high pressure detection are provided on the discharge of the emulsion and product pumps.

On detection of no flow or high pressure during normal running the pumps are stopped immediately, an indicator light in the cab warns the driver.

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

QUAD Truck

Technical Information



Nominal Capacities

	Bin/Tank (Kg)	Flow Rate Min-Max (kg/Min)
AN	4,100	100 - 500
BULK AGENT	1,080	25 - 125
FUEL OIL	560	10 - 50
EMULSION	4,500	100 - 300
TRACE N17	120	0.1 - 1.5
TRACE N33/L3	120	0.1 - 1.5
PRODUCT PUMP		100 - 250

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 MAN 8x8. 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:	15.5 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.

QUAD Truck

Technical Information



Vehicle History

The QUAD truck has developed over a number of years of product experience in Australia to meet the challenge of delivering a wide range of products including the BlastLite Low Density related products.

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



The information and suggestions contained in this document concern explosive products that should only be dealt with by persons having the appropriate technical skills, training and licence. The results obtained from the use of such products depend to a large degree on the conditions under which the products are stored, transported and used.

While Dyno Nobel makes every effort to ensure the details contained in the document are as accurate as possible, the conditions under which the products are used are not within its control. Each user is responsible for being aware of the details in the document and the product applications in the specific context of the intended use. If technical advice is required in the specific application of the products then you should contact Dyno Nobel for assistance.

Dyno Nobel makes no warranties in relation to the products it sells other than those implied by law. Except to the extent determined by law, Dyno Nobel bears no risk, responsibility or liability arising from the use of the products and the information in this document by the buyer or user of the products.

Dyno Nobel Asia Pacific Ltd. © 2005 Reproduction without permission strictly prohibited.

VERSION NO.: 1.0

Last Updated: 06/05

DYNO NOBEL
Asia Pacific Limited

Level 20, AGL Centre, 111 Pacific Hwy,
North Sydney, NSW 2059
Australia

DYNO
Dyno Nobel

Groundbreaking Performance