

bhsl 

bhsl Toploader

The New Innovative Bulk Material Handling Solution

Patent Number EU 0882390



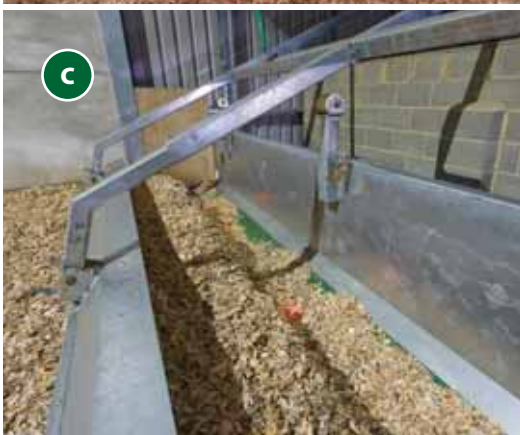


The patented bhs Toploader is an innovative and economical system of storing and dispensing large volumes of biomass, agricultural and waste products.

bhs offer a number of different size Toploaders which have been designed to deal with all volumes and types of biofuels. The Toploader is available in sizes of 6.0m, 5.0m and 4.0m and will provide a durable and reliable system to assure maximum efficiency and profitability in your business.

bhs Toploaders have been developed for efficient performance and reliability by utilising an innovative mechanical design. The Toploader can be designed as a stand alone unit or multiple in-line units.

THE TOPLOADERS ARE EXTREMELY VERSATILE AND CAN BE INSTALLED IN ANY NEW CONSTRUCTION, RETRO FIT INTO EXISTING BUILDINGS OR CAN BE DESIGNED AS A STAND ALONE COVERED UNIT



A More energy efficient than any other type of material handling systems, the Toploader is mounted on a dual rail track system above the storage bunker.

B The carriage of the Toploader sits on the rails and travels back and forth along the rails. Mounted on the carriage is a blade which spans the storage bunker; this blade moves up and down.

C As the carriage moves forward the blade comes down and into contact with the material in the bunker. The blade then scrapes an amount off the top of the material and deposits this into a collector or conveyor at the end of the bunker.

D The material is then dispensed as required. The Toploader is controlled by a PLC and software designed to suit the client's application

Because the Toploader is scraping material off the top and depositing a controlled amount into the collector or conveyor there is no requirement to move all the material in the bunker.

Moving floors and walking floors both typically have to expend energy to move all the material in the storage bunker to deliver a small amount to the conveyor.

Power requirements of the Toploader are minimal: one Toploader has the capacity to move approximately 36 tonnes of wood chips per day.

The Toploader utilizes an over head cable management system; this ensures that all wiring and cable controls are safely secured and free from hazards.



Unlike the moving floor systems where all the mechanical parts are inaccessible below the material in the storage bunker, the Toploader moving parts are all easily accessible overhead.

Consequently any preventive or reactive maintenance can be performed quickly and without the need to remove material from the bunker.

The Toploader material storage bunker walls can be concrete or wood.

The smooth walls of the storage bunkers prevent any material remaining in the storage bunker.

The storage bunker is easily accessible to fuel delivery vehicles.

The bhsI Toploader is simple to use and will reduce operating costs by reducing manpower requirements.



bhsI offer a number of **additional upgrade** options to the basic system.

These include:

- > Installation of CCTV
- > Remote monitoring by bhsI technicians
- > Remote interventions by bhsI technicians
- > Customer access to bhsI Toploader operation screen
- > Operation and maintenance contract.

All bhsI Toploaders are tested prior to shipment to site and each system is installed by qualified bhsI technicians.

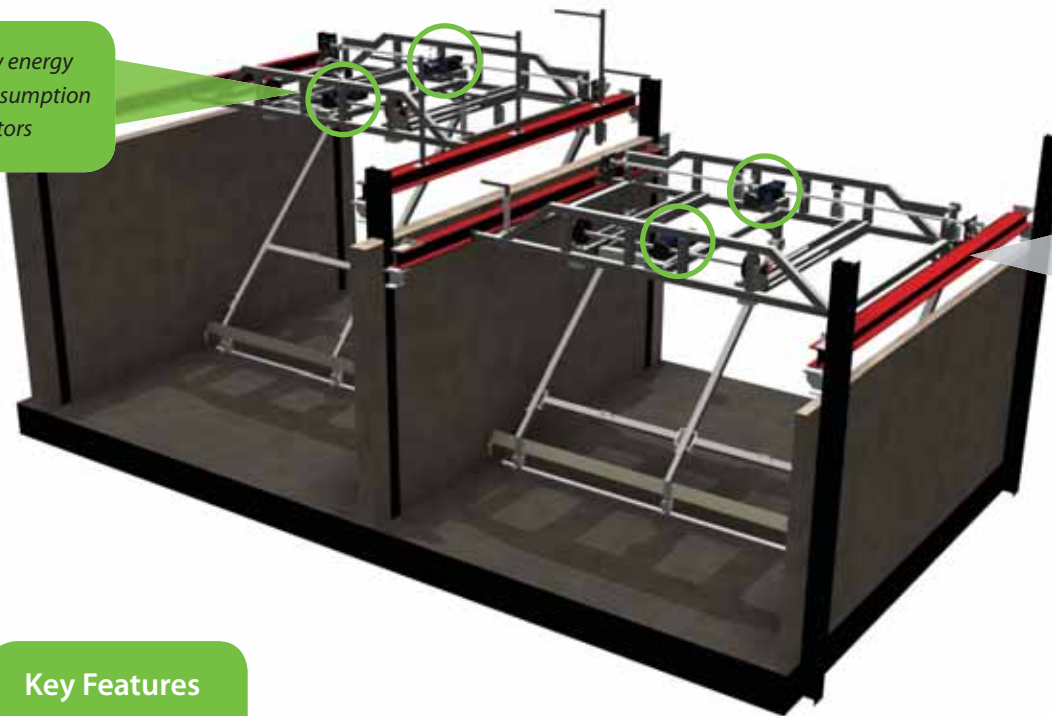
Every bhsI Toploader comes with a 12 month warranty.

Technical Specifications

TWIN TOPLOADER ARRANGEMENT

Length	Variable to suit application.
Width	6.0m, 5.0m, 4.0m (Can be adjusted +/- 125mm)
Max Fuel Height	4.00m
Capacity	Variable m ³ per stroke depending upon model

Low energy consumption motors



The **bhsl Toploader** utilizes an overhead cable management system

Key Features

- > Ability to drive fuel delivery vehicles into the storage bunker
- > Stage Bunker optimization through Toploader fuel stacking capability
- > Patented material moving system for the automatic handling of bulk materials
- > Variable sizes to suit requirement
- > Storage capacity up to 4.0m high
- > High reliability
- > Competitively priced compared to moving or walking floors
- > No (extra) wear and tear due to dust or moisture
- > Low energy consumption compared to other material handling systems

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