



## Leaders in Cleaning Technology

- Ground Support Equipment ■
- Solid & Liquid Waste Management ■
- Hydraulic Aerial Platforms ■
- Tractor Impliments ■



Manufactures of Agricultural, Industrial,  
Constructional Hydraulic Equipments  
& Sewer Cleaning Machines



# About Beco

Bilal Engineering Company (BECO) is in operation since 1987 in Gujranwala, an industrial city in the north-east of the Punjab province of Pakistan, as manufacturers of agricultural, industrial, constructional, hydraulic equipment and sewer cleaning machines. Built on the traditional Grand Trunk Road, Opposite Rescue 1122 office, Lohianwala Bypass, BECO is easily accessible by our valued customers.







## The Plant

BECO has grown to become a leading company in the industry operating from a modern manufacturing plant equipped with state-of-the-art machinery and staff expertise to meet the expanding needs of our customers. The plant guarantees first class production, dependability and responsive service making BECO a recognized market leader in cleaning technologies.

## Customers

BECO prides itself on customer care. We strive to build trust through a positive working relationship with our clients to nurture a long-term and successful partnership.

Our machinery is at work in the country's municipalities, housing authorities, development authorities, water and sanitation agencies, armed forces, cantonment boards, aviation and public health engineering departments getting the job done with reliability, consistency, cost-effectiveness and safety. Our products are also in use in Afghanistan, Bangladesh, Sri Lanka and South Africa winning laurels for the country in customers' liking.



## The Products

We design, manufacture and import a superb and wide range of high-end equipment and accessories to meet the demands of a competitive industry. Our products include Catering High Loader Truck, Sewer Suction Machine, Sewer Jetting Machine, Garbage Compactor, Hydraulic Aerial Platform, PackMore, Front End Loader, Back Hoe, Hydraulic Tipping Trolley, Water Bowser and Dump Truck.

## Quality Control

We ensure the implementation of standardized tests of the performance, safety and environmental aspects of machinery and tools. The tests, based on national and international standards, provide us with useful information on ways to improve our machinery and allow users to make an informed choice when purchasing new machinery.







## Training to our employees and customers

BECO provides technical and non-technical heavy machinery training to its employees and customers to facilitate optimum use of the equipment.

We train operators, maintenance personnel and engineers, giving them the necessary knowledge and resources to adequately operate and maintain a machine.

## Research and Development

We continue raising the bar for ourselves. We work passionately to ensure customers' satisfaction. We bring together researchers from a broad range of disciplines who collaborate towards building innovative solutions, and equipment evaluation and development spurring technological advances in all areas of traditional farming and cleaning practices.

This department helped us introduce sewer suction machine, sewer jetting machine, hydraulic aerial platform and packmore in Pakistan. Before the production at BECO, these machines were imported in Pakistan. New mechanical, electrical and software upgrades become available as we strive for continuous development.





# Ground Support Equipments



Catering High Loader Truck  
Ambu Lifter Truck  
Lavatory Truck  
Self-Propelled Passengers Stair

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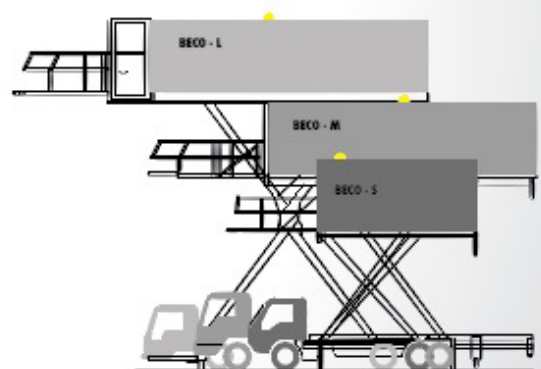




## Catering High Loader Truck

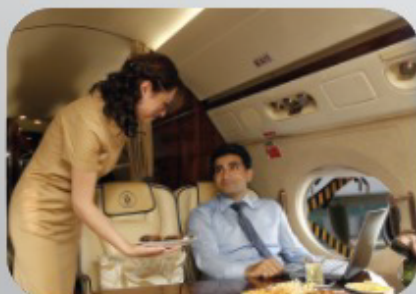
BECO is the first company in the region to provide High Loader Catering trucks which are used to load food and equipment onto the aircraft by raising the complete body hydraulically to the lower level of the doors enabling meal trolleys to be loaded and empty trolleys removed. The safety of both the operators of the vehicles and the aircraft themselves is a prime consideration during the design process of the High Loaders which include stringent safety features.

The front platforms of our High Lift Catering vehicles are configured appropriately for different applications with passage widths from 760 mm to 2,400 mm. The box body is executed in a "sandwich design". Optionally refrigeration boxes with a cooling system are also offered. Hydraulic outriggers provide our vehicles with the necessary stability to withstand wind speeds of 50 to 60 knots, depending on the vehicle type. We only use high-quality components from well-known suppliers that meet the requirements for a hi-lift catering vehicle.



### Lifting Heights

- 6- A340, B444, B747,...
- 5- MD11, DC10, A310,...
- 4- B767, B757, A321, A320,...
- 3- B727, B737, MD80,...
- 2- F100, F28, ATR RJ, Saab 340,...
- 1- F27,...





## Ambu Lifter Truck

Medical Lifts are used for the transportation of passengers with restricted mobility. The travelling persons are taken on board with the lift at ground level and comfortable transfer from the Medical Lift into the aircraft is possible after lifting.

### TECHNOLOGY

Platform design for outside aircraft stairs  
Rear lift with fall-arrest  
Extensive inside medical equipment  
Authorised for airports and public roads up to 80 km/h  
Person transfer possible from the airport directly to the hospital  
Standard chassis with high flexibility due to the small turning radius



## Lavatory Truck

The BECO Toilet Service Truck has been specially designed to service the toilet tank of all aircraft types, including wide bodied jets, based on the vacuum evacuation principle. The range includes 4500 liters capacity & 3000 Liters capacity Units.

### TECHNICAL SPECIFICATIONS

3000 Liters Capacity Units	4500 Liters Capacity Units
2000 liter effluent	3000 liter effluent
1000 liter flushing water	1500 liter flushing water

### SPECIFICATION

- Vacuum Based evacuation system
- Hydraulic tail lift
- Waste tank mounted in tandem with flush tank.
- Complete assembly attached to vehicle chassis via independent mounts.
- Top surface covered with aluminium tread-plate supported on a tubular frame, secured to the tank top ensuring easy access to the aircraft servicing points.
- Water services are provided via power take-off, which is engaged or disengaged within the vehicle cab. This drives a hydraulic pump and motor which operates the water pump.





## Self-Propelled Passengers Stair

Overall Length:	10000 mm (approx)
Overall Width:	1995 mm (approx)
Overall Height:	2300mm (Transport mode)
Step Width:	1100mm x 325mm (approx)
Platform size:	1575 (Width) x 2000 (Length) mm (approx)
Maximum Reach:	4000 mm



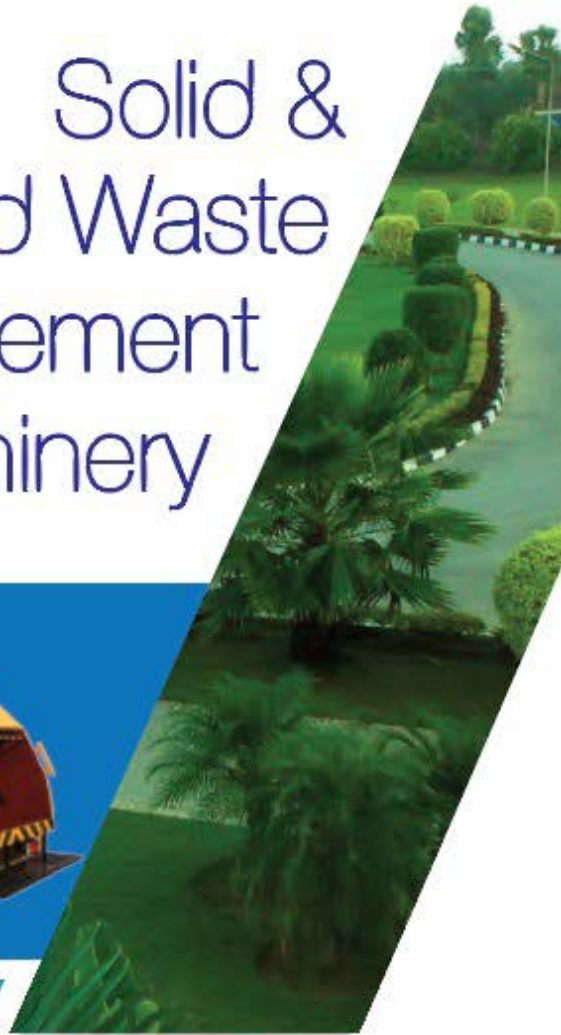
Outriggers:	4nr with imported honed steel tube & chrome plated shafts for stability during operation
Lift Cylinders:	2 nr with imported honed steel tube & chrome plated shafts fitted with pilot operated check valves
Control Valve:	II-spool double action control valve with built-in relief valve provided at base (Italian Origin)
Power:	Through Power Take Off of Transmission. The power take of should be electronic control shift type (12/24 volt DC Operated) with its control switch located in driver's cabin. The PTO should be of Italy Origin
Hydraulic Pump:	Closed coupled with PTO, Gear/Piston type with 30-40cc/rev flow & 250-300 bar pressure. Pump should be of Italy origin
Hydraulic Oil Tank:	50-60 liter capacity with breather cap and oil level & temperature gauge.
Emergency Hand Pump:	Will be provided at base of platform for lowering of pax step in case of Emergency (Italian Origin)







# Solid & Liquid Waste Management Machinery



Garbage Compactor  
Mini Tipper  
Road Washer  
Combined  
Jet-Vac Machine

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## Combined Sewer Suction & Jetting Unit

Sewer systems need regular cleaning, especially during storms when an abundance of debris tends to collect in sewer drains. Sewer jet cleaning uses high-pressure water nozzles to effectively flush out dirt, litter, sludge, and any other form of garbage from pipelines. Jetting releases water at high pressure to dislodge dirt and debris and flush it into containment vessels. Vacuuming uses a system of air-based pressure to suck out dirt and collect it for disposal. Combination sewer cleaners employ both of these systems; the water removes the dirt and the vacuum sucks it up.

BECO high-pressure combined jet-vac machines are ideal for removing stones, bottles, cans, grease, sludge, and other debris from sanitary sewer and/or storm drain lines by the flushing action of high-pressure water. Combined Jet-Vac machines are equipped with a self-contained water tank & waste tank and can be operated by one man, with all operating controls for high-pressure water, hose reel, located at the front of the machine for ease of operation and more safety.



## Sewer Suction Machine

BECO sludge suction unit efficiently suck-up, safely transport & then by the use of hydraulic hygienic power discharge the viscous & semi-viscous material that are results of cleaning & maintenance operation in sewerage lines, manholes etc.



## Sewer Jetting Machine

BECO high pressure Water Jetting Machines are ideal for removing sludge, stone, bottles, cans, grease, & other debris from sewer and/or storm lines from 4" to 48" by the flashing action of high nearly effortless task-especially for cleaning drains that are heavily used, even for grease. The operation is carried out by a specially designed nozzle.





## Road Washer Trucks

The BECO Road Washer Trucks are especially designed for high pressure washing and sanitation of public roads. High Pressure Road Washer can cope not only with public street cleaning but as a solution for large industrial areas, resorts or wherever else hygiene is required.

A Mild Steel/ Stainless Steel water tank capable of holding 2000-15000 litres water (depending upon the base vehicle) coupled with compact dimensions and high maneuverability makes BECO Road Washer Truck a unique machine in its category, both in working autonomy and versatility. It is ideal to clean both large roads as well as small streets. Washing is done by means of a stainless steel spray bar positioned in front of the cabin. The BECO Road Washer Trucks are also equipped with a hand spray gun to reach difficult areas or to clean walls.





## Fuel Bowser

The range of our fuel bowser consists from 500 Gallons to 2500 Gallons & are equipped with wide range of accessories that includes pto driven self priming Suction/delivery Pumps, wide range of DC driven dispensing unit, flow meters, nozzles, water separators & diesel filters to match the versatile requirements of clients. Our range of fuel bowzers provide added environmental protection by enclosing all pumps, valves and other fittings inside the bunded area, giving full environmental protection.



## Water Bowser

The tow-able Water Bowzers are the perfect solution for transporting liquid-based loads, such as water and fuel, in a safe manner. Tow-able bowzers have been designed in such a way that you can simply tow it around site with a tractor and spray of water onto the surface. It can even be used as a stationary piece of equipment to keep a specific area moist. Can be used to supply water for: watering shrubs, trees & general horticultural use. The larger models can be used for spraying operations etc.





## Garbage Compactor

The BECO Compactor bodies come in different volumes from 4m<sup>3</sup> to 16m<sup>3</sup>. All are made up of high-grade steel and are fully reinforced for years of heavy-duty work.

The special construction and technical set-up make the noise level very low and thanks to an electrically controlled sequential system and a discontinuous cycling system very low energy consumption is achieved.



Garbage Compactor cum dump trucks, as the name indicates, are combination of Garbage compactor Trucks & dump Trucks. Unique design of this equipment allows manual loading of garbage as well as Loading through bulk waste lifting machines like Front End Loaders, Excavators, backhoes etc resulting a rapid waste collection & compaction process.

## Dump Truck with Compaction Arm





## Dump Trucks

Dump bodies, as the name implies, are equipped with underbody hoists / Front Mounted Telescopic Cylinders and are used in any application where bulk product / Heavy load (such as soil, sand, stone, gravel, solid waste, mulch, hot asphalt in construction, road-building and surface mining applications etc) is to be transported & unloaded quickly, easily and cost effectively.



## Mini Tippers

Tipping bodies can range from the very small to the very large, and all in between. Heavy steel construction and PTO operated for the larger trucks, or light alloy and power pack operated for the smaller vehicles, any size any construction, we have them all covered. We can also do side or 3 way tippers for the difficult to get at areas.

One of our most efficacious products is the 1 cum capacity hydraulic tipper either mounted on Suzuki 800 cc pickup or equaling commercial chassis used for quick and efficient door to door collection and removal of garbage and cleaning of street vats, designed to facilitate the mobility of heavy loads in spaces reduced.





# Hydraulic Aerial Platforms



Telescopic Platforms  
Articulated Platforms  
Towable Platforms  
Scissor Lifts

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## Articulated Aerial Platforms

An Aerial Hydraulic Work Platform is a device used to provide temporary access for people or equipment to inaccessible areas, usually at height. They are generally used for flexible access purposes such as maintenance and construction work. They are designed to lift limited weights (usually around 200kg / two men pay load). BECO AWP are capable of being fully operated by a single person.



## Telescopic Aerial Platforms

The hydraulic telescopic boom enables quick access speeds and therefore increased work productivity. Telescopic boom provides maximum horizontal outreach comparing to articulated design platforms.

Regardless of the task they are used for, aerial work platforms may provide additional features beyond transport and access, including being equipped with electrical outlets or compressed air connectors for power tools. They may also be equipped with specialist equipment, such as carrying frames for window glass.





## Tractor Towable Aerial Platform



## Scissor Lifts

Scissor Lifts are the industry solution for increasing worksite productivity. Ideal for maneuvering in tight spaces, they're excellent for indoor and outdoor construction, maintenance and installation applications with firm, level surfaces. Characterized by low noise levels, these lifts provide excellent capacity and large platform workspace.





# Tractor Impliments



Back Hoe  
Water Bowser  
Hydraulic  
Tripping Trolley  
Front End Loader

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## Front End Loader

Multi-purpose rugged & powerful machine for loading stone, brick crush, garbage, sand, grains etc.

Hydraulic operated

Quick attachable & de-attach at front of tractor

Different models available with lifting capacity varying from 750kg to 2000kg depending upon the tractor.



### Front End Loader

- Multi-purpose rugged & powerful machine for loading stone, brick crush, garbage, sand, grains etc.
- Hydraulic operated
- Quick attachable & de-attach at front of tractor
- Different models available with lifting capacity varying from 750kg to 2000kg depending upon the tractor.
- Earth digging bucket with replaceable teeth
- 2 double acting rams for lifting & 2 double acting ram for bucket tilting
- Lift rams & bucket rams with imported honed steel tube & chrome plated shafts
- II-spool, mono-block double actions control valve with adjustable relief valve (Italy/USA)
- Different models available with optional accessories like independent Hydraulic Pump, Oil reserve tank, Counter Weight Box, Canopy of tractor and change of Front Tires, Rims & hubs to Heavy Duty.





## BackHoe

Multi-purpose machine primarily used for excavation below natural surface of ground on which it rest.

Excavate trenches and pits for basement with speed & precise control of depth in soft and medium soil  
Bucket capacity ranging from 0.85M3 to 0.14M3



## Water Bowser

The tow-able Water Bowsers are the perfect solution for transporting liquid-based loads, such as water and fuel, in a safe manner.



## Hydraulic Tipping Trolley

A Multipurpose rugged & powerful machine which can be quickly attached/detached at rear of tractor used for transportation of Garbage, Stone, bricks, Sand, Grains, etc.

