

Perlite Presentation 2015



The Leading Industrial Services Contractor

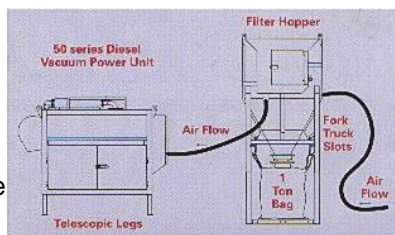
The Industrial Services Division within Future Industrial Services provides leading innovative industrial cleaning services for removal & recharging of Perlite from cold boxes & heat exchangers to some of the world's largest multi-national companies.

The key to our success lies in having the most advanced technology and a team of highly qualified and dedicated people with the right skills, training and a can-do attitude. We work in close partnership with our clients to achieve the most appropriate solution, creating time and cost efficiencies, as well reducing downtime and increasing overall production uptime.

Our Perlite Unloading & Loading Services

Cold Box Extraction & Re-Charge of Expanded *Perlite*.

- Future Industrial use proven vacuum equipment & Big bag Loading equipment to remove the Perlite.
- This process utilises specially designed equipment which minimises confined space entry and dust emissions from the bag loading.
- The standard hopper has a capacity of 3 cubic metres and is designed to be transported by standard lorry in the upright position or by skip lorry laid on its side.
- Filter Hopper - similar to the standard hopper in design it has an integral filter & filter cleaning system. It produces a very clean, dust free collection of waste for onward disposal & is ideal for dry, light dusts, arresting all material and discharging into big bags or similar.
- Air or nitrogen is used to blow the filter bags on the Filter Hopper, through to clean them.
- All equipment and vacuum pipework are earthed and continuity checked before any work starts.



Industrial services

- HP and UHP Water Jetting
- Heat Exchanger Cleaning
- Non Man Entry Vessel Cleaning
- Confined space entry
- Air Conveyance Units
- Vacuumation
- Catalyst recovery
- Cold Cutting
- Drain Cleaning, CCTV Survey & Relining
- Mobile dewatering
- Sludge management
- 24hr Emergency response
- Gas free certification

Additional Services

- Chemical Cleaning
- Vapour Phase Decontamination
- Liquid Phase Decontamination
- Fin Fan Cleaning
- Pipeline Pigging
- Hydro-testing
- Air / Nitrogen Drying
- Vacuum Drying
- Waste water mobile treatment units
- Membrane Filter Press



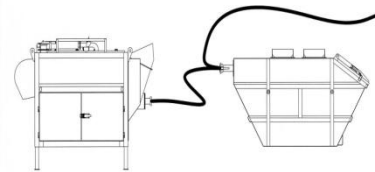
Unloading

The Filter Hoppers are ideal for collecting dusty material like fly ash, perlite, carbon etc.

The Hopper's big filter area stops all dust larger than 1 micron, protecting the vacuum equipment from contamination. Its steep walls and 12" valve allow material to be easily deposited into 1-ton bags, dust free.

This dust free system creates a healthy and professional working environment, protecting your own workers and other site personnel.

All Filter Hoppers come with full handrails and a top fold down Filter Change safety frame. This allows easy compliance with Working at Height regulations if filters require removing for cleaning/ repair/ replacement.



50 Series Diesel Vacuum Machine Specifications	
Fuel Consumption - Tank holds 200 litres	2 gallons per hour or 10 - 12 litres per hour
Power	Perkins 1104-44 or JCB 44C TCIPU
Airflow	2,200 to 2,750 cubic metres per hour (1,300 - 1,618 cfm)
Maximum Vacuum	500 millibars
Vacuum Suction Line	4" - 5"

30 Series Electric Vacuum Machine

The 30 Series Electric is the largest vacuum machine that can be plugged into a 63amp supply.

Electricity supply required:

Voltage - 415V, 3 phase

Ampere - 63 amp, 3 phase is the minimum supply requirement

Power

30kw/40hp electric motor directly coupled to a roots positive exhauster.



Pump Performance at Inlet Conditions

Air velocity at metres/sec 100mm hose	Air flow m ³ /hr	Air Flow cfm	Suction m/bars
75	1,800	1,060	100
63	1,250	736	500

Loading

- Future can arrange delivery of Perlite to site via tanker where the material is then blown into the vessel via earthed 4" hoses.
- Sonic waves are used during the loading process to aid material flow and eliminate voids forming.
- An acoustic cleaner consists of a sound source similar to an air horn found on trucks and trains, attached to the material-handling equipment, which directs a loud sound into the interior. It is powered by compressed air rather than electricity so there is no danger of sparking which could set off an explosion.
- Frequent density checks during loading operation ensure the loading procedure is effective. The acoustic frequency range is set to create a series of very rapid & powerful sound induced pressure fluctuations which are then transmitted into the solid particles which causes them to move at differing speeds & debond from adjoining particles & the surface that they are adhering to.



Contact us

Tony Molloy

Contracts Manager

Tel: +44 (0) 1633 277270

Mob: +44 (0) 7785456836

Future Industrial Services

13 Broad Quay Road
Felnex Industrial Estate
Newport
NP194PN

Tony.molloy@futureindustrial.com