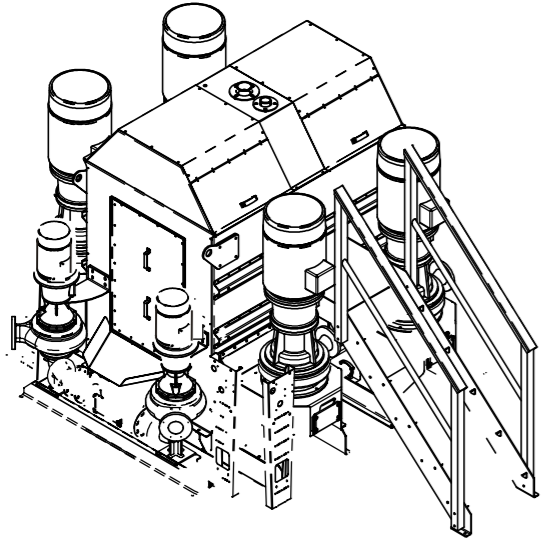
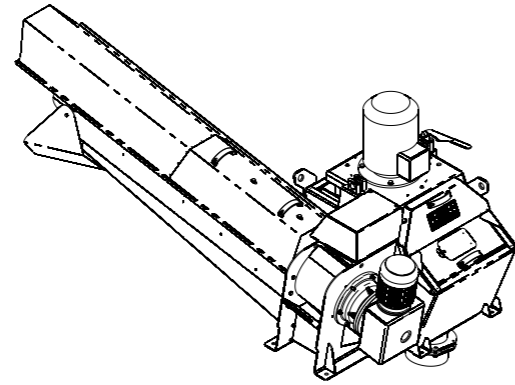


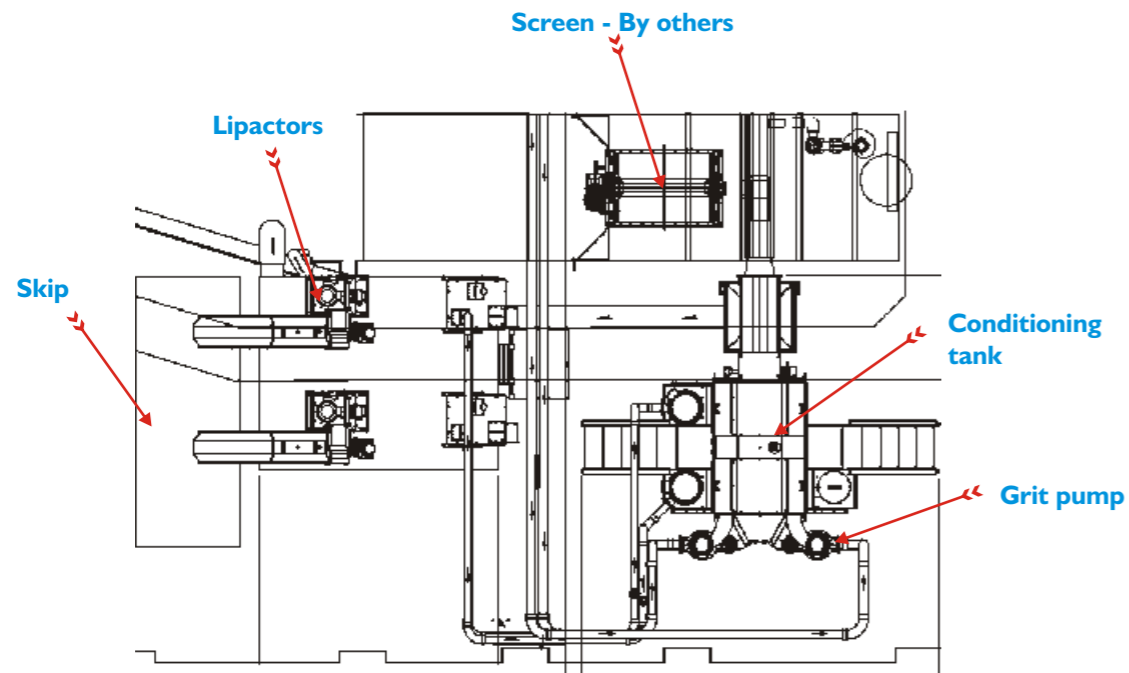
GENERAL VIEWS OF INSTALLATION



**CONDITIONING TANK MODULE
(DUTY/DUTY/DUTY/STANDBY
SYSTEM SHOWN)**



LIQUID SEPARATOR LIPACTOR (LS403)

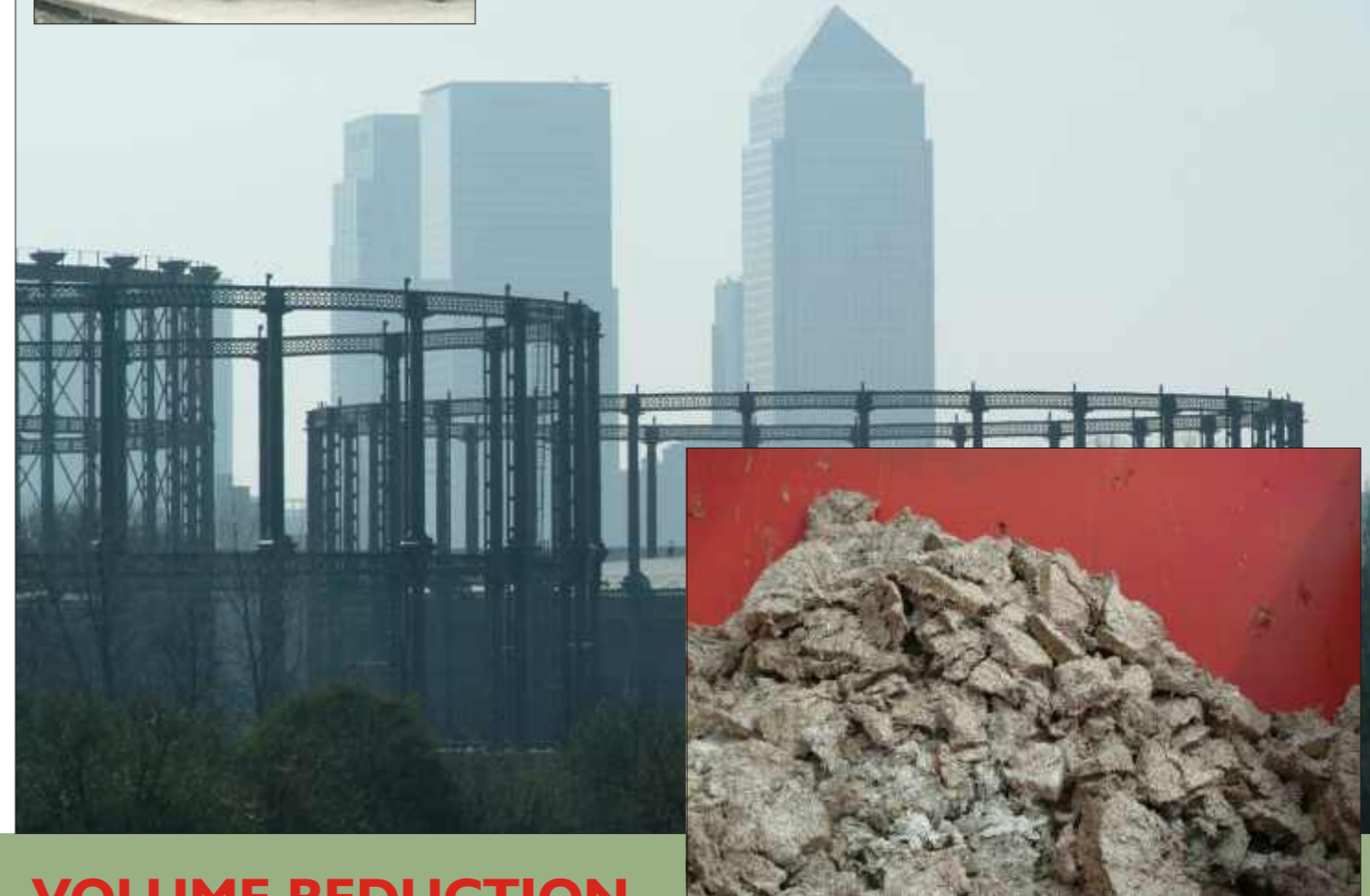


TYPICAL PLAN VIEW



2000 LISEP PACKAGE

**HIGH PERFORMANCE SCREENINGS
HANDLING FOR LARGE
SEWAGE TREATMENT WORKS.**



VOLUME REDUCTION

WORKS WITH ANY SCREEN

CLEAN PROCESSED SCREENINGS

MAXIMUM ORGANICS TO TREATMENT

EASY UPGRADE

GRIT CAPABLE

By



Haigh Distributor:-
Project Pumps Pty Ltd
 Unit 11, 1 Adept Lane Bankstown NSW 2200 AUSTRALIA
 PO Box 332 Padstow NSW 2211 AUSTRALIA
 Phone +61 2 9709 6684 Facsimile +61 2 9709 6685
 info@projectpumps.com www.projectpumps.com

It is the policy of our Company continually to improve our products and accordingly we reserve the right to alter specifications and appearance without notice.

HOW IT WORKS

Screenings arrive into a conditioning tank via a launder channel from the screens. This can be a common launder or individual launders. Screenings are normally diluted using the screen wash water to provide the launder flow.

The level in the conditioning tank will rise to a preset start level, at which point the duty macipump(s) will start up. These are rated to beat the incoming launder flow so that the level in the tank will start to drop. The macipump(s) will run until a preset stop level is reached and then change control to a 20-30 second run-on timer - this ensures that floating debris is drawn in or mixed and basically kept in suspension.

The macipump is a macerator running on the same shaft as a centrifugal pump. Screenings are drawn into the pump through the cutterhead (headstock and shearplate design) so that the rag etc is disintegrated to a 10mm maximum particle size. They are then pumped away as a dilute mix (max 2% ds) to the liquid separating stage. In the disintegration and pumping action, the rag and paper is subjected to some severe agitation (washing) and greases, faecal matter are washed out of the rag, broken up and put into suspension.

Washed and disintegrated screenings are pumped into the liquid separator (LISEP) which uses centrifugal action to separate water from solids. The lisep consists of a pair of conical screens, with a rotor running inside but not in contact with. The rotor throws the dilute medium to the inner surface of the screen so that water and faecal matter is forced through (this decant liquor is piped back to the main channel or to a local drain point). The inner surface of the screen is swept clear by the rotor, moving the solids gradually up and out to the skip. There can be a compactor included on the discharge of the LISEP to further reduce the volume of screenings and to maximise dryness.

The Lisep can be positioned wherever convenient within 50 metres of the inlet with connecting pipework as required.



Macipump disintegrates washes and transfers screenings via grit trap.



Macipump shearplate and cutter provides washing and disintegration



Liquid Separator.



Optional compactor



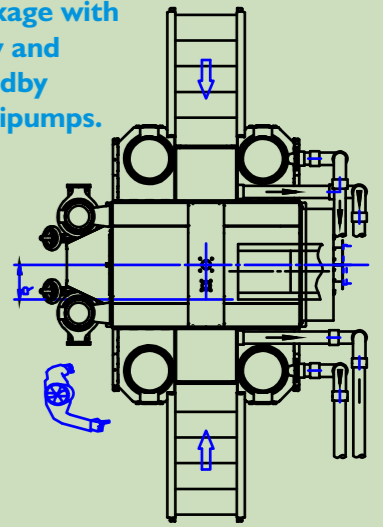
Dewatered and compacted end product.



OPTIONS 2000 LISEP PACKAGE

1. Adding a second macipump to the conditioning tank will provide a standby capacity. The conversion is very simple, requiring only a bolt-on toe section at the spare aperture. The standby macipump can be linked to a standby Lipactor to provide a totally independent process stream or to a shared Lipactor.
2. The Lipactor is offered as a standard item. It provides excellent dryness and the real benefits of high volume reduction. However, the compacting element may not be essential and can be left out of the build. Screenings will still be dewatered to a moist confetti (0.7 kg/litre density), and will be volume reduced by about 90%. ie; 1 cubic metre of wet screenings becomes 100 litres or 10% of it's original volume.
3. Lisep Packages by design, allow for flexibility in layout and orientation using standard modules. This means that almost any topography and site configuration can be accommodated effectively. Please feel free to discuss with us your specific requirements.
4. Haigh Engineering has a full design and make capability for control panels. Using standard IP65 weatherproof enclosures, a control system can be provided to sit alongside the lisep package or remotely inside a control room, and includes the ultrasonic transducer. The control panels offer a flexible alternative to Motor Control Centres. A telemetry rail is built into our control panels as standard.
5. Seaside or salt laden installations may require alternative materials to our standard 304 grade stainless steel fabrications. Our manufacturing facility is geared to work with 316 variant stainless steels for fabrications. Equally, our castings can be adapted to use corrosion and erosion resistant metals.
6. A grit bund is provided as a standard feature on conditioning tanks. Automated grit removal is available as an option, using a purpose built grit pump. Normally, grit would be pumped to an existing classifier or trap, but an ACE Gritter can be added to separate grit locally.

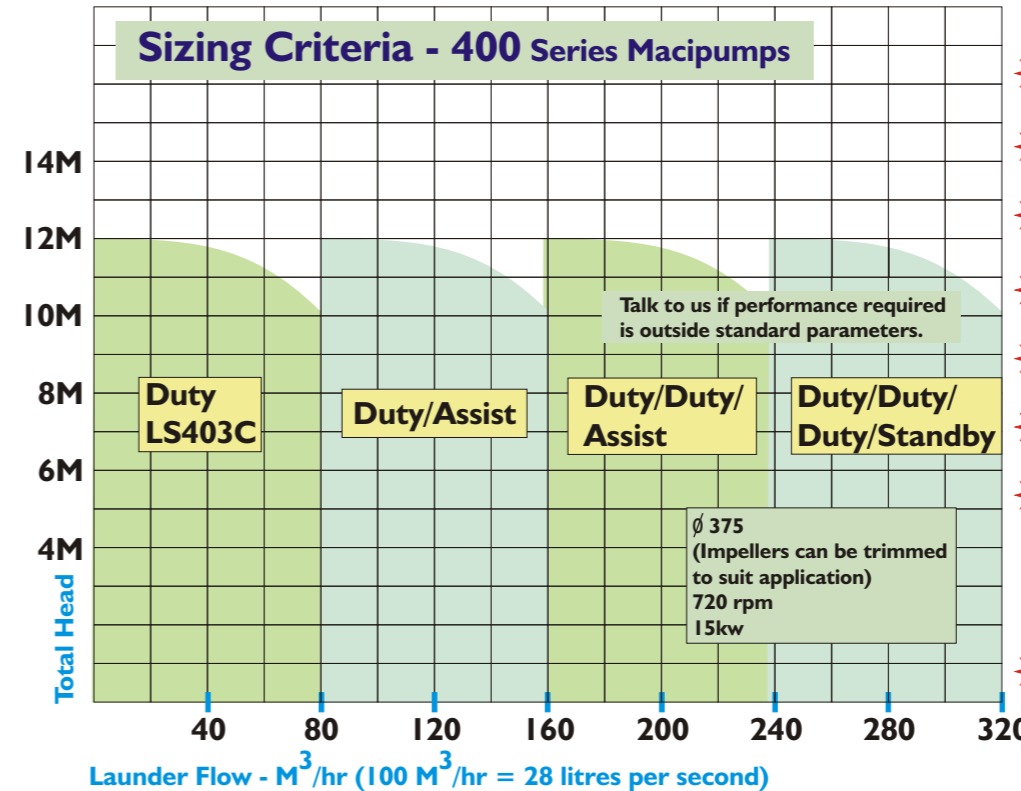
Package with duty and standby Macipumps.



High performance grit pumps.



Sizing Criteria - 400 Series Macipumps



- ★ Small footprint/flexible layout
- ★ Works with any screen
- ★ Grit capable
- ★ Easy Upgrade
- ★ Volume reduction
- ★ Improved sludges
- ★ Clean Processed Screenings - less than 5% organics left in skip. Up to 30% dry solids when using a Lipactor
- ★ Maximum organics returned to treatment.