

SOLIDS CONTROL & WASTE MANAGEMENT

CONTAINERISED PORTABLE EQUIPMENT



ATC (Automatic Tank Cleaning) System



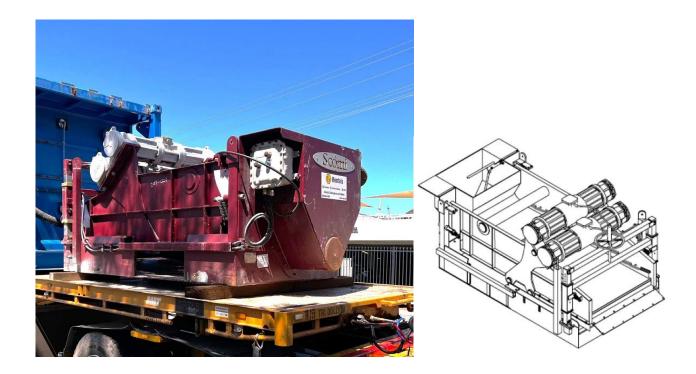


- Our ATC-system reduce your waste with more than 95%. The tank cleaning nozzles provide 360 degree impact indexed coverage for cleaning the inside of all tanks and pits.
- Using was water containing a degreasing agent, the tank cleaning head is supplied with a continuous stream of wash water at pressures of up to 225 psi and flow rates of 100 gpm.
- All cleaning sequences are pre-programmed for the ease of operation and to reduce cleaning time and rig crew non-productive time.

- Single Pump Skid providing 200 gpm of wash water at 225 psi (16 bar)
- Capability to run 2 nozzles (clean multiply tanks at once)
- Process time: 30-60mins per tank (depends on tank geometry and solids build up)
- 50bbls of wash solution storage capacity
- Clean pipe manifolds
- Portable, fully automated option
- Re-circulation of wash water back to storage tanks
- No man entry to mud tanks



SHALE SHAKERS



- Shale Shakers are the primary and probably most important device on the rig for removing drilled solids from the mud. Wire-cloth screen vibrates while the drilling fluid flows on top of it.
- The liquid phase of the mud and solids smaller than the wire mesh pass through the screen, while larger solids are retained on the screen and eventually fall off the back of the device and are discarded.

- The SCM Shaker provides excellent conveyance of solids. With shaker performance being characterised as a product of screening area and g's, the SCM Shaker has one of the highest performance ratings in the industry. When run at 7g's combined with its large screening area, the SCM Shaker has a performance rating of 210 ft2-g (83.6 m2-g).
- Speed: 1800 RPM
- Number of screens: 4
- Dimensions: 3391mm x 1746mm x 1562mm



CENTRIFUGE DE-1000 FHD



Proven in the field, this machine has processed twenty pound per gallon weighted oil field mud as well as flocculated ultrafine solids slurries. The bowl assembly is capable of rotating at any speed from 0 to 4000 RPM, producing an internal centrifugal acceleration more than 3000 G's.

The DE-1000 FHD is installed on a rugged portable skid that includes a two point effluent discharge for easy setup. The rotating assembly is manufactured from 316 stainless steel with forged bowl heads and a centrifugally cast bowl and conveyor. The drive system uses a 50 horsepower explosion-proof motor to drive the bowl via a hydrostatic pump/motor, and the conveyor with a Rotodiff by Viscotherm AG.

FEATURES & BENEFITS:

• 14" (356mm) Diameter

• Bowl type: Contour cylinder

• Speed range: 0-4000 RPM, Maximum g's: 3180

Flow rate: 200GPM with water

System: Counter-current

• Dimensions: 2921mm x 1905mm x 1448mm

Weight: 4050kg



BIG BOWL CENTRIFUGE WITH PLC controls



High volume design for very low gravity solids (LGS) and barite recovery.)
6-degree /beach angle, 150mm, 5.9" single lead STC-tiled 304SS conveyor, hydraulic main drive and back drive, guards, feed tube, bearing lube system, vibration switch/isolators and chutes with PLC controls and ancillary tanks, pumps on skid-mounted base.

- Max bowl speed 2600 RPM
- 2229 x G, 598 x 2020mm, 23.54 x 79.53" bowl ID
- Hydraulic capacity 792 GPM (180 m3/h)
- max solids discharge rate 125 GPM (28.5 m3/h
- 132 KW XP motor 400/460/3/50/60
- 80:1 11 kNm gearbox



BIG BOWL CENTRIFUGE STAND



Customised steel structure, these stands are split into section and can be easily assembled once delivered on the site.



OEM SCREENS FOR SCM-SHALE SHAKERS



Composite Screens provide higher surface tension. When using powder-coat, the applied temperature is lower than when the product is moulded.

The heating process causes the wire mesh to contract and provide for a tighter surface tension.

The higher the surface tension, the longer lasting the screen. This is because the wire mesh experiences less fatigue wear, the tighter it is.

- Light-Weight
- Easy to install
- Blinding Resistance
- Drier solids discharge
- Tight seal between the screen & bedding plane
- Enhanced Production
- Large number of screens are available in stock



SCM-Extractor Cuttings Dryer





This dryer offers improved performance to Operators and Drilling Contractors striving to meet increasingly strict environmental regulations while reducing waste volume at source by reclaiming drilling fluids.

<u>Improved performance due to:</u>

- turns over solids exposing them to the screen thus assisting in further removal of liquid trapped between solids particles
- Minimizes fluid loss and prevents blinding and product loss by ensuring consistent distribution of cuttings
- Minimizes particle breakage and promotes longer screen life, due to machined scroll flights

FEATURES & BENEFITS:

• Feed Capacity: 35 metric tons per hour

• Maximum G Force: 375g's

Maximum Bowl Speed: 870rpm

Centrifuge Type: Basket Centrifuge

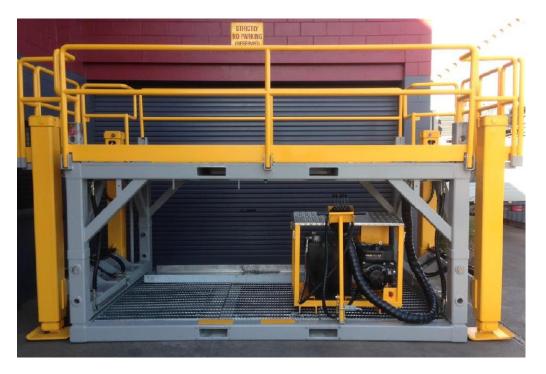
Maximum Scroll Speed: 885rpm

• Dimensions: 2337mm x 2438mm x 2032mm

Weight: 4300kg



SELF ELEVATING STAND



- Hydraulically Actuated Self-Elevating Centrifuge Stand is transported to site by truck in the lowered travel position prior to self-elevating to the desired working position on site.
- A fully integrated power pack raises and lowers the working platform and only requires power during the elevating and lowering processes.
- Self-Elevation and Self-Lowering occurs within a few minutes.
- The self-raising hydraulic centrifuge stand, centrifuge, and feed pump is efficiently deployed as an integrated system from a single load during rig moves which mitigates the risks around mechanical handling as well as significant cost savings.

- Standard Discharge Height 3.3 meters
- Rapid Deployment Self-Elevating and Lowering
- Reduced Mobilization, Demobilisation, Rig Up and Rig Down Costs and Time
- Risks associated with lifting heavy equipment on a raised platform mitigated
- Self-Contained; Fully Integrated Feed Pump, Piping, Hoses, Discharge and Hydraulic Power Pack
- No matting required



WATER PRESSURE WASHER



The Jetwave® Senator™ Silent 350-23 is professional diesel cold water pressure washer that is in a league of its own. With an ultra-low decibel sound reading the Senator™ Silent can run 24/7.

- Dual M22 screw hose coupling system
- Washable/inlet water and diesel filter to ensure clean supply
- Keyless push button electric start with maintenance free battery
- Exclusive low speed professional pump for increased reliability and longer maintenance intervals
- Fuel supply type: Diesel
- Fuel Capacity: 70 litres
- Pump Speed: RPM 1500



SGM 2000 GROUT MIXER & AGITATOR



SGM 2000

IS a very efficient mixing platform for the production of various types of grout slurries for offshore structures and fabric formwork grout bags.

The SGM 2000 is an electric-powered grout mixing system consisting of a colloidal mixer, agitated storage tank and a 3-stage mono pump. The SGM 2000 is fitted with a densitometer to assist in the rapid mixing of grout slurries and a flow meter for accurate assessment of mixed and pumped grout volumes. The unit can be loaded with bagged products including fines such as sand and bentonite.

- Electric
- Densitometer
- Pneumatic loading
- High volumes and speed



MUD MIXING SYSTEM





Mud mixing system will work to mixing new mud or storage depending on mud tank size. A complete mud mixing system includes mud mixing tank, mixing pump, mixing hopper, mud agitator, pipeline and valves, etc. The mud tank size and equipment model selection will be depending on mixing requirement as per jobsite. AIPU supply only mixer also with mixing pump and hoper sit on a skid for economy option.

Mud Mixing Tank Layout:

The mud mixing tank normally lay at end of mud tanks stem and close the mud chemical storage for mixing convenient. The mixing pump suction and discharge line will connect with all clean mud storage tank with mud pump suction line as well. The connections between tanks are normally union for fast moving and connecting. The mud mixing tank will keep extra valves at each connection for convenient operation.

Main Specification:

- 1. There are options for 200GPM, 500GPM, 800GPM and 1000GPM mud mixing speed. Different mud flow will match different size of mud mixing pump and mud mixing hopper with suitable size of pipeline.
- 2. Mixing mud tank size is customized but 4000x2000x2000mm, 20ft and 40ft are 3 main popular options. Or customer can list mud tank capacity and AIPU will supply options for mud tank size for suggestions.
- 3. Mud agitator size, shaft depth, impeller size will be made as per engineer suggestion depending on tank size and drilling mud conditions.
- 4. Mixing pump will set on mixing tank skid and mixing hopper sit on tank skid or tank top by options. Tank top can be gratings or checker plate as per request.



CENTRIFUGAL PUMPS



The electric-driven centrifugal pumping units provide reliable fluid transport performance.

The Centrifugal pumps are 4x3x13'' impeller 11'' with electric motor 40HP, dual voltage/frequency 1450rpm / 1750 rpm, 380/460V, 50/60Hz.

FEATURES & BENEFITS:

- Pump Sizes available: 3 x 2 x 13 inches; 4 x 3 x 13 inches
- Frame: Cast Iron
- Shaft: 4140 Low Alloy Steel
- Shaft Sleeve: 316 Stainless Steel
- Casing: Hard Iron/Cast Iron
- Applications: Fresh Water, Sea Water, Drilling Mud

SLUDGE SCREW CONVEYOR





Screw Conveyors are one of the most reliable methods of conveyance.

Screw Conveyors are used to convey bulk material from almost any position (vertical, horizontal, or at an incline). Available in both options: "Tube" cylinder form and "U-shape (open)

FEATURES & BENEFITS:

- Capacity up to 17,000 CFH
- Horizontal rotation speed 18rpm
- Incline rotation speed > 18rpm
- Screw diameter 380mm
- Conveying length (3700mm, 7400mm, also customizable)
- Protection level IP55 F
- Motor power 1.1-3KW

NEMO INDUSTRIAL PUMPS (BY Series)





NEMO® progressing cavity pumps are used in all sectors of industries to convey almost all types of media continuously, smoothly, with low pulsation and dosing in proportion to speed.

Fields of application:

Industrial applications in environmental technology and in the food, oil, and chemical industries for fluid to viscous media with and without solids.

Features:

Compact design with directly flanged drive. Its low investment, operating and maintenance costs really make it stand out. Four rotor/stator geometries for optimum performance with every kind of application.



NEMO INDUSTRIAL PUMPS (SY Series)



NEMO® progressing cavity pumps are used in all sectors of industries to convey almost all types of media continuously, smoothly, with low pulsation and dosing in proportion to speed.

Fields of application:

Industrial applications in environmental technology and in the food, oil and chemical industries for fluid to viscous media with and without solids.

Features:

Design with bearing housing and two-part shaft allows all types of drive to be used universally and makes servicing the rotating parts simple and fast. Four rotor/stator geometries for optimum performance with every kind of application.



NEMO® Progressing Cavity Pump



The concept consists of three stages, FSIP.ready, FSIP.advanced and FSIP. pro, which are designed to upgrade already installed pumps step by step, or which are available for new installations according to the individual needs of our customers.

Features:

Basic BY/SY pump including revised housing design with large inspection cover, with standard drive train and various seal arrangements.



NEMO® Hygienic Pumps



The pumps are designed and manufactured in accordance with hygienic guidelines, are CIP/SIP-capable and comply with the US 3-A Sanitary Standards. Two rotor/stator geometries are available to ensure optimum performance*.

These pumps are suited for hygienic applications in the foodstuff, pharmaceutical, cosmetic and biotechnology

industries for low and highly viscous media with and without solids.

- Flow rates up to 140 m³/h at pressures up to 24 bar.
- Compact design with directly flanged drive. Its low investment, operating and maintenance costs really make it stand out.



WASH DOWN GUN

Our High Pressure Washdown Gun offers enhanced safety, reduction in environmental pollution and an opportunity to make significant savings in operational costs.



- high pressure cleaning
- Oil based mud spillages
- Spill containment
- Fluid transfers



- Air driven, can be safely operated in hazardous areas
- Can be used with open head universal drums
- Designed for use with hot or cold water up to 200° F (93° C)
- Pump Package: Cart Mounted
- Max Working Pressure psi (MPa, bar) 3065 (21.1, 211)
- Max Air Input Pressure psi (MPa, bar) 100 (0.7, 7)
- Fluid Flow at 60cpm qpm (lpm)
- Fluid inlet size 1"
- Fluid outlet size 3/8"

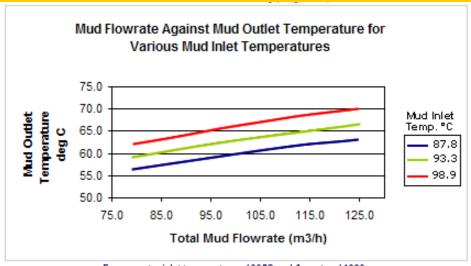


DRILLING MUD COOLER



The cooling system, featuring Alfa Laval plate-type heat exchanger for cooling the drilling fluid for high pressure/high temperature wells, for increased safety. The unit is very compact, and skid mounted, consists of either a single or dual plate heat exchanger depending on process requirements designed in accordance to ASME codes and standards.

The drilling fluid is pumped to the cooler via centrifugal pumps (optional delivery) from the clean fluid pit with the cooled fluid returning to the same pit. With this system, the oil-based fluids can be maintained at surface below their flash points, improving safety and environment for rig personnel.



For selawater inlet temperature of 23°C and flowrate of 1000 gpm



MUD BUCKET



The mud bucket clamps around the pin and box ends of the drill pipe creating an airtight seal.

The interchangeable seals are located at the top and bottom of the unit. With the pipe threads backed off, the joint of pipe is then lifted away from the string. The drilling fluid inside the drill pipe, instead of spraying out over the drill floor, is safely contained inside the bucket.

With the fluid now safely contained it is then redirected through a 6" hose straight to the mud pit or fluid line. In this respect, mud buckets contribute greatly to an operation's fluids and solids control system.

WEIGHT 460KG / 1020Lbs

Height (mm-in) Width (mm-in) Depth (mm-in) 1762 - 69 670 - 26 640 - 25



DIAPHRAGM PUMPS



Diaphragm type pumps are an air operated, positive displacement, self-priming pump designed for demanding applications that require a robust design.

The clamped or bolted configuration is a classic design that ensures reliability without sacrificing ease of maintenance.

This type of metal pump lends itself to various processes and waste applications.

Several elastomeric options including Teflon® PTFE are available to meet your abrasion, temperature, and chemical compatibility concerns.

SPECIFICATION:

Flow rate
Max working Pressure (psi)
Material – Water Chamber & Manifolds
Material – Non Wetted Housings
Maximum Suction Lift Capability
Maximum Diameter of Solids

T15 (3 inch pump)
Up 232 GPM
125
Aluminium/Cast Steel
Brass
5.5m (18') Dry, 9.5m (31') Wet
10mm (3/8")

Up to 163 GPM 125 Aluminium/Cast Steel Brass 6.4m (21')Dry, 9.5m (31') Wet 6mm (1/4")

T8 (2 inch pump)



HIGH PRESSURE WASHER



Air Powered Pressure Washers

Designed for use on land and offshore drilling rigs, refineries, chemical plants, pipelines, heavy industrial, pharmaceuticals, grain handling or any other application where hazardous gasses or dusts are a consideration.

SPECIFICATION:

- Power Source: Compressed Air;
- Flow Rate: Up to 12gpm;
- Performance: 150psi to 35gpm at 375psi
- Standard Configuration: Base Mounted Pump, Motor, Air Filter, Motor, Air Filter, Regulator
 & Lubricator, Pressure Relief Valve, discharge Hose, Trigger Gun, Chemical Injector &
 Nozzles



PIPES, HOSES, FITTINGS, VALVES

FOR INTEGRATED
CUSTOM SOLUTIONS





Our capabilities include Integrated Package Delivery such as mud mixings, shaker skids, fluids processing, drilling waste management and more.

Most of the sizes are available in our stock.



