SAND WASHING SOLUTIONS
With over 30 years designing and manufacturing experience in the Australian market for the Australian Market we have learnt that the highest form of design is “simplicity without Compromise” and no range better exemplifies that value than our extensive range of washing equipment. It starts at the beginning with equipment designed for site not for a cargo-ship.

We use the best of Australian sourced steel, fabricated in house then sandblasted to a high standard, then either treated with high quality poly paint or galvanised. Additional coverage is given with a generous lacquer coating. Machined parts are made in our own machine shop to our exacting standards, then the full unit is assembled in our Brisbane manufacturing facility, all machinery is carefully inspected and dry run before dispatch. Machines are made to order and clients are encouraged to come and inspect their new equipment as it moves through the manufacturing process. Precisionscreen’s extensive range is designed as modular components and we can easily customise to suit the client’s needs, no square pegs for your round sandpit.

Our equipment includes dry or wet screen box stations, bucket wheels, screws, weirs, cyclones, dewatering screens, barrel washers, filters, sumps, tailored solutions you need for your sand washing process.

No words can do justice to our range so take the time and call our staff to inspect our facility or organise a tour at just some of our very satisfied clients sites.

ADVANTAGES OF AUSTRALIAN MADE:

- All drawings and fabrications done locally in Australia
- Built with Australian knowhow
- Designed and built in Brisbane
- All components selected from the start for Australian conditions
- Built to Australian standards and conditions
- Superior service capabilities
- Built for serviceability
- Using readily available components
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MOBILE SCREENING WITH RINSE KITS
TRACKED AND WHEELED PLANTS

WHEELED

The Precisionscreen Wheeled range of wash screening plants has an efficient rinse kit built into the screenbox with individual control valves for each spray bar. The plants are fitted with a reject grid over the hopper with variable speed conveyors regulating the flow of feed material to washing screen head. The hanging screen style allows for good integration to the next stage of washing.

TRACKED

Precisionscreen can convert standard Tracked screening plants to be incorporated with their range of washing products. This can be done by using a bladder inserted catchment box or removal of the fines conveyor and replaced by a wet box. There is the option of two deck and triple deck washing.
MODULAR SCREENBOX RANGE
(6X4, 8X4, 10X5, 12X5, 17X5, 20X5)

Precisionscreen have a range of highly efficient Screenboxes fitted with Rinse kits to help wash various materials including sand and aggregates. These can be fitted with modular stands to allow greater access to the plant for maintenance and servicing.

FEATURES

- Australian built and designed
- Optional hydraulic/Electric drive motor
- Optional 2 or 3 deck screens
- Different end chute configurations
- Galvanised Catwalk and stand
- Optional spray bar combinations including sling on rinse kit to twin and triple deck rinsing
- Each spray bar has individual control over water volume
SRD180 BUCKET WHEEL DEWATERER

The SRD180 Bucket Wheel Dewaterer is used to collect Sand particles from slurry material fed from a wet screening process. Its primary job is to pick up the heavier particles of sand as they sink to the bottom upon entry to the tank via the feed tubes. The very efficient poly bucket inserts allows water to drain from the sand discharging it at the other side onto a stockpiler. The plant allows for excellent settlement time of the finer particles. The under water screw drags these particles back to the buckets for collection. The organic material floats to the back of the tank with the silty water and is dealt with by a 44.8m (linear) weir that eventually allows effluent water to escape out the 10 inch discharge pipe back to pond.

FEATURES

- Galvanised inlet chutes (two off)
- Ability to make two size Sand fractions
- Galvanised bucket wheels with poly inserts
- Submerged screw for fines conveying back to bucket
- Option of single or twin discharge chute for washed sand
- Large adjustable Weir 44.8m linear
- Large dewatering capacity
- Buckets and screw variable speed with individual control
- Wheel mounted with tow bar for site movement
- Galvanised legs for operation mode
- Option of 10x5 screenbox attached to Dewaterer as one complete unit
FINES RECOVERY POD (FRP)

Fines recovery Pod is used at the end of the sand washing process to help dry (dewater) the sand from a previous stage or concentrate on recovering the fine sand from the waste water before going back to Pond. Fine Sand recovery is achieved via the on-board 250mm Cyclone fed by the rubber lined pump that collects feed material from the base of the tank. The Cyclone then discharges the heavy particle (ie fine sand) onto the high frequency dewatering screen for draining. The newly recovered sand can then be deposited to the side of the unit (via screw) or out the front of the Pod onto a Stacker. This sand discharge point is optional depending on Pod Configuration.

FEATURES

- Vibrating dewatering screen
- 250mm Cyclone with rubber lined pump
- Cyclone is on a swing that allows fine material to stockpiled separately
- Cyclone pump and screen driven hydraulically
- Large weir area for effluent water 44.8m linear
- Optional discharge point from dewatering screen
- Designed to work in conjunction with Precisionscreen Sand Washing products
SAND SCREW

Precisionscreen Sand screw offers a simple solution for sand classification. The slurry material enters the feed tube at the base of the screw and as the heavier particles sink to the bottom they are dragged up the trough via the spiral screw. Dewatering occurs up the length of the trough until discharged at the end via a chute.

FEATURES

- Low capital cost
- Replaceable wear shoes on the screw
- Option of Electric or hydraulic drive
- Weir area around the base of the screw for effluent water
- Discharge chute at the front of the screw for Sand depositing
SRD240X MOBILE SAND WASHING PLANT

The SRD240x has been designed to provide a mobile solution for new and existing Sand washing projects. The road towable chassis allows the plant to be moved via prime mover easily with minimal set-up costs normally associated with sand washing plants.

The SRD240x requires a clean water source supplied to the 3 inch inlet manifold for the washing screen deck and a 10 inch waste water pipe discharging from the machine to a settlement pond. The machine is packed full of features that makes this the perfect tool for testing sand deposits out cost effectively to give you measurable results before investing in a full plant. The SRD240x is fed via additional conveyor with Dry material from another source.

The plant has the ability to make up to 3 different sand grades at the same time.

FEATURES

- 8x5 two deck Rinser screen
- Wash kit fitted both top and bottom
- Dual bucket wheel dewaterer with variable speed
- High frequency dewatering screen
- Submerged Screw with variable speed
- 44.8m Galvanised weir area
- 250mm Cyclone with rubber lined pump
- Cyclone on a swing allowing it to be stockpiled separately
- Road towable chassis
- Engine Hydraulic powerpack on-board runs all components
- Single or double discharge points for Sand via screw conveyor
BARREL WASHER

The Precisionscreen Barrel Washer is designed to scrub and clean natural pebble or crushed aggregate. The Barrel Washer circuit can be used in conjunction with a Precisionscreen feed hopper to form a standalone circuit or be incorporated into an existing plant set-up. Ideal feed size for the Barrel is 50mm minus but it can handle up to 150mm size rock. The feed material then enters the feed box on the Barrel washer where a large volume of water forces the material into the rotating Barrel. The internal lifters help agitate, scrub and clean the rock creating a rock on rock cleaning action, assisted with the injection of fresh water via the internal spray bar that’s runs the length of the barrel. Retention time inside the barrel is controlled via the variable speed controller ranging from 1-10 RPM. Material discharges onto the 2.4m long mesh Trommel for final cleaning and draining of dirty water. The mesh on the outside of the Trommel is cleaned via a spray to help prevent blinding before material is discharged of the chute.

FEATURES

- 4x independently hydraulically driven wheels to rotate the barrel
- 10mm heavy duty Rubber Lining in the barrel with 12 lifters
- Enclosed Barrel length 4m long with 1.5 diameter
- Heavy duty skid mounted frame
- 2.4m long rotating trommel at the discharge end to help drain dirty water away
- Internal Spray bar runs the entire length of the barrel adding clean water
- Spray bar on the outside of the mesh to keep it clean from build up
- 3 inch connection hoses for both spray bars
- 10inch barbed discharge pipe for dirty water
SAND WASHING MODULAR

Sand Washing Modular Plant with:

- 10x5 two deck Wash screen (Galvanised)
- SRD180 Bucket Wheel dewaterer
- FRP Fines Recovery Pod

This plant can accept material from any drying screening process delivered via conveyor belt or a Cyclone mounted above the screen.

Can make up to three different sand fractions and waste material of the front of the wash screen. Cyclone in this case needs swung out away from the machine to make separate product (fine brickies loam).

The water in this set-up has to go through two 44.8m (linear) weirs before discharging to settlement pond.
Precisionscreen offer a range of modular hoppers to suit Material washing processes. These hoppers are designed and built in Australia to suit the Australian conditions. They come with many options.

FEATURES

- All built with a heavy duty frame
- Triple seal bearings for durability
- Discharge head drum scraper
- Option of hydraulic or Electric motor drive
- Option of Vibrating Grid/Hydraulic lifting grid/Manual lifting grid or open style extension
- Various Hopper sizes with different volumes and belt widths
- Option of hopper lining
Precisionscreen’s range of Stockpilers are designed with productivity and mobility in mind. Heavy duty Australian built conveyors designed to handle various types of material and perfectly suited to match up with Precisionscreen Washing range of equipment. Standard features on all stockpilers is the radial wheels allowing for greater stockpile sizes and less double handling of material.

**FEATURES**

- Australian built and designed
- Heavy duty frames
- Triple seal bearings
- Individual bladed drum scraper
- Fully galvanised chassis
- Aluminimum side rails
- Options of electric or hydraulic
- Feedboot options with liners
- Power radial wheel option

1. Aluminium slider plate for a full seal with belt. Reduced weight at under 15kg per segment, great for OHS.
2. Plastic rollers for reduced friction, energy and noise. Increased belt and conveyor longevity.
3. Mainframe 2-pac painted outside over galvanised steel for long lasting corrosion protection.
WATER FILTER 500

Precisionscreen have designed a water filter system to help condition the feed water to various types of sand washing plants. Water is sourced from a dam/pond through the suction hose. Unfortunately this allows fine particles of organics to pass through the foot valve and sent to the wash plant (anywhere up to 10mm particle sizes). Most wash plants are generally fitted with a number of fine spray nozzles that scrub and turn the fine particles of sand to help liberate it from the silt/clay before moving downstream. Over the years Precisionscreen encountered a problem in keeping these nozzles clean which effectively left the bottom deck (most important) spraying inefficient.

To combat the problem Precisionscreen have introduced a standalone water filter System that can go in line with your water feed, generally located close to the spray bar water entry point. The fully galvanised housing is fitted with a specially designed 500micron metal wedge wire filter. The filter capacity allows for water flows up to 3000 Litres per minute.

The filter housing has two pressure gauges fitted to the lid to help identify a variance in water flow indicating filter blockage. The hinged filter lid simply opens up allowing the operator to quickly and easily hose out the filter from the inside without the need for removing the actual filter. The tap on the bottom of the housing allows the water to escape with the organics leaving a clean filter in minutes. The lid is closed and the process is ready to start again.

This is a must have filter for anyone washing Sand where they run fine nozzles.

FEATURES

- Maximises Nozzle spraying efficiency
- Cleaner sand due to full use of all nozzles
- Easy to clean and maintain
- Less downtime changing worn out/blocked nozzles
- Can be fitted easily into most plants
MACHINE LAYOUTS

1. SM1580 50ft Stockpiler
2. Fines Recovery Pod
3. SRD180 Dewaterer
4. 10x5 galvanised Wash Screenbox 2 Deck
5. Cyclone Option
SRD240X LAYOUTS
SRD240x making three sand fractions

Tracked triple deck screen with SRD180 Dewaterer

SRD180 Bucket wheel with 10x5 Rinser Screenbox mounted to the dewater. Dry feed material via SM1580 Stockpiler. Making three Sand fractions.

Super Reclaimer Rinser SRD180 Bucket Wheel Two Radial Wheeled Stockpilers
BARREL WASHER

Module hopper feeding Barrel washer with pre screened decorative rock.

Finished stockpile of clean rock
Super Reclaimer Rinser
SRD180 Bucket Wheel Dewaterer
100ft Radial Wheel Stockpiler

Weir dealing with effluent water and organics

Contractor 604 with Sand Screw
AFTERMARKET SUPPORT

PRECISIONSCREEN SCRAPER SYSTEMS

Precisionscreen’s primary head scraper features a high grade polyurethane blade to suit most applications. It utilises a simple internal “rubber rope” tensioning system and therefore is easily maintained.

The Unique Precisionscreen rubber rope tensioning system is a clever design in that it not only holds each individual blade in place without the use of bolts but it also tensions the scraper once on the head drum without the need for external spring tensioners.

There is no compromise on quality with Precisionscreen units as all shafts and scraper clamps are electro plated as standard and the Poly blades themselves are of a high grade polyurethane composition in 93 shore hardness maximising scraper life.

Scraper widths can be tailored to exact customer specifications. Comprehensive assembly and fittings drawings are available on request with every scraper supplied and free advice from the Precisionscreen sales team is available at all times.

PRECISIONSCREEN SPEED HARPS

Precisionscreen manufacture and stock a wide range of high tensile and stainless steel speed harps for mobile and static plants for the Australian market, ideal for sand screening. With a wide range of apertures sizes and wire diameters, Precisionscreen can manufacture and supply as per your individual requirements.

Contact our after sales support team today and invest in our Australian manufactured speed harp screens!

PRECISIONSCREEN SERVICE TEAM SERVICES

- Service and maintenance contracts
- General repairs and maintenance
- Product training
- Hydraulic services
- Engine services
- Welding repairs and bearing changes
- On site diagnostics and repairs
- Sauer Danfoss (plus1 system) diagnostics and reprogramming
- Safety audits
- Lube servicing
- Crusher wear part change outs
- Mesh/Piano wire changes
- Tracking and supply of conveyor belts
- Design services
- Conveyor repair and manufacture
- Roller repair and manufacture
PRECISIONSCREEN POLY SPRAY NOZZLES (PD5 NOZZLES)

Precisionscreen Poly Spray Nozzles are a heavy duty, one piece construction spray nozzle widely accepted & proven throughout the mining, industrial & process industry.

These Spray Nozzles are ideal in screen washing duties, dust control for chutes, hoppers and transfer points, cleaning of conveyor belts, foam breaking & cooling applications.

FEATURES OF THE POLY SPRAY NOZZLE

- Uniform Distribution Fan Spray Pattern
- No Internal Parts
- Clog-Resistant Performance
- Tough Corrosion and Wear Resistant Polyurethane

PRECISIONSCREEN STAINLESS STEEL SPRAY NOZZLES

Precisionscreen Stainless Spray Nozzles, ideal for your fine spray washing and precoating applications are available between ¼” to ¾” thread with varying hole and angle sizes for various applications.

FEATURES OF STAINLESS STEEL NOZZLES

- Flat spray pattern distributes the liquid as a flat- or sheet-type spray.
- Uniform distribution over a wide range of flow rates and pressures.
- Specially tapered spray pattern is ideal for use in manifold and spraybar applications.
- Unobstructed flow passages minimize clogging.

OTHER PRECISIONSCREEN MANUFACTURED ITEMS, EXCELLENT ADDITIONS FOR WASH PLANTS

- Boilboxes – enquire today for Precisionscreen designed and manufactured boxes
- Wet transfer boxes
- Plasma cut guarding – made to order
- Stainless steel mesh screens
- Equipment for sand washing including hoses, water pumps and cyclones