

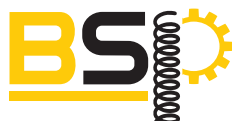
BRUCE
MATERIALS PROCESSING SOLUTIONS

intelligent
washing solutions

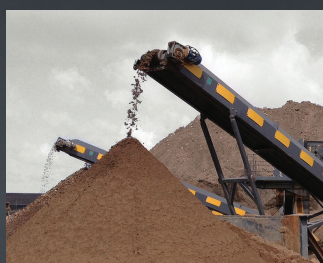
› FOR OVER 60 YEARS



HARDOX®
WEARPARTS



intelligent washing solutions



Disclaimer: The information in this document is for reference only and can be changed without notice at any time. Please note, any performance information is for guidance only and is not guaranteed.



With over 60 years experience in the Materials Processing Industry Bruce provide turnkey modular washing systems.



BRUCE WashPod

› Scrubs/Washes/Separates

Complete Self-Contained Wash Plant
with only the footprint of a Container.

FEATURES & BENEFITS

- Smallest working footprint of any complete Washplant
- Fastest on-site set up time
- Factory wired & tested
- Easily transportable with no need for specialist transport
- Aggregate scrubbing, trash removal, aggregate rinsing & sizing plus sand washing in one neat package
- Production of 4 washed products: 3 aggregates & 1 sand
- Fully galvanised walkways & steps
- Branded components throughout
- Radial or integrated Stockpile Conveyors
- Fully automated control system

WHAT'S ON BOARD

- Double or Triple Deck Washing Screen (10' x 5')
- Dewatering Screen (8' x 4')
- Twin Shaft Logwasher
- Twin Cyclones
- Clean Water Tank, Sand Collection Tank and Dirty Water Tank
- Complete with integrated pumps and control panel

APPLICATIONS

- Sand & Gravel
- Recycled C&D waste
- Aggregate
- Road Sweepings
- Crushed Rock
- Utilities Waste
- Railway Ballast
- Drainage Medium

TPH

- Aggregate product up to 100tph
- Sand 50tph

OPTIONS

- Radial or integrated Stockpile Conveyors
- Feed Hopper
- Feed Conveyor



Easily transportable with fast on-site set-up >



BWR-TL Washing System

The Bruce BWR-TL consists of a Twin Shaft Logwasher, Double/Triple Deck Washing Screen and a Trash/Filter Screen all mounted together on a skid frame.

FEATURES & BENEFITS

- Fully mounted washing system consisting of wet Pre-screen, Washing Screen, Twin Shaft Logwasher & Filter (Trash) Screen
- Modular skid frame
- Multifunctional: Easily adaptable to suit various material washing requirements
- Compact unique design with minimal footprint
- Highly productive and efficient Screens with high frequency motors
- Complete with automated control system or wired to mains system control panel
- Hardox Wearparts supplied as standard to ensure extended wear life
- Range of screen sizes to suit application & tonnages

APPLICATIONS

- Sand & Gravel
- Recycled C&D waste
- Aggregate
- Road Sweepings
- Crushed Rock
- Utilities Waste
- Railway Ballast
- Drainage Medium

OPTIONS

- Single, double or triple deck Washing Screen
- Stockpile Conveyors
- Modular Bruce feeding system, Sand Plant and water treatment technology





BWS Sand Processing Plant

.....

The Bruce BWS Sand Plant maximises fines recovery to produce high quality dewatered sand products.

The system consists of Hydro cyclone(s), centrifugal slurry pump(s), Dewatering Screen and collection tank on a skid mounted frame.

.....

FEATURES & BENEFITS

- Can produce one or two grades of material
- Maximises fines recovery
- Sand moisture content reduction
- Rubber lined slurry pump(s) & Hydro cyclone(s)
- High frequency Dewatering Screen with polyurethane media & side wall protection
- Rubber lined cyclone collection tank
- Overflow weir discharge system
- Mechanical diverter plate at screen discharge to blend product
- Adjustable chute under cyclone discharge box for blending coarse and fine product
- Fully automated electrical control panel
- Self-regulating sump with pump protection float system
- Hardox® and rubber lined wear parts

APPLICATIONS

- Sand & Gravel
- Washed Aggregate

OPTIONS

- Single and twin product machines
- Dual / Twin Wash Sand Plant
- 40 / 60 / 120 / 200tph models
- Integrated Bucket wheel (BWSRB)
- Spray bar on Dewatering Screen
- Boiler box for dry feed
- Stockpile Conveyors




Did you know?
Bruce only use Hardox® for all their wearparts



HARDOX®
WEARPARTS

BRUCE
MATERIALS PROCESSING SOLUTIONS



BWSRB Sand Processing Plant

.....
The Bruce BWSRB Sand Plant maximises fines recovery to produce high quality dewatered sand products.

The system consists of a Bucketwheel, Hydro cyclone(s), centrifugal slurry pump(s), Dewatering Screen and collection tank on a skid mounted frame.
.....



FEATURES & BENEFITS

- Twin bucket wheel with variable speed control
- Can produce one or two grades of material
- Maximises sand recovery
- Sand moisture content reduction
- Rubber lined slurry pump(s) & hydro cyclone(s)
- High frequency Dewatering Screen with polyurethane media & side wall protection
- Rubber lined cyclone collection tank
- Overflow weir discharge system
- Mechanical diverter plate at screen discharge to blend product
- Adjustable chute under cyclone discharge box for blending coarse and fine product
- Fully automated electrical control panel
- Self-regulating sump with pump protection float system
- Hardox® and rubber lined wear parts

APPLICATIONS

- Sand & Gravel
- Washed Aggregate

OPTIONS

- 120 & 200tph models
- Single and twin product machines
- Spray bar on Dewatering screen
- Boiler box for dry feed
- Stockpile Conveyors



BWD Dewaterer Range

The Bruce BWD Dewaterers are a cost effective way to remove water from washed material. The range is available in 90, 120 & 150tph capacities.

FEATURES & BENEFITS

- Long settling tank & recovery spiral for increased fines recovery
- High capacity variable speed bucket wheel fitted with interchangeable drain plates
- Overflow weirs to control fines recovery
- Rubber lined slurry intake boxes
- Adjustable weir discharge
- Variable speed hydraulic controls
- Robust & durable build quality

APPLICATIONS

- Sand & Gravel
- Recycled sand
- Marine dredged sand

OPTION

- Electric/Hydraulic powerpack



Did you know?
Bruce are up and running over 60 years

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BWTL/C Logwasher/Coarse Material Washer

Bruce twin shaft heavy duty Logwashers / Coarse Material Washers are ideal for cleaning and scrubbing aggregates.



FEATURES & BENEFITS

- Robust build for heavy duty applications
- Extended machine life due to interchangeable Hardox® wearparts
- Adjustable water discharge weir system
- Controlled input water flow
- Can be adapted to suit or compliment an existing system

APPLICATIONS

- Sand & Gravel
- Recycled C&D Waste
- Aggregate
- Road Sweepings
- Crushed Rock
- Utilities Waste
- Railway Ballast
- Drainage Medium

OPTIONS

- Can be supplied as a separate modular unit or as an integral part of a Bruce washing system
- Fully automated control system



BWT Thickener Tank

Designed to clarify and recycle water plus concentrate sludge, the Bruce Thickener Tank (BWT) is an efficient solution to wastewater treatment.

FEATURES & BENEFITS

- Fully automated
- Inlet Chamber: Located on the side of the tank. Delivery intake of wastewater and addition of polymer binding agent
- Integrated feed well in centre of tank encourages downward settlement of sludge to central discharge point
- Integrated conditioning rakes
- Perimeter weir: Capture of recovered clean water
- Backwash facility to clear any potential blockages
- Fully galvanised stairs, walkway & fixed bridge
- Support structure
- Centrifugal Sludge Pump
- Full system Control Panel

APPLICATIONS

- Sand & Gravel
- Recycled C&D Waste
- Aggregate
- Road Sweepings
- Crushed Rock
- Utilities Waste
- Railway Ballast
- Drainage Medium

OPTIONS

- Available in 8 / 10 / 12m diameter models
- Flocculent Station / Polyelectrolyte Plant
- Cabin / Housing for Flocculent Dosing Station
- Clean Water Ballast Tank
- Sieve Bed / Filter Screen



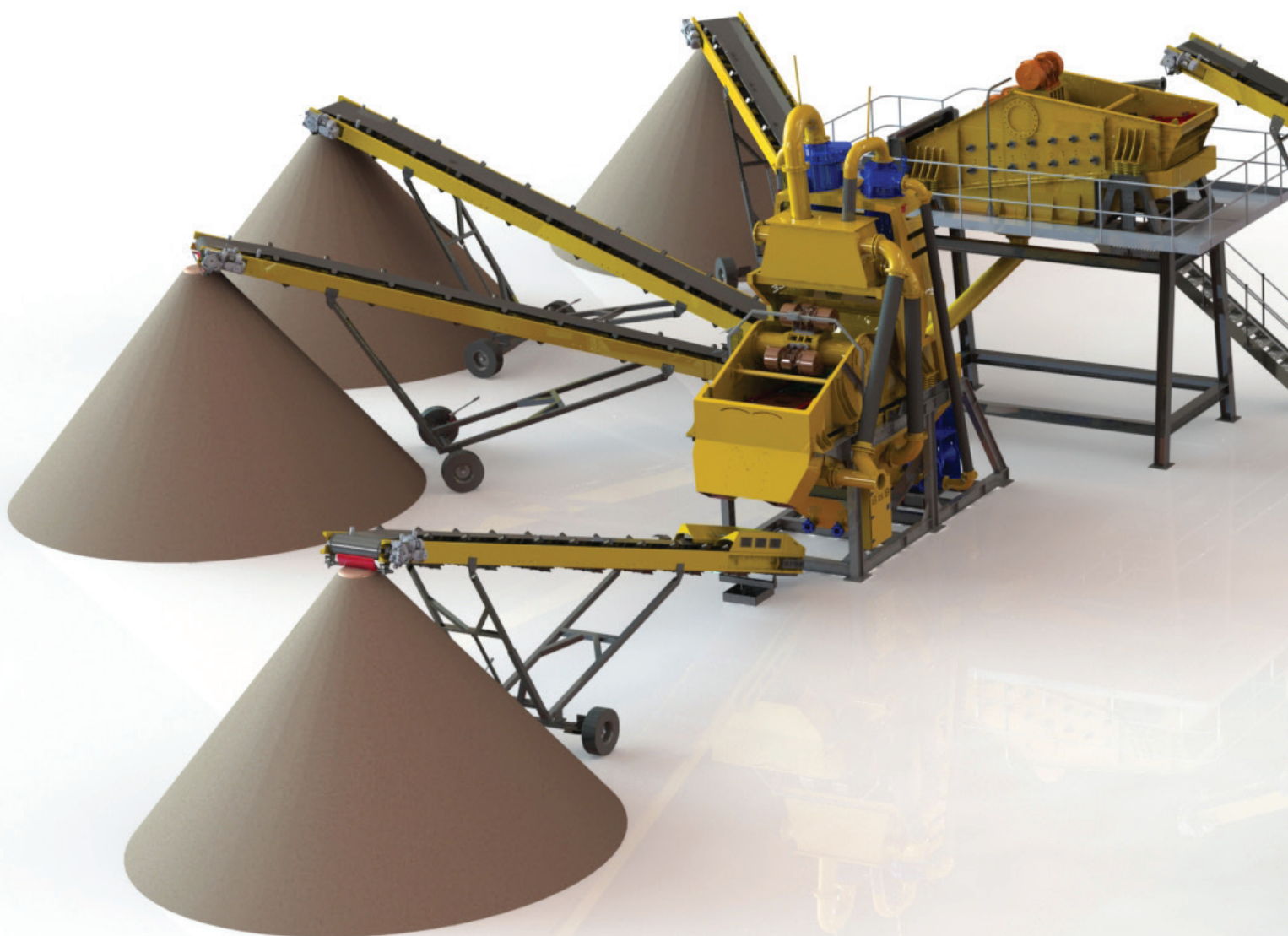
BW-FRD

Modular Washing System

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The Bruce BW-FRD modular washing system offers feeding, screening, sand washing and stockpiling in one neat package. The range includes numerous modular configurations enabling the production of clean aggregates and sand products.

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FEATURES & BENEFITS

- Up to 3 washed aggregates and 2 washed sands
- Modular design to facilitate specific customer requirements
- Intelligent design ethos ensures maximum performance and serviceability with easy access to pumps, screen media and essential components
- Production of aggregates and sand products to a desired specification
- Easily integrated with Bruce water treatment technology for complete package
- Fully galvanised access steps, walkways and guard rails
- Complete with control panel for connection direct to generator or wired to full system control panel

COMPONENTS

- Feeding
- Screening
- Sand Washing & Dewatering
- Stockpiling

OPTIONS

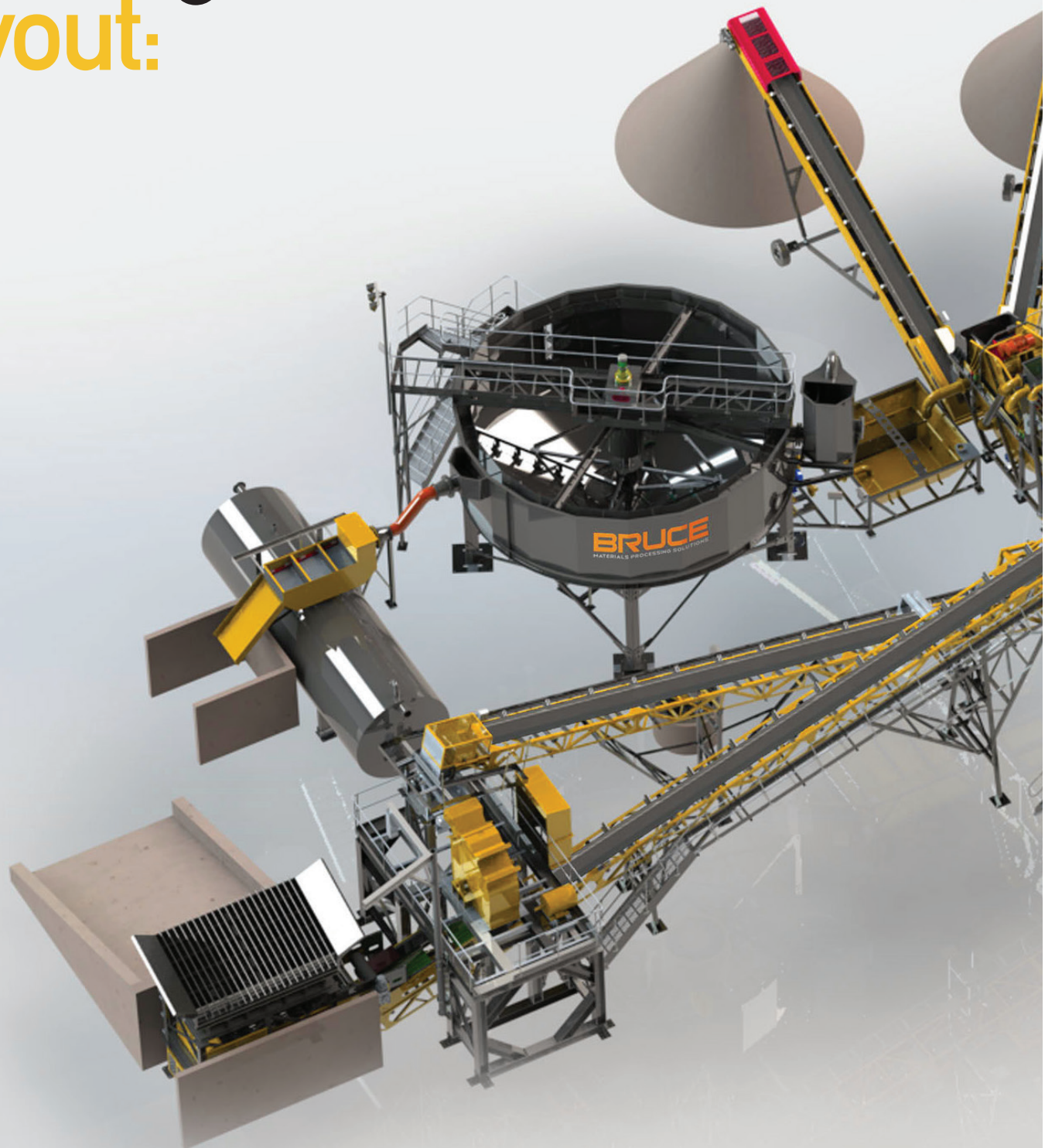
- Single, double or triple deck Washing Screen
- Single or twin product Fines Recovery Plant
- Choice of Bruce BWS, BWSRB, BWD range of fines recovery systems
- Spray bars on Dewatering Screen
- Over-band magnet including support frame and stainless steel chute on Transfer Conveyor
- Belt weigher system on Conveyors
- Removal of Stockpile Conveyors and discharge material to bays
- Can be supplied with Bruce wastewater treatment system for complete turnkey solution

Layout consists of the following:

- Belt Feed Hopper
 - Infeed Conveyor
 - Washing Screen
 - BWS Sand Plant
 - Stockpile Conveyors
-

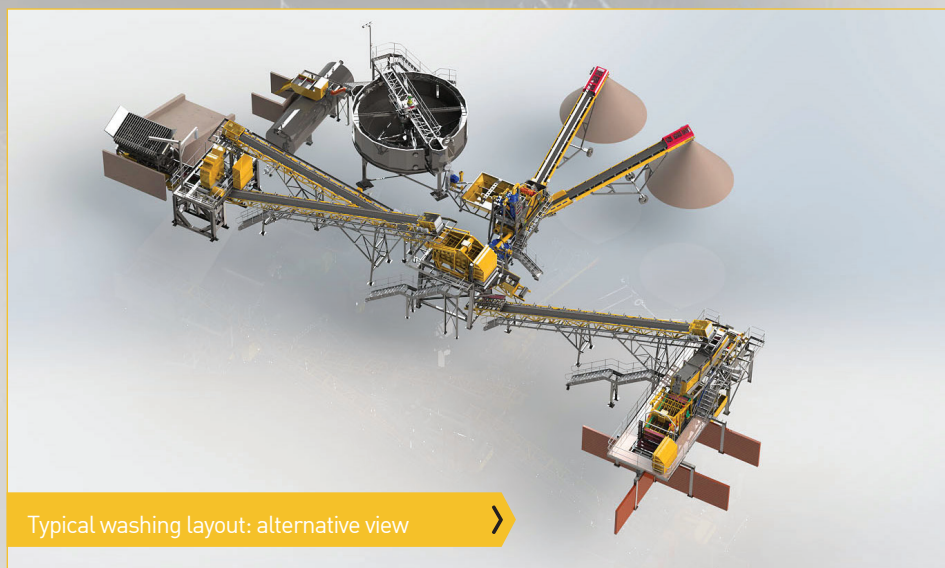


Typical Washing Layout: 01



Layout 01 consists of the following:

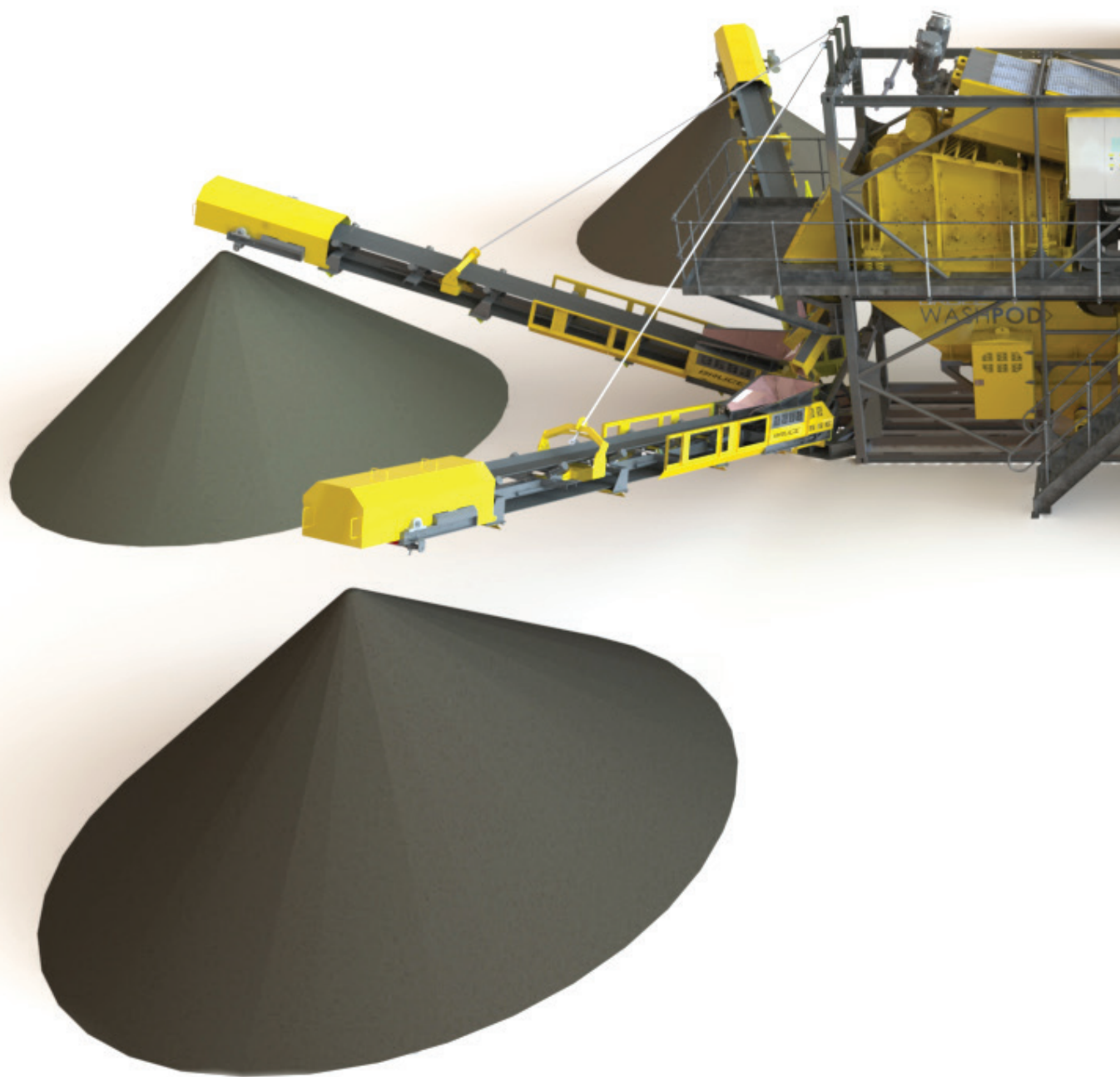
- Belt Feed Hopper
 - Lattice Conveyors
 - Washing Screen
 - BWR
 - BWS60 twin product
 - Thickener, Clean Water Tank and Sieve Bed
 - Stockpile Conveyors
-



Typical washing layout: alternative view

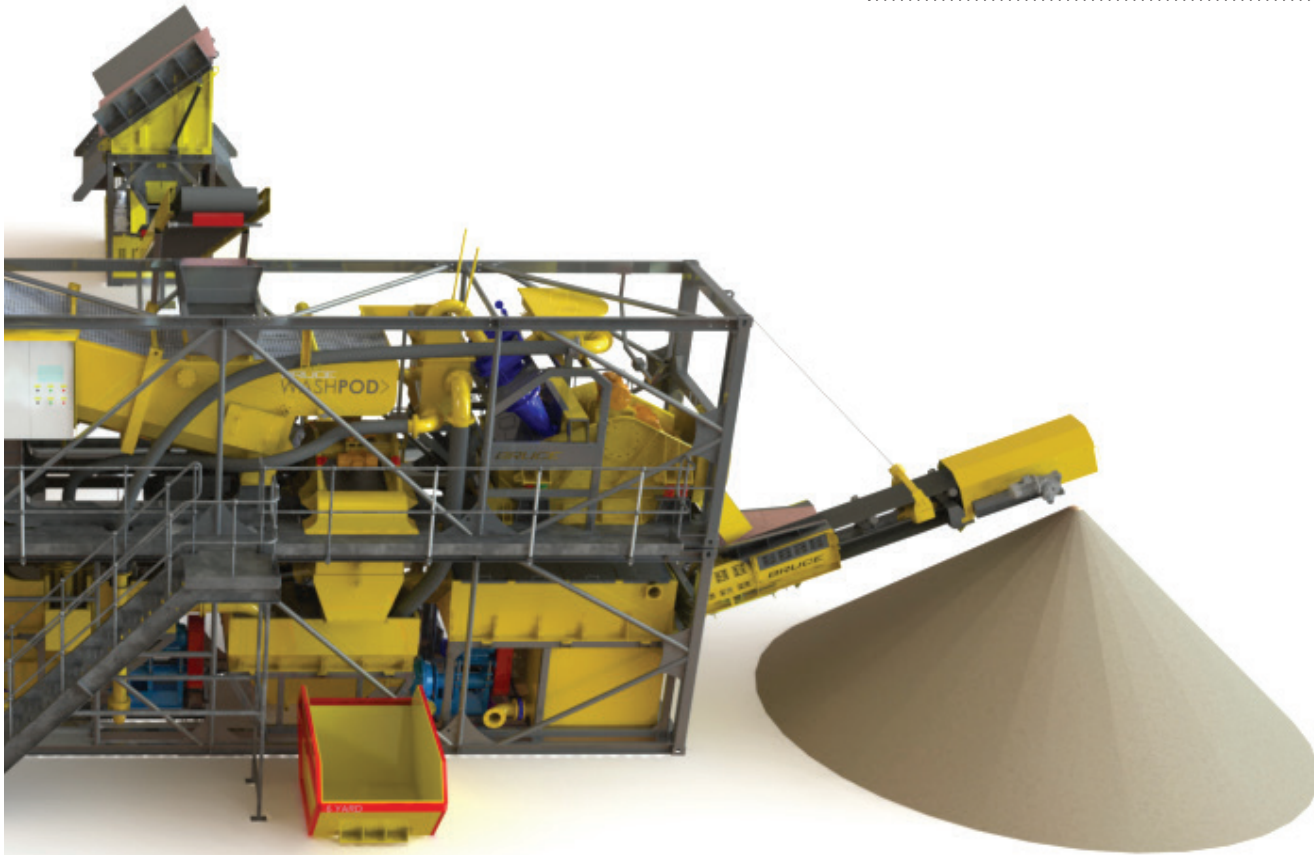


Typical Washing Layout: 02



Layout 02 consists of the following:

- Feed Hopper
 - In Feed Conveyor
 - BW-POD TL
 - Integrated Stockpile Conveyors
-





BWB Recycling Waterbath

The light waste floatation system to maximize recovery of recycled materials.

FEATURES & BENEFITS

- The machine is an operator friendly, cost-effective package designed to separate floating waste contamination from aggregate products

APPLICATIONS

- Construction & Demolition (C & D) waste
- Trommel Fines clean-up
- Particle size from 6mm – 100mm

OPTIONS

- Silt Screw Conveyors
- Hopper and Pan Feeder
- Mobile Tracked Machine – See image left
- Silt Scraper Conveyor



Hoppers & Belt Feeders

Bruce Hoppers & Belt Feeders are designed for feeding quantities of material evenly and consistently to the next stage of processing.



FEATURES & BENEFITS

- Large capacity heavy duty Hoppers and Belt Feeders
- Conform to ISO safety requirements with safety guards and side skirting fitted as standard
- Fixed variable speed drives
- Interchangeable belt scraper segments
- Discharge Conveyors up to 1500mm wide

OPTIONS

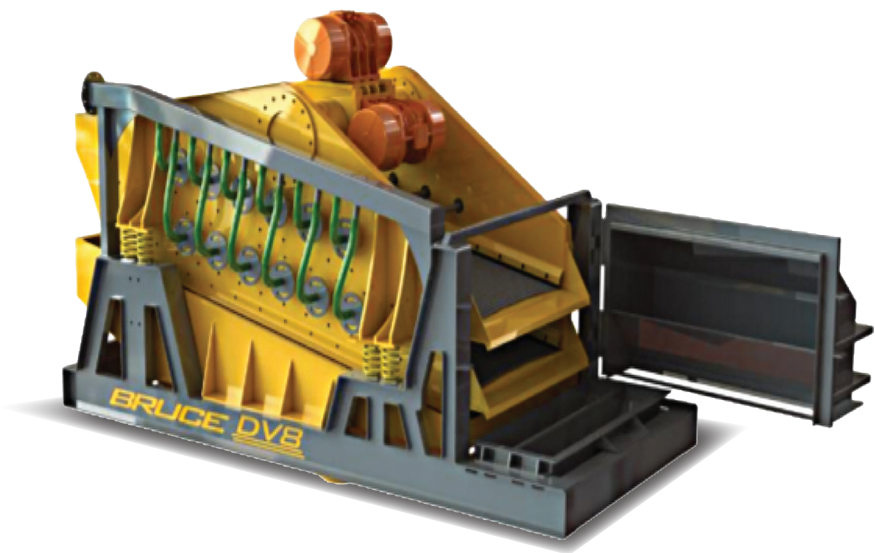
- Various Hopper capacities available
- Hardox® lined
- Open top or grid with Bofor bars
- Hydraulic Tipping Grid with remote control
- Electric or hydraulic drive

Did you know?

Bruce's first wash plant was installed in 1974 and is still running today

BRUCE
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Heavy Duty Washing Screens



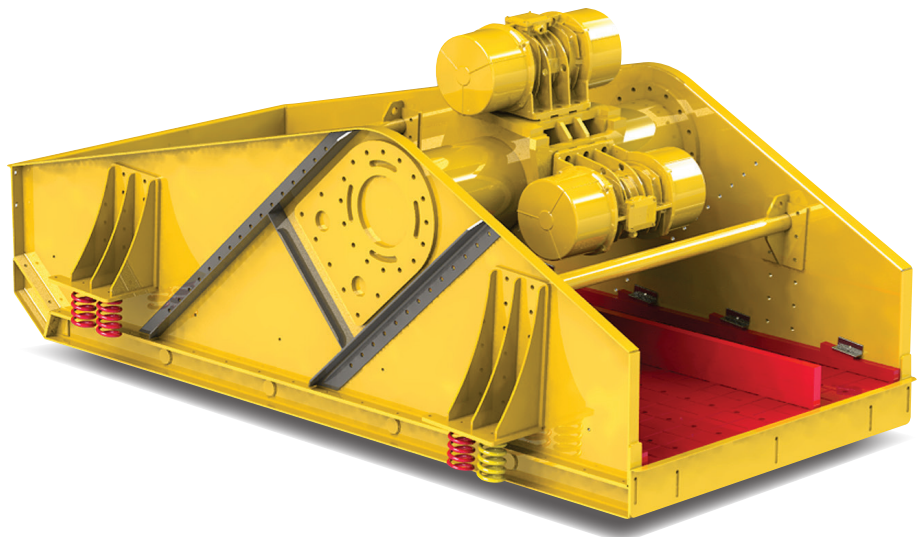
FEATURES & BENEFITS

- High acceleration rate to ensure optimum screening
- Screens driven by low maintenance vibrating motors
- Heavy duty single motor base using a fabricated and machined construction
- Modular skid mounted base
- Spray bars with "Vari-Spray" nozzles
- Hardox® lined discharge chutes
- Variable screen angle 5 - 20°

OPTIONS

- Single, double and triple deck screens available
- Screen media options; polyurethane, rubber or wire screen mats plus finger decks available
- Reverse phase braking system

Dewatering Screens



FEATURES & BENEFITS

- Modular polyurethane media
- Can be supplied as a separate unit or incorporated into existing plants
- High frequency low amplitude vibration for effective dewatering of fine solids

OPTIONS

- Rubber lined Sump
- Spray bars
- Single or Twin Product

Lattice Conveyors

FEATURES & BENEFITS

- Hardox® lined feed boot
- Belt scrapers
- Enhanced guarding
- ISO accredited safety standards

OPTIONS

- Galvanised access steps and walkways
- Chevron belt
- Dust encapsulation covers
- Belt scales
- Electric or hydraulic drive
- Range of lengths and belt widths
- Over-band magnet
- Radial or static



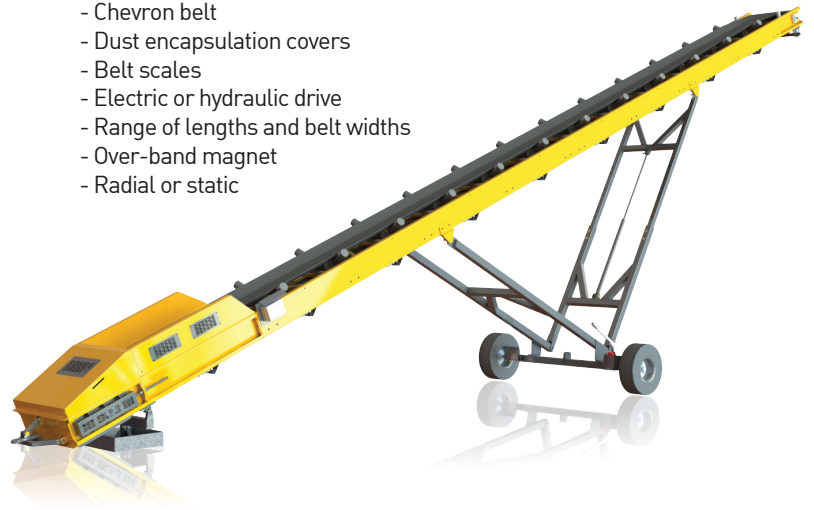
Mobile Conveyors

FEATURES & BENEFITS

- Hardox® lined feed boot
- Belt scrapers
- Enhanced guarding
- ISO accredited safety standards

OPTIONS

- Chevron belt
- Dust encapsulation covers
- Belt scales
- Electric or hydraulic drive
- Range of lengths and belt widths
- Over-band magnet
- Radial or static



Bruce Feeding

ELECTRO - MAGNETIC FEEDERS

Electro-magnetic vibrating Feeders are designed with a single drive unit incorporating variable control to ensure a consistent material feed.

ELECTRO - MECHANICAL FEEDERS

The Bruce extensive range of mechanical vibrating Pan Feeders are designed for light to heavy duty applications within the materials handling industries. The Feeders are driven by twin electric motors with an option of variable feed control.

FEATURES & BENEFITS

- Hardox® liners
- Variable speed control
- Quiet operation
- Low maintenance
- Low energy consumption

OPTIONS

- Hopper
- Conveyors
- Various pan sizes
- Available in 40 - 600t feed rate



Bruce Screening

VIBRATING GRIZZLIES

Bruce Grizzlies have an extremely robust fabricated design.

FEATURES & BENEFITS

- Hardox® liners
- Variable speed control
- Quiet operation
- Low maintenance
- Low energy consumption

OPTIONS

- Available in 40 - 600t feed rate
- Single, double or triple stepped decks



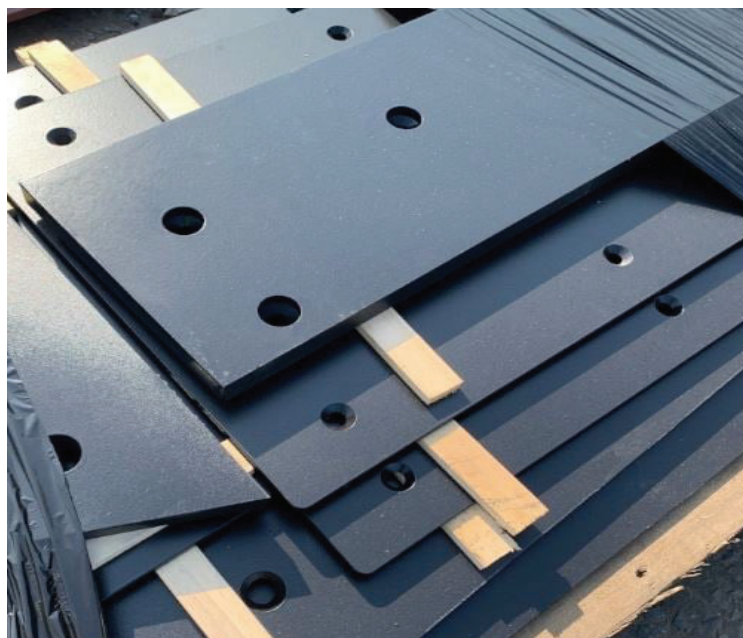
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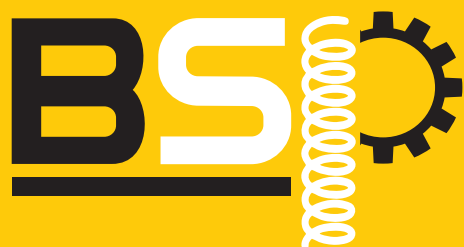
HARDOX®
WEARPARTS
www.hardoxireland.com

Services:

- Welding
- Cutting
- Folding
- Drilling
- Bending
- Machining
- General Wearparts and Cutting Edges
- Complete Wearparts



BRUCE > SPAREPARTS



- > Bearings
- > Belts
- > Drive Motors
- > Hardox
- > Flights
- > Pumps
- > Rollers
- > Screen Media
- > Shafts
- > Cyclone Spigots
- > Springs
- > Vibrating Motors

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intelligent washing solutions

www.bruce-eng.co.uk

Did you know?

Bruce were the first company in Ireland to manufacture Electro-Magnetic Feeders

BRUCE
MATERIALS PROCESSING SOLUTIONS

Water Treatment Partner



.....

Bruce Engineering are proud partners of Tecnoidea Impianti Water & Sludge Treatment Plants.

.....

We can provide the complete solution to wastewater management including:

- Filter Press: Side-beam and Overhead Beam options
- Vertical Clarifiers/Deep Cone Thickeners
- Flocculant Stations
- Clarified Water Tanks
- Pumps



Materials Processing Solutions
all over the world...



> PROVIDING SOLUTIONS
FOR OVER 60 YEARS



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washing solutions**

› FOR OVER 60 YEARS

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