

# intelligent washing solutions

> FOR OVER 60 YEARS



**BRUCE**  
MATERIALS PROCESSING SOLUTIONS

> WASHING/FEEDING/SCREENING/RECYCLING/ENGINEERING/WEARPARTS



# BRUCE

MATERIALS PROCESSING SOLUTIONS

## intelligent washing solutions

With over 60 years experience in the Materials Processing Industry Bruce provide turnkey modular washing systems that produce high quality in-spec products.



**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.

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# BRUCE WashPod

## > Scrubs/Washes/Separates

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

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> Easily transportable with fastest on-site set-up

### FEATURES & BENEFITS

- Smallest working footprint of any complete Washplant
- Fastest on-site set up time
- Easily transportable with no need for specialist transport
- Aggregate scrubbing, trash removal, aggregate rinsing/sizing & sand production in one neat package
- Compliments any make of mobile screen/crusher
- 3-4 products: 2-3 aggregates, 1 sand
- Compliments Bruce Mobile Lamella Silt Settlement System
- Fold-up walkways & access steps
- Branded components throughout
- Integrated conveyors
- Full system control panel

### APPLICATIONS

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

### TPH

- Aggregate Product up to 100tph
- Sand up to 40tph

### OPTIONS

- Radial stockpile conveyors
- Feed hopper
- Feed conveyor





# BRUCE SandPod

## › Fully Containerised Wash Plant

Complete self-contained Aggregate Washing, Sizing & Sand Dewatering System with the same footprint as a Transport Container.

### FEATURES & BENEFITS

- Fully containerised wash plant
- Aggregate rinsing, sizing & sand dewatering all on one unit
- Up to 5 products - 3 aggregates / 2 sands
- Fast on-site setup
- Easily transportable - 2 containers (twist-locks)
- Easily compliments Bruce Feeding Range or any make of mobile screen
- Ready to 'plug & wash'

### WHAT'S ON BOARD

- Double or triple deck washing screen ( 16' x 5' )
- Single or twin product dewatering Screen ( 12' x 5' )
- Single or twin cyclone
- Clean water tank, sand collection sump, dirty water tank
- Complete with integrated pumps & control panel





# BWR300 Washing System

The Bruce BWR300 consists of a 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 logwasher, washing screen & filter (trash) screen
- Mobile or semi mobile skid frame - can be mounted on back of 45' trailer for ease of transportation.
- Compact unique design - easily transportable from site to site with minimum set up time
- Highly productive and efficient screens with high frequency motors
- Full system control panel
- Minimal footprint
- Hardox® wearparts supplied as standard

## OPTIONS

- Double or triple deck washing screen
- The Bruce BWR300 can also be supplied with a Bruce Sand Plant and Bruce Lamella or Thickener Tank for complete turnkey solution
- Plant can be adapted to suit or compliment an existing system

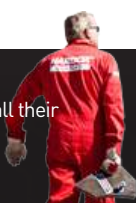
## APPLICATIONS

- Recycled Aggregate
- Sand & Gravel
- Primary Aggregate
- Railway Ballast
- Secondary Aggregate
- Reclaimed Aggregate
- Demolition Waste



### Did you know?

Bruce only use Hardox® for all their wearparts



**HARDOX®**  
WEARPARTS

**BRUCE**  
MATERIALS PROCESSING SOLUTIONS



# BWS Sand Recovery Plant

The BWS Bruce Sand Recovery Plant maximises fines recovery and produces high quality In-spec sand products. The system consists of a lined cyclone, centrifugal slurry pump, dewatering screen and collection tank all skid mounted.

## FEATURES & BENEFITS

- Maximises sand recovery producing in-spec products
- Eliminates loss of quality fines to ponds/lagoons
- Reduction in moisture content of sand product
- Rubber lined slurry pump & hydro cyclone(s)
- High frequency dewatering screen - polyurethane modules provided as standard
- Rubber lined cyclone collection tank
- Weir discharge system
- Removable cyclone and support frame for shipping
- Can produce one or two grades of material
- Adjustable chute under cyclones for allocation of coarse/fines product
- Full system control panel
- Self regulating sump with pump protection float system
- Hardox® and rubber lined wear parts

## APPLICATIONS

- Sand and Gravel
- Washed Aggregate
- Silt

## OPTIONS

- Available in 40 / 60 / 120 / 200tph
- Available with integrated bucket wheel
- Single and twin product available
- Spray bars on dewatering screen
- Boiler box for dry feed







# BWSRB Sand Recovery Plant

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The BWSRB is an extremely efficient Sand Recovery Plant consisting of double bucket wheel, centrifugal slurry pump, hydro cyclone, collection tank and dewatering screen all on one chassis.

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## FEATURES & BENEFITS

- Twin bucket wheel with variable speed control
- Weir discharge system
- Underflow rubber lined slurry pump
- Rubber lined hydro cyclones
- High frequency dewatering screen
- Rubber lined cyclone collection tank
- Can produce one or two grades of material
- Adjustable chute under cyclones for allocation of coarse/fines product
- Full system control panel
- Self regulating sump with pump protection float system
- Hardox® and rubber lined wear parts

## APPLICATIONS

- Sand and Gravel
- Silt
- Clay
- Crushed Rock

## OPTIONS

- Available in 120 / 200tph
- Single and twin product available
- Spray bars on dewatering screen
- Boiler box for dry feed





# BWL/C Logwasher/Coarse Material Washer

Bruce single or twin shaft heavy duty logwashers / coarse material washers are ideal for cleaning and scrubbing contaminated aggregate.

## FEATURES & BENEFITS

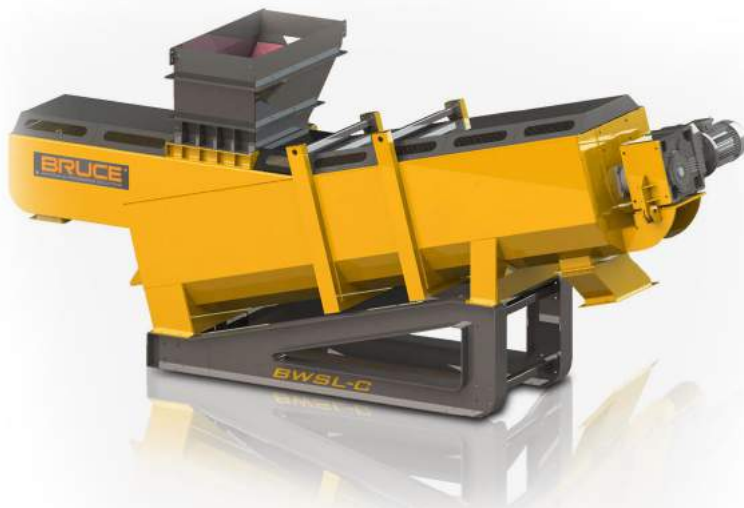
- Robust build for heavy duty applications
- Extended machine life due to Hardox® wear parts & nozzle plates
- Interchangeable Hardox® screw flights, paddles & nozzle plates as standard
- Adjustable water discharge weir system
- Controlled input water flow using valve
- Can be adapted to suit or compliment an existing system

## APPLICATIONS

- Recycled Aggregate
- Primary, secondary or reclaimed Aggregate
- Sand & Gravel
- Railway Ballast
- Reclaimed Asphalt
- C & D

## OPTIONS

- Single or twin shaft machine available
- Can be supplied as separate unit or as an integral part of Bruce washing system
- Full system control panel







# BWD Dewaterer Range

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



# Typical Washing Layout: 01

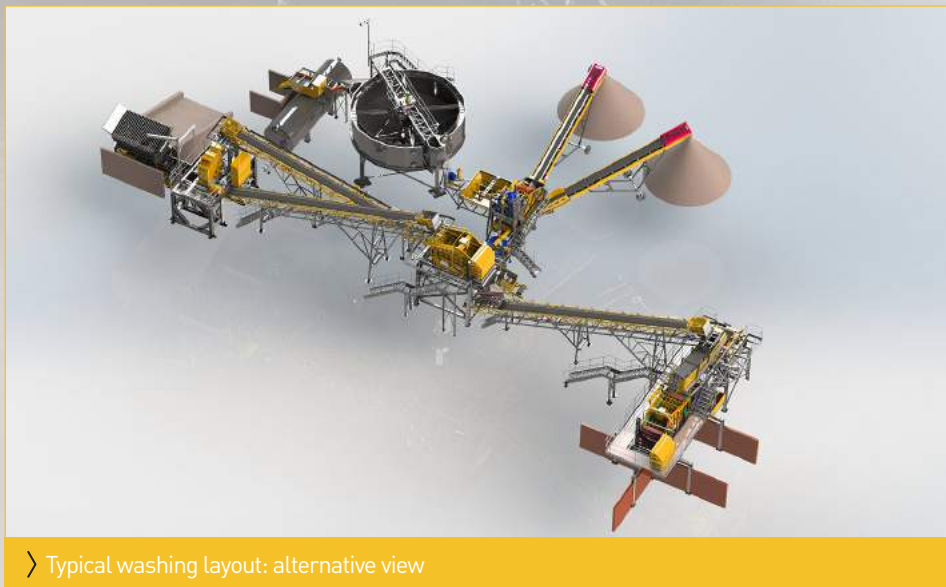
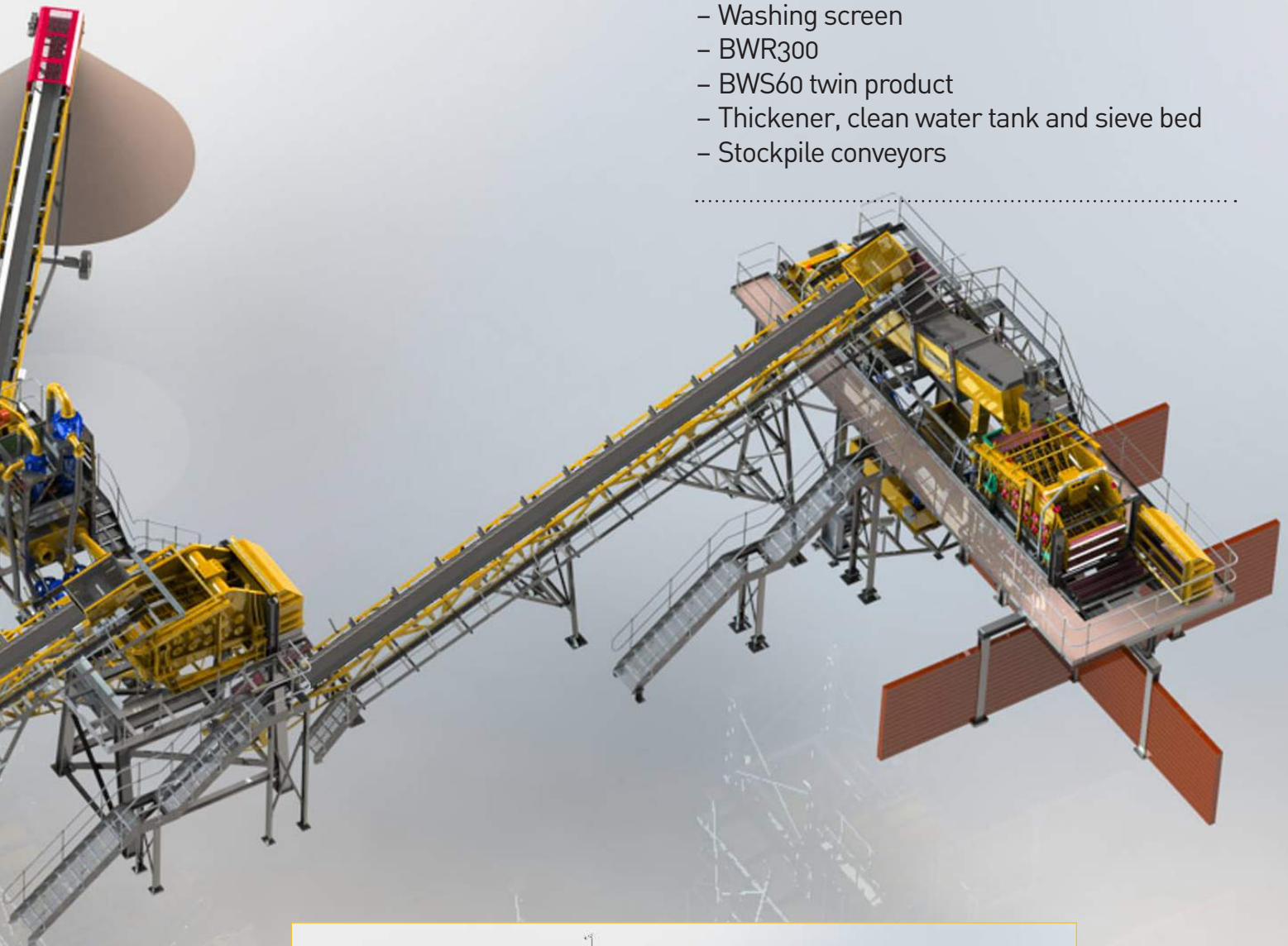




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### Layout 01 consists of the following:

- Belt feed hopper
  - Lattice conveyors
  - Washing screen
  - BWR300
  - BWS60 twin product
  - Thickener, clean water tank and sieve bed
  - Stockpile conveyors
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> Typical washing layout: alternative view

# Typical Washing Layout: 02





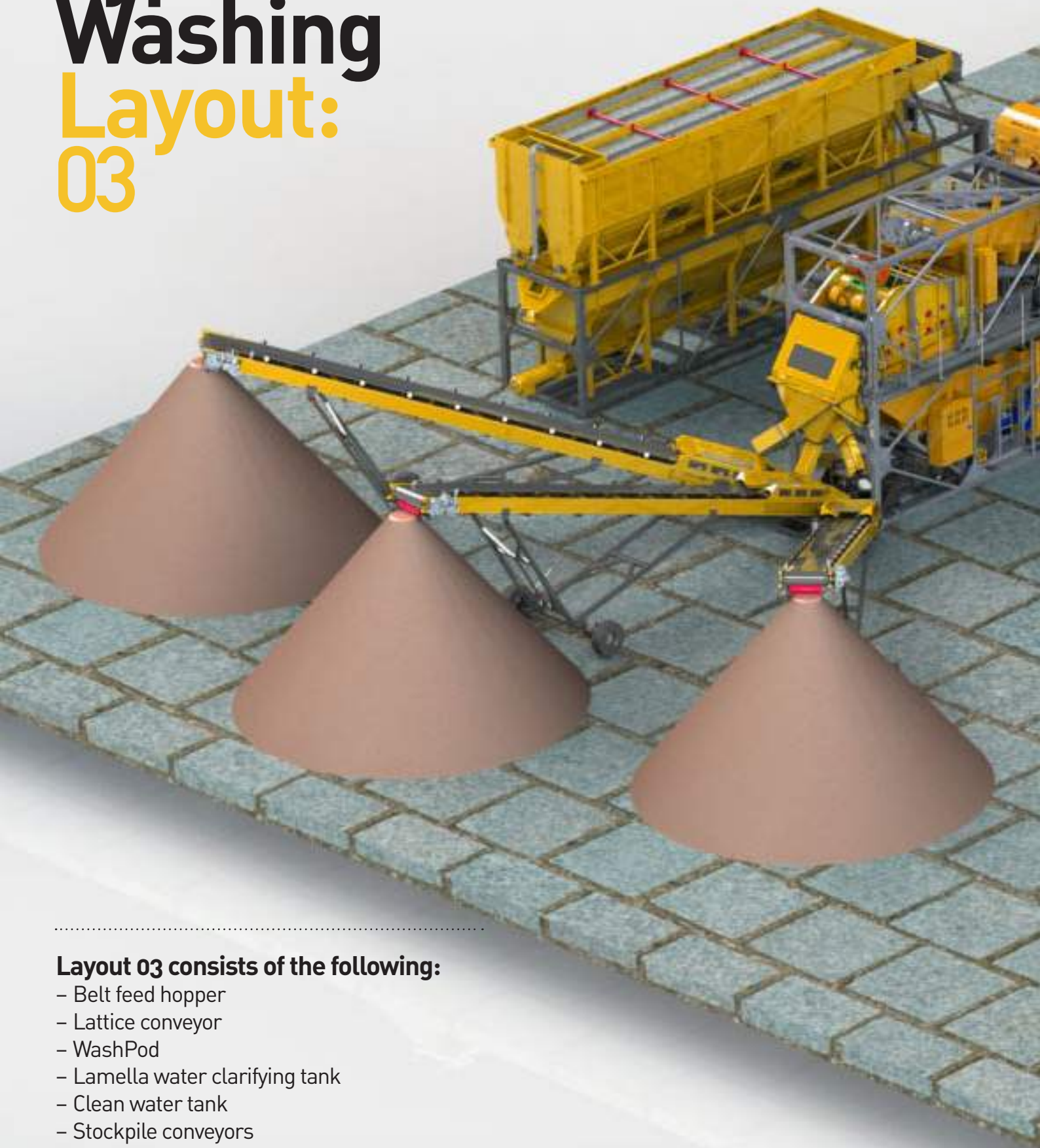
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**Layout 02 consists of the following:**

- Belt feed hopper
  - Infeed conveyor
  - Washing screen
  - BWS sand plant
  - Stockpile conveyors
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# Typical Washing Layout: 03

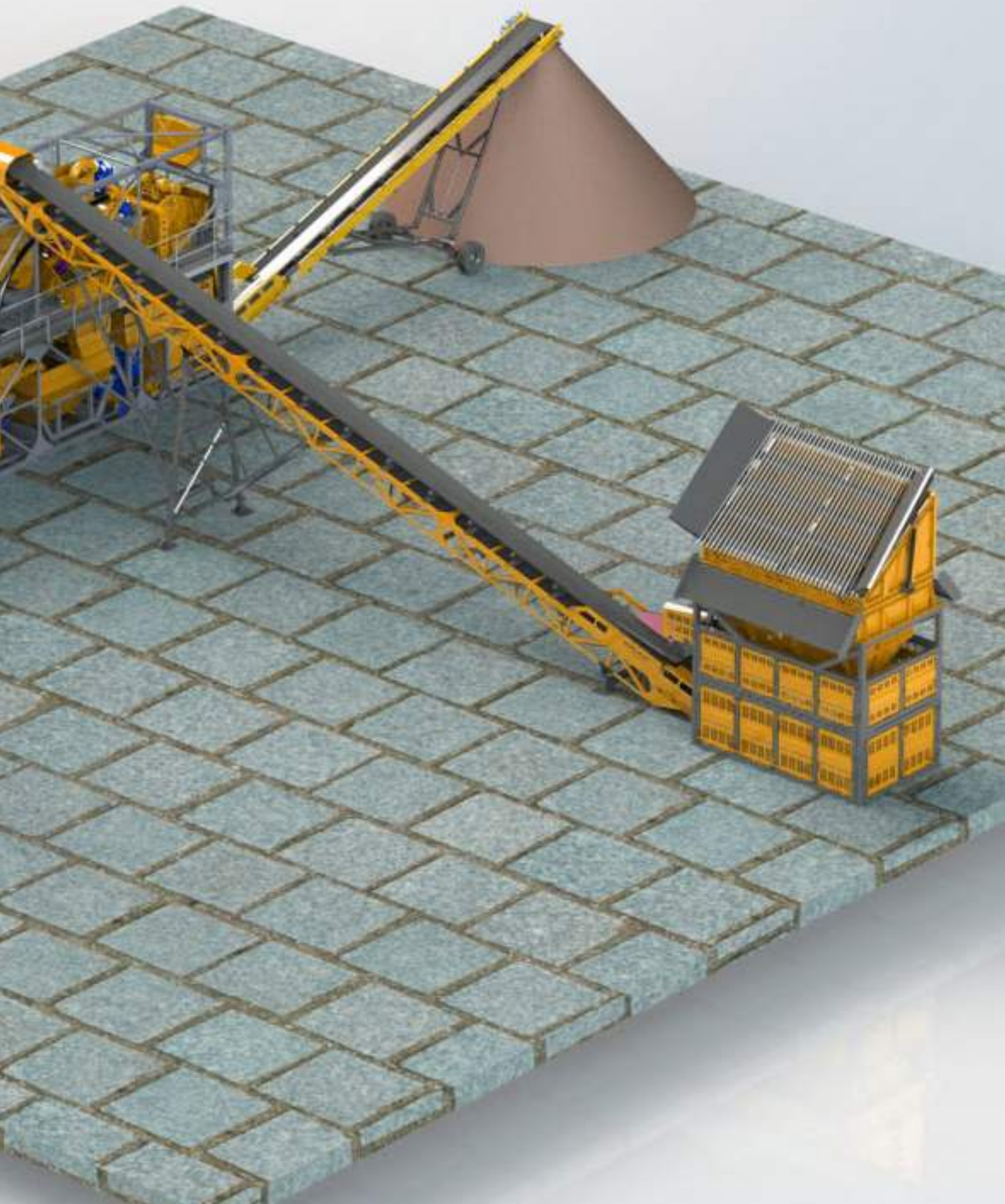


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**Layout 03 consists of the following:**

- Belt feed hopper
  - Lattice conveyor
  - WashPod
  - Lamella water clarifying tank
  - Clean water tank
  - Stockpile conveyors
- .....









# BWT Thickener Tank

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



## FEATURES & BENEFITS

- Fully automatic
- Inlet chamber - located on side of tank. Delivery intake of waste water 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 - overflow 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
- Aggregate
- Crushed Rock

## OPTIONS

- Available in 8m, 10m and 12m models
- Relevant FloccStation/Polyelectrolyte Plant
- Cabin/housing for flocculent dosing station
- Clean water ballast tank
- Sieve bed





# BW Lamella Tank

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The Bruce BW Lamella Tank is a modular fines settlement system to recycle water and eliminate ponds. This unique modular design involves no on-site building and minimal setup time.

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## FEATURES & BENEFITS

- Semi mobile modular frame can be mounted on back of 45' trailer for ease of transportation
- Unique design to market
- 2 x silt screw conveyors with variable speed
- Clean water tank agitator
- Pump for clean water
- Full system control panel

## OPTIONS

- Mobile trailer
- Sludge removal screw conveyor
- Clean water ballast tank
- Sieve bed
- Buffer tank



### Did you know?

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



# BWB120 Recycling Waterbath

Light waste flotation system to maximize recovery of recyclable materials.

## FEATURES & BENEFITS

This unit is an operator friendly, mobile and cost-effective package designed to separate floating contamination from aggregate products

## APPLICATIONS

- Construction waste
- Trommel fines clean-up
- Demolition waste
- Particle size from 6mm - 100mm

## OPTIONS

- Silt screw conveyors





# 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
- Meets ISO safety requirements with safety guards and side skirting fitted as standard
- Fixed variable speed drives
- Fully automatic belt scraper with replacement wiper blade
- Discharge conveyors up to 1500mm wide

## OPTIONS

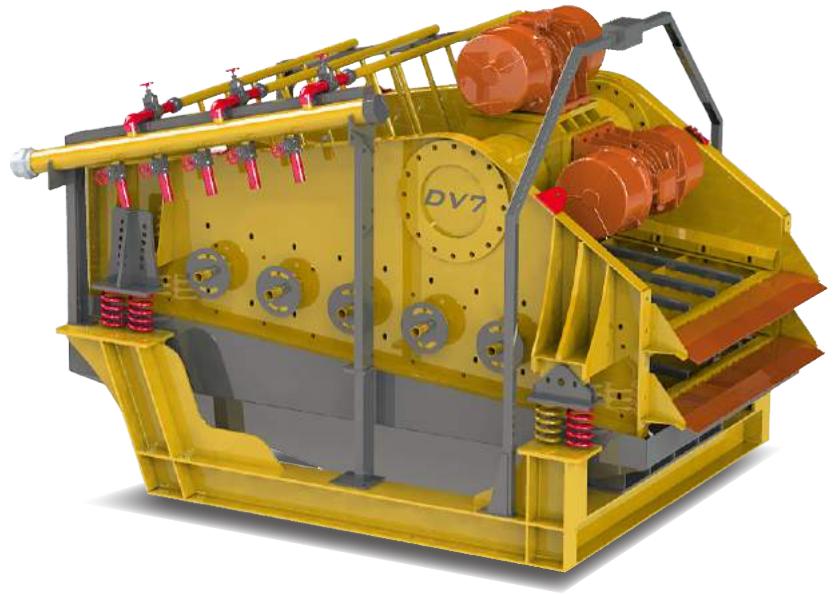
- Hopper lined with Hardox®, HD polyurethane or rubber
- Electric or hydraulic drive
- Blending plants (2 or 3 bin)



### Did you know?

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

# Heavy Duty Washing Screens



## FEATURES & BENEFITS

- High acceleration rate to ensure optimum screening
- Screens driven by low maintenance vibrating motors eliminate the need for complicated shaft assembly & belt drives
- Heavy duty single motor base using a fabricated and machined construction
- Spray bars with "Vari-Spray" nozzles
- Hardox® lined discharge chutes
- Variable screen angle 5 - 20°

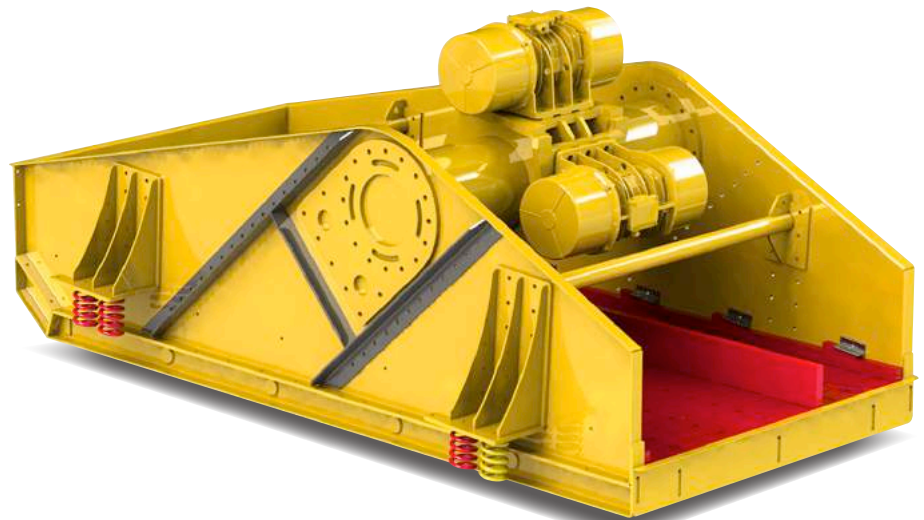
## APPLICATIONS

- Quarry
- Sand Stone
- Mineral Processing
- Sand & Gravel
- Recycling

## OPTIONS

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

# Dewatering Screens



## FEATURES & BENEFITS

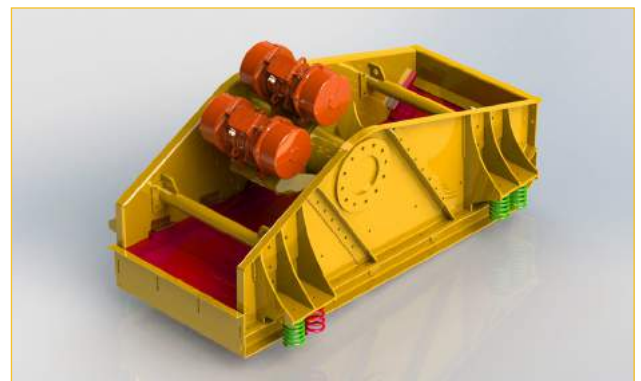
- Modular polyurethane decks
- Can be supplied as a separate unit or incorporated into existing plants
- High frequency low amplitude vibration for effective dewatering of fine solids

## APPLICATIONS

- Sand and Gravel
- Washed Aggregate
- Silt

## OPTIONS

- Rubber lined sump
- Spray bars
- Single or twin product





# Lattice Conveyors

Bruce Belt Conveyors are of a heavy-duty lattice design.

## FEATURES & BENEFITS

- Hardox® lined feed boot
- Belt scrapers
- Conveyors meet ISO accredited safety standards

## OPTIONS

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



# Mobile Conveyors

## FEATURES & BENEFITS

- Belt scrapers
- Conveyors meet ISO accredited safety standards

## OPTIONS

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



# Bruce Feeding

## ELECTRO - MAGNETIC FEEDERS

Electro-magnetic vibrating feeder's are designed with a single drive unit incorporating variable control to ensure a steady feed of material.

## 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

- Single, double or triple stepped decks
- Hopper
- Conveyors
- Vibrating dry screens
- Available in 40 - 600t feed rate







**HARDOX®**  
WEARPARTS

**Services:**

- Welding
- Cutting
- Folding
- Drilling
- Bending
- Machining

**Industries:**

- Quarry & Mining
- Recycling
- Agriculture
- General Wear Parts & Cutting Edges

# Keeping you up and running



**When time = money  
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all over the world...



> PROVIDING SOLUTIONS  
FOR OVER 60 YEARS

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**Bruce Engineering Services (NI) Ltd.**  
33 Lindesayville Road, Cookstown, Co. Tyrone BT80 8UH

 +44 (0) 28 8676 3684  sales@bruce-eng.co.uk  www.bruce-eng.co.uk

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