



PRODUCTS & SERVICES CATALOG



Member Companies of Floyd Holdings



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Advanced Conveyors & Bulk Handling Systems

The SMART Conveyor™ Company

**BE
&E**

SMART CONVEYOR™

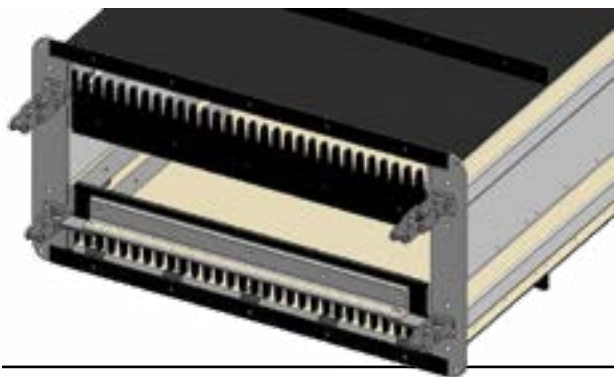
Designed for versatility, SMART Conveyors™ are available in three series with variable volumetric and load capacities. Conveyor widths range from 18-72". All are available with a variety of finishes and components. They allow for multiple inlets and outlets and can be configured as top-drag or bottom-drag units. Ash-handling configurations are also available.



01

UNIQUE CAPABILITIES

- High inclines up to vertical
- Change curve wear strips in just minutes (S Series)
- Modular construction allows for reconfiguration
- Replace sprockets and wear items without breaking the chain
- Relatively little power required for high volumes



02

SUPERIOR DESIGN

- Paddles don't touch floors or sidewalls
- Chains run outside the material path
- Bolted construction
- Metal-on-metal contact occurs only at the sprockets
- Requires only one structural support every 40'
- Enclosed design contains dust
- Standard parts for easier maintenance
- Split head for faster maintenance (M/T Series)
- Multiple fail points to protect critical components

03

BUILT-IN SAFETY

- Fully enclosed / "dust tight"
- Shaft-mounted gearboxes with direct drive
- Available with automatic deluge with spark detection, explosion panels, and flameless explosion vents
- Meets NFPA standards for explosion hazards



BURST PANELS
INSPECTION DOORS
DELUGE NOZZLES
CONDUIT SUPPORTS
CUSTOM COLOR

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CONVEYOR OPTIONS

MORE
FUNCTIONS

MORE
OPTIONS

MORE
APPLICATIONS

01

MORE FUNCTIONS

- Extended tops
- Tail scoops
- Paddle scoops
- Slide gates (electric or pneumatic)
- Sweep brushes
- Conduit mounts
- Manual sample ports
- Mid-floors



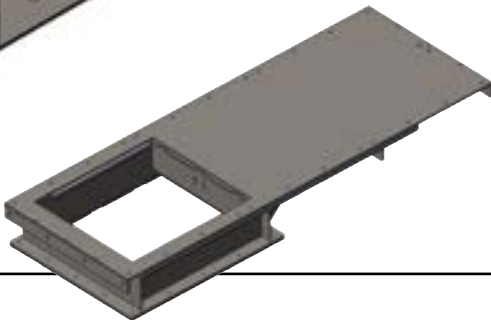
MANUAL SAMPLE PORT

PADDLE
BRUSH

PADDLE
SCOOP



SLIDE
GATE



02

MORE OPTIONS

- Flop and diversion gates
- Explosion burst panels
- Flameless vents
- Automatic deluge with spark detection
- Sealed inspection doors
- Sealed access doors
- UHMW, Tri-Braze, and AR steel floor liners
- Powder coat, galvanized, and stainless steel finishes
- Custom colors

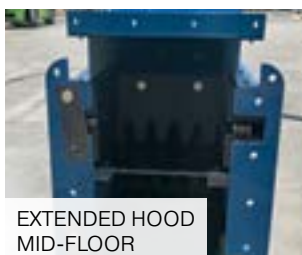
03

MORE APPLICATIONS

- Stainless steel ash conveyor
- Single or multiple curves
- Top- or bottom-drag
- Three series with differing heights and capacities: S (standard), M (medium), and T (tall)



GALVANIZED FINISH



EXTENDED HOOD
MID-FLOOR



FLOP GATE

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SMART CONTAINER

VERSATILE
DESIGN

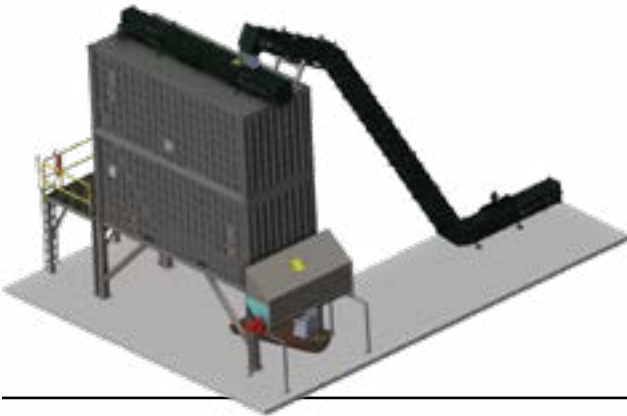
DISTINCT
VALUE

SIMPLE
OPERATION

01

VERSATILE DESIGN

- Available in 20' or 40' lengths
- 2,300 ft³ base capacity (40')
- 1,025 ft³ base capacity (20')
- Hydraulics require no sensors or limit switches
- Accurate discharge rate without large surges
- Can be made "dust tight"
- First-in, first-out material recovery



02

DISTINCT VALUE STATIONARY CONFIGURATIONS

- Can be placed side-by-side for material segregation, blending, or redundancy
- Stack up to three units tall
- Installs quickly, often in 2-3 days
- Minimal civil work required
- Vertical walls resist bridging
- Available with devices to mitigate fires and explosions
- Available with closed or open top

03

SIMPLE OPERATION MOBILE OPTION

- Use for on-site storage, transport, and feeding
- Sits on flatbed trailer
- Ready to operate upon delivery
- "No mess" receiving stations available



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SMART FLOORS

**VERSATILE
DESIGN**

**ROBUST
PERFORMANCE**

**SIMPLE
MAINTENANCE**



01

VERSATILE DESIGN

- Contents can be blended at discharge
- Storage can be divided
- Trucks and wheel loaders can unload directly onto storage area
- Modular design allows for future capacity expansion

Storage building
with SMART Floors



02

ROBUST PERFORMANCE

- Existing buildings can be converted to storage facilities
- Material flow is first-in, first-out
- Flights shear material off bottom of pile
- Accurate discharge rates
- Available for small, 20' bunkers or large buildings
- Available with "push" or "pull" hydraulics

03

SIMPLE MAINTENANCE

- No sensors or limit switches
- Overflow protection available
- Long-lasting wear materials
- Stokers are powered individually so crews can maintain the floors without shutting down the entire system



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TWIN-SCREW METERING BIN



ENCLOSED TRI-SCREW BIN

LIVE-BOTTOM BINS

NUMEROUS
APPLICATIONS

SMART
FEATURES

PROVEN
RELIABILITY

01

NUMEROUS APPLICATIONS

- Metering / Surge protection
- Process infeed
- Moving-floor trailer receiving
- Wheel loader receiving
- SMART Container receiving



8'X16' RECEIVING BIN

02

SMART FEATURES

- Shaft-mounted direct drive
- Individually powered shafts
- No drive chains, pulleys, or hanger bearings
- "Dust tight" when paired with our SMART Conveyors™
- Standard zero-speed sensors
- Optional explosion panels, spark detection, and deluge
- Vertical walls resist bridging
- Protects feed conveyor from damaging surges
- No bridging at the conveyor inlet



OPEN-TOP
4'X16' BIN



ABOVE:
4'X16' BIN WITH
ADDED CAPACITY



LEFT: TRI-SCREW BIN
FOR RECEIVING

RIGHT:
QUAD-SCREW
BIN WITH ADDED
CAPACITY



03

MANY CONFIGURATIONS

- Single-screw centering
- Open top (for wheel-loader and trailer receiving)
- Top hat (for moving-floor trailer receiving)
- Containerized with quad-screw outfeed
- Enclosed, tri- and quad-screw
- Custom solutions for unique needs

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SIDE-DISCHARGE RECEIVING BIN



SIDE-DISCHARGE RECEIVING BIN, INTERNAL



SIDE-DISCHARGE RECEIVING BIN

TRAILER RECEIVING

SMART
FEATURES

MULTIPLE
CONFIGURATIONS

AUTOMATED
INFEED



REAR-DISCHARGE
RECEIVING BIN

01

SMART FEATURES

- Shaft-mounted direct drive
- Individually powered shafts
- No drive chains, pulleys, or hanger bearings
- Standard zero-speed sensors
- Protects receiving conveyor from damaging surges
- No bridging at the conveyor inlet
- Available with pneumatic dust collection
- Available with automated shut-off switch

02

MULTIPLE CONFIGURATIONS

- **Rear-discharge** “in-line” style for mess-free receiving
- **Side-discharge** style with a smaller footprint and a 10' depth
- **Centering bins** fitted to receive from SMART Containers without mess



SMART CONTAINER RECEIVING BINS

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TRAILER LOADING

**SMART
OPERATION**

**MEASURABLE
ADVANTAGES**

**EXCELLENT
VALUE**

01

SMART OPERATION

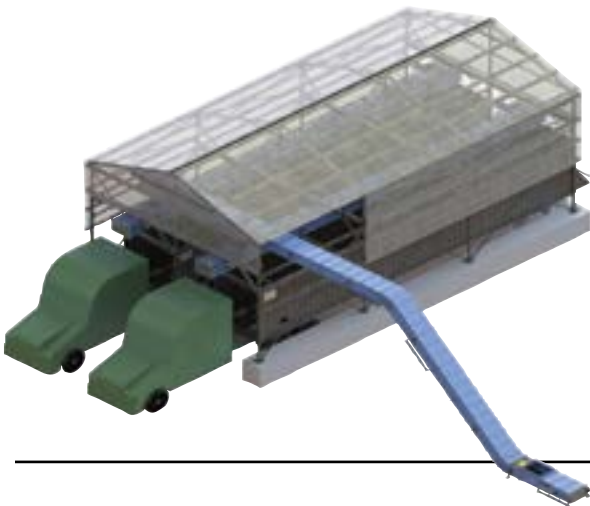
- Drops material directly into trailers
- Enclosed, conveyor-based system
- Full, even loads front to back
- Can be easily integrated into a chipping line or implemented as a self-contained process



02

MEASURABLE ADVANTAGES

- Requires no air permits to operate
- Drive-through convenience
- Eliminates need for loud, inefficient fans
- Eliminates the need for storage and its related maintenance costs
- Load times as fast as 20 minutes with BE&E's 48S SMART Conveyor™
- Modular design allows for expansion



03

EXCELLENT VALUE VS. CHIP BINS

- Less capital costs
- Far less dust
- Safer loading environment: no need to unplug material to encourage flow
- Less ground space required



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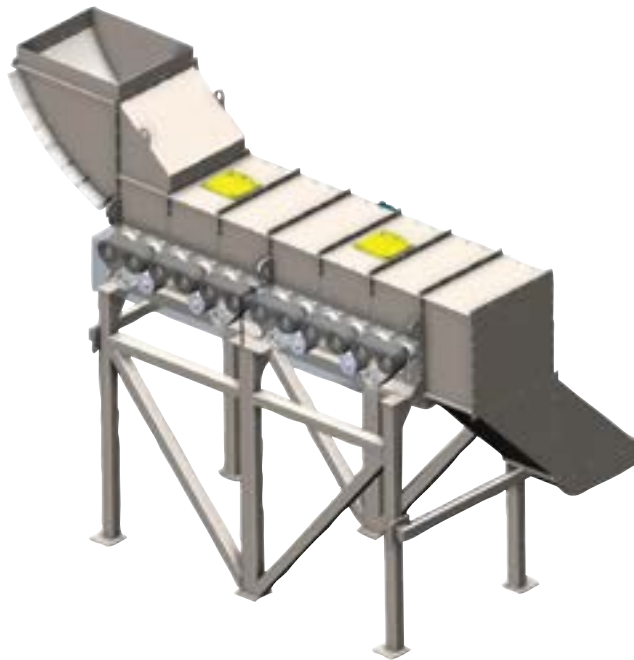
**BE
&E**

DISC SCREENER

**SMART
FEATURES**

**BETTER
ENGINEERING**

**SIMPLE
MAINTENANCE**



01

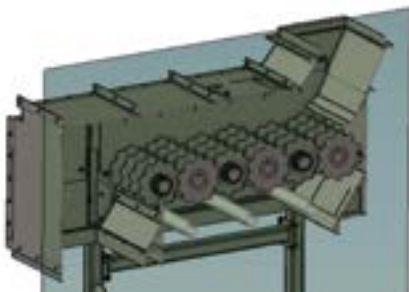
SMART FEATURES

- Superior rock handling: thousands of shapes simulated to reduce jams
- “Dust tight” enclosure
- Available with NFPA-compliant components for fire and explosion safety
- Discs not welded to shafts: can adjust spacing and swap discs
- Bolt-together construction
- Bolts directly to BE&E’s SMART Conveyors™

02

BETTER ENGINEERING

- Cogged belt drive
- No chains or pulleys
- Quiet operation
- Direct drive, shaft-mounted motor
- No lubrication required
- No tensioning required



Advanced Conveyors & Bulk Handling Systems

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LOG HANDLING

SMART
DESIGNS

INTELLIGENT
SORTING

MULTIPLE
OPTIONS

01

SMART DESIGNS DECKS AND TROUGHS

- Easy-to-access bearings
- Modular, bolt-together sections
- Slots included for viewing tension
- Strands can be changed in less than an hour
- Individually driven strands reduce power requirements and decrease the size of shafts, bearings, and gearboxes
- Built to withstand years of abuse



02

INTELLIGENT SORTING

- 20' infeed deck with three or four strands
- Singulation with bull wheels (hardwood)
- Crosswise sorting (softwood)
- Three 10' bays (six sorts) for hardwood
- Ten 12' bays (ten sorts) for softwood
- Automatic length and diameter scanning (softwood)
- Waste conveyor under structure
- Walkways, stairs, and controls
- Three logs per minute sort rate for hardwood
- Eighteen logs per minute sort rate for softwood



03

MULTIPLE OPTIONS

- Automated grading
- Manual to fully automatic controls
- Metal detection with reject bin
- Hourglass conveyors
- Debarkers (rotary or rosserhead)
- Log conveyors (trough or hourglass)



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BELT CONVEYOR

Belt conveyors from BE&E are the premier choice for a horizontal or low-angle conveyance system. Built without catch points, our belt conveyors will transport your bulk materials without snags that slow production. They're safe and make for easier clean up.

LESS MESS

Rollers only used in tail section, so dust collects in one spot

NO SNAGS

Seamless tray:
Sections welded together
and ground smooth

SAFE OPERATION

Powered by direct drive
No pulleys
No idler rollers



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PELLET PLANTS

BE&E offers complete service for turn-key pellet mills with outputs between 34,000-103,000 tons per year. Let us engineer, procure, and oversee the construction of a premium mill that will produce a consistent, value-added product.

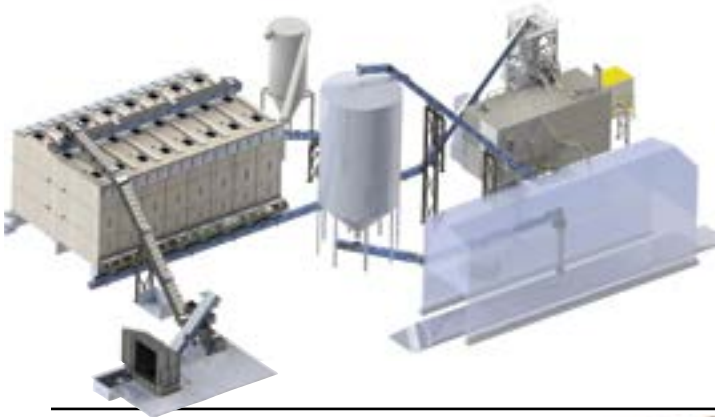


01

ENGINEERING AND DESIGN

- Site civil engineering
- Electrical engineering
- Mechanical engineering
- Structural engineering
- Controls engineering
- Workload calculations

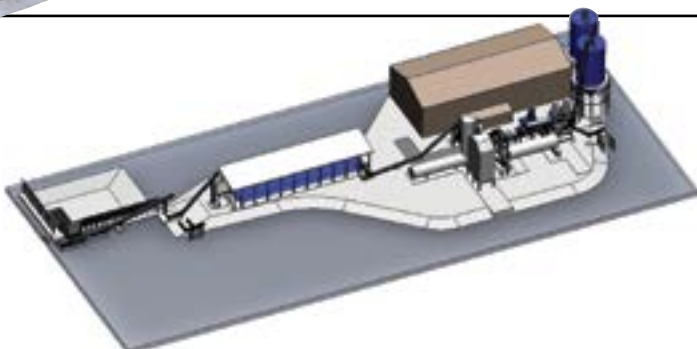
Drax pellet mill
Leola, Mississippi
Material Handling



02

INSTALLATION AND STARTUP

- Facility operations building
- Base rock and concrete for all machinery foundations
- Finished access roads and work area access pads
- Supply of all electrical components, controls, and machinery
- Electrical connections from the transformer
- Installation and startup for all the above



03

TECHNICAL SUPPORT

- Training on all supplied machinery
- CMMS maintenance program
- On-site technical support for the first month
- Quarterly technical visits for next year
- Assembly sections to save time during assembly

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ADDITIONAL SERVICES

Far more than a machine manufacturer, BE&E offers 3D LIDAR scanning, modeling, layout design, construction management, and turn-key services for its customers. We design everything in 3D to precisely locate equipment and prevent misunderstandings that can occur with 2D modeling.

ACCURATE DESIGNS

Engineering completed in 3D

TURN-KEY SOLUTIONS

Pellet mills
Material handling
Chipping lines
Log infeed
And more!

EXPERIENCED CONSTRUCTION

Available
worldwide



VIBRAPRO™

**SMART
DESIGNS**

**INTELLIGENT
SORTING**

**MULTIPLE
OPTIONS**

01

SMART DESIGNS

- Width: Conveyors are manufactured in 6" increments up to 25'. Length: Manufactured to fit. Most efficient range is 80-100'.
- Tail to Drive: Sections offered in 20' length. Drive section 25' length. Drive to head custom.
- Conveyor leg spacing: Standard spacing 6'-8', Maximum leg spacing 10' max.
- Drive System: Belt driven motor to avoid VFDs



02

INTELLIGENT SORTING

- Maximum incline angle 5°
- Feed Rate: Maximum 60ft/min
- Standard Trough Height 12"
- Maximum spring load is 16,000lbs
- Finger Screen scalping section to bypass acceptable size material.

03

CONVEYOR OPTIONS

- Perforated PLT screen, finger screen, mesh screen, adjustable dropouts. - Any mesh size. Requires material depth <6". Easy clean.
- Partition wall separation and Diverter Gates:

Manual and air actuated.

- Chipper throat infeed trough
- Hood and lids
- Pan liners
- Slope chute support arms
- Support legs and framing: Horizontal and Angled
- Dewatering system



SPANNER CONVEYOR



VIBRAPRO™

Vibratory Conveyors

04

MAGNET SYSTEM

- EZ clean magnets are a great option to eliminate confined entry spaces.
- Can be opened and cleaned from outside the conveyor, eliminating the need for a spotter and lock out tag out of overhead equipment that is contained within the parameters of slope chuting.
- Offer in fixed, wedge, and hanging magnets.



05

SCREENING

- The primary function of any screen is to separate particles of different sizes from one another. This is accomplished by passing mixed material over various screen surfaces so as to have the undersized particles pass through specifically sized apertures to another surface while retaining the oversized particles on the upper surface.
- Screen Types: Perforated PLT screen, finger screen, mesh screen, and adjustable dropouts.



06

GREASE MANIFOLD - PROXIMITY SWITCH

- **Grease Manifold** provides single contact point to grease all components whether or not conveyor is running or stationary. *Offered as Standard Equipment.*
- The **Proximity Switch** allows for connection with internal system to monitor conveyor movement. *Offered as Standard Equipment.*



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