



# IRONCORE<sup>™</sup> Standard Product Brochure

Design | Fabrication | Installation & Millwright Services | Maintenance | Robotic Palletizing

# IRONCORE Bucket Elevators

Centrifugal Discharge | Continuous Discharge | Belt or Chain Driven

- A complete range of bucket types available to suit any application
- Continuous seam welds
- Dust & moisture sealed construction for indoor and outdoor use
- Easy access cleanout and inspection design
- OSHA & CEMA compliant



#### Options

- Self cleaning boot
- Belt or chain
- Head & intermediate access platforms
- Vulcanized plain or herringbone pattern lagging
- Welded strip lagging
- Drum or wing pulleys
- Enclosed take ups
- Belt alignment monitorng
- Abrasive resistant liners
- Speed monitors for operational efficiency
- Blockage control detection sensor

- Capacities: 1000BPH 30,000BPH, 10MTPH -850MTPH
- 10 150 HP motor power range
- High duty cycle
- 3 Phase 600V, 575V, 460V volt motors
- Shaft mounted AGMA Class II gearbox
- CSA Class II Division 1 Groups E, F & G approved
- Made to order custom designs available

# IRONCORE Distributors

Flat Back | Round

- Positive air return style for dust control
- Liners available
- Blockage and control monitoring
- Dust & weather tight construction for indoor and outdoor use
- Easy access cleanout and inspection design



#### **Options**

- Manual or electric operation for spout selection & positioning
- Positive air return style for dust control available
- Mild, galvanized, or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Motor size designed to order
- Spout sizes: standard sizes 6"-20"
- Number of outlets: 4 -20
- CSA Class II Division 1 Groups E, F & G approved
- Custom designs available

# IRONCORE Valves

Diverter | Pan | Salem | Swing

- Hybrid diverter designs for increased versatility
- Automated spout positioning
- Easy access cleanout and inspection design
- Dust & weather tight construction for indoor and outdoor use
- Heavy duty construction



#### **Options**

- Swing valves with single or dual inlets
- Non-explosion proof versions
- Manual, electric, or pnuematic lever actuation
- Mild, galvanized, or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Spout sizes: standard sizes 6"- 20"
- Number of outlets: 2 20
- CSA Class II Division 1 Groups E, F & G approved
- Made to order custom designs available

# IRONCORE Belt Conveyor

Troughing | Flat Top | Hybrid | Enclosed | Stackers | Metering

- Easy access for reduced labour and maintenance
- Self cleaning
- Energy efficiency design
- Heavy duty construction suitable for indoor or outdoor use
- CEMA compliant



#### Options

- Drum, wing, or self-cleaning wing pulleys
- Vulcanized plain, herringbone or diamond pattern lagging
- PLC and HMI control integrations
- CEMA idlers
- Speed monitors for operational efficiency
- Cord activated safety pullswitches
- Automated discharge belt trippers
- Mild, galvanized, or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Belt widths: 18"- 60"
- Capacities: 4000BPH-58,000BPH, 102MPTH-1482MTPH
- High duty cycle
- 3 Phase 600V, 575V, 460V volt motors
- CSA Class II Division 1 Groups E, F & G approved
- Made to order custom designs available

# IRONCORE Drag Conveyors

U-Trough | Flat Bottom | Incline

- Dust and moisture sealed lids
- Easy access inspection ports
- Clean boot designs to reduce contamination
- Heavy duty chain, sprockets, flanges, and head sections
- CEMA compliant



#### **Options**

- CA550, 81X, 81XH, WH-124 typical sprocket & chain series are based on size & application
- Enclosed take ups
- PLC and HMI control integrations
- Flat or hip lid configurations
- Hinged, lockable lids for safe accessible cleaning
- Side inlets
- Intermediate discharge gates
- Standard or custom sections
- Speed monitors for operational efficiency
- Blockage control detection sensor at discharge

#### **Specifications**

- Custom throughput capacities to suit customer needs
- 5-75 HP motor power range for most common applications
- High duty cycle
- 3 Phase 600V, 575V, 460V volt motors
- CSA Class II Division 1 Groups E, F & G approved
- Made to order custom designs available

Get a Quote Today:

sales@advancemillwrights.com

# IRONCORE Screw Conveyors

Formed U-Trough | Round Tube Trough

- Feeder screws for metering accuracy
- Round tube trough for inclined or full loading applications
- Continuously welded
- Standard or custom sections available
- CEMA compliant



#### Options

- Right hand, left hand & reversible conveyors
- Helicoid or sectional screws
- PLC and HMI control integrations
- Cut, ribbon, or cut & folded flight
- Flight shrouds
- Large selection of hanger bearing styles
- Single, twin, triple & quad arrangements
- Flared trough
- Side inlets
- Intermediate discharge gates
- Flush end discharges
- Discharge breaker rods

Get a Quote Today:

#### **Specifications**

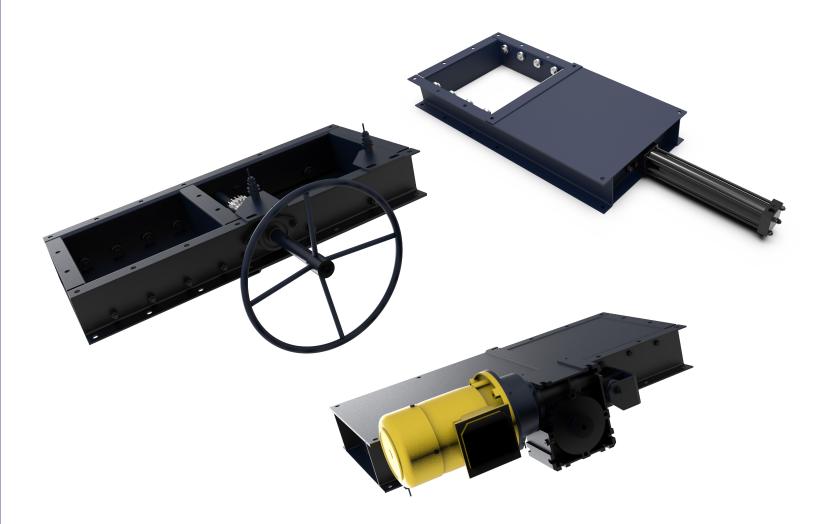
- Custom throughput capacities to suit customer needs
- Screw diameter range: 4" 36"
- Inclined screw conveyor available upon request
- Made to order custom designs available

ay: sales@advancemillwrights.com | 1-800-675-4073

# IRONCORE ™ Gates

Slide

- Innovative product loss technology for improved yield
- Jam resistant design
- Sensors to verify the desired slide plate position
- Suitable for indoor or outdoor use
- Easy access cleanout and inspection design



#### Options

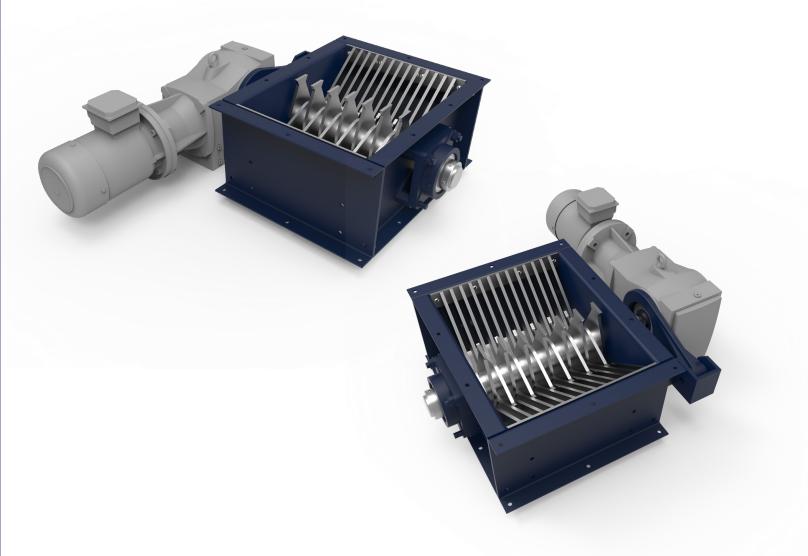
- Economical non-explosion proof versions
- Manual handwheel actuation
- Electric motor or linear actuation
- Pneumatic cylinder actuation
- Mild, galvanized, or stainlesss steel build

- Heavy duty construction
- 24 VDC / 120 VAC / 575V 3 phase operation available
- CSA Class II Division 1 Groups E, F & G approved
- Made to order custom designs available

# IRONCORE Lump Breaker

Round Bar - Single Shaft | Flat Bar with Grating - Dual Shift

- Flange mount configurations for compact installations
- Fines production kept to a minimum with precision rotor design
- Low speed high torque for tough product resizing
- Easy access cleanout and inspection design
- Low noise output



#### **Options**

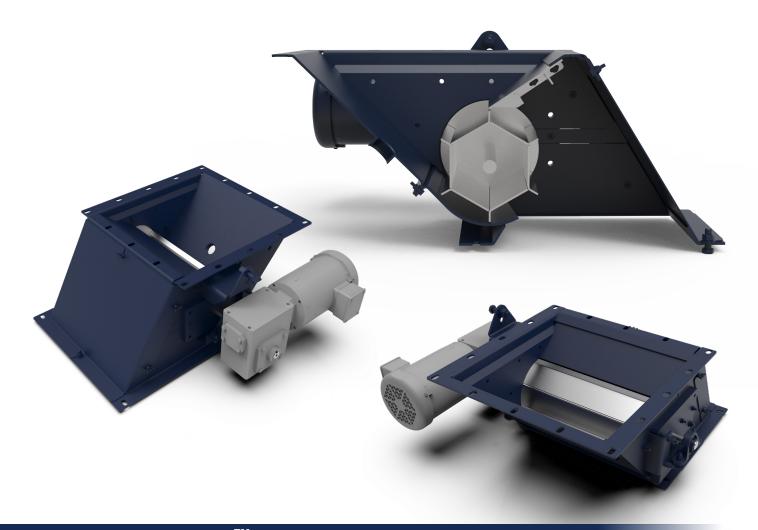
- High wear resistance materials
- Non-explosion proof versions
- Mild, galvanized, or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Heavy duty construction
- Standard sizes 12"x12", 18"x18" or 24"x24"
- CSA Class II Division 1 Groups E, F & G approved
- Made to order custom designs available

# IRONCORE Rotary Feeder

Metering Trough Feeder

- Uniform dispersion of bullk materials at high flowrates
- Hybrid rotor designs for efficient product handling
- Rotor speed monitoring
- Easy access outboard bearing design
- Heavy duty construction suitable for indoor or outdoor use



#### **Options**

- Bolted rotor tips for adjustablillty
- High wear resistance materials
- Non-explosion proof versions
- Mild or stainless steel fabricated housings
- Enamel, powder coated, or epoxy finishes

- Standard diameters: 6", 8", 10", 12", or 14"
- Standard Lengths: 24", 36", or 48"
- Standard speed: 1-22 RPM
- High duty cycle
- 3 phase 600V, 575V, 460V motors
- CSA Class II Division 1 Groups E, F & G approved
- Made to order custom designs available

# IRONCORE Bins & Hoppers

Square & Rectangular Bins | Round Storage & Process Bins | One Piece Fully Welded Hoppers | Square to Round Transitional Hoppers | Split Panel Bolted Hoppers

- Continously welded design
- Reinforced bin walls
- Square or round discharge collars
- Suitable for all types of dry bulk solid material
- Heavy duty construction suitable for indoor or outdoor use



#### Options

- Bin support structure
- Hopper support frames
- Displaced air venting
- Inspection ports
- Cladding finishes
- Level & inventory monitoring
- Mild, galvanized, or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Standard sizes: 6'x6', 8'x8', 10'x10', 12'x12', 14'x14'
- Standard round sizes: 3'-12' diameter
- Made to order custom designs available

# IRONCORE Lids & Hatches

Square Inspection Lid - Flat | Spout Inspection Hatch - Round



- Lightweight
- Dust and moisture sealed
- Variety of hinge styles to accomodate space restraints
- Bolted or clamp latches
- Heavy duty construction



#### Options

- Sealed
- Vented
- Limit switch or position sensor detection
- LOTO access protection
- Loss prevention hardware
- Internal safety grates
- Mild, galvanized, or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Standard square sizes: 6", 8", 10", 12", 14"
- Spout sizes: standard sizes 6"- 20"
- Made to order custom designs available

# IRONCORE

# Platforms & Walkways

Equipment Support | Conveyor Support Bridge | Access Catwalk Intermediate Rest Platform

- Custom built to suit any applications
- Meets or exceeds local building codes
- Professionally engineered and stamped drawings
- Heavy duty construction
- Suitable for indoor or outdoor use



#### **Options**

- Tip gate for elevated pallet transfer
- Safety swing gate for staircase & ladder entrance protection bulldog style
- Platform pitch to central drainage system
- Continuously welded
- Mild, stainless steel, or aluminum build
- Enamel, powder coated, or epoxy finishes

- Smooth, checkerplate, bar grate, expanded mesh & FRP flooring
- Made to order custom designs available

# IRONCORE Palletizing Transfer Conveyors

Chain Conveyor | Roller Conveyor | Lift | Pivot Type

- 90 degree pallet transfer in heavy duty applications
- Ergonomic design for improved employee safety
- Custom layouts to suit spatial constraints
- Labour reductions for material handling
- Improve warehouse product flow to reduce forklift usage & traffic



#### **Options**

- PLC and HMI control integrations
- Densifier product settling
- Scale weight verification
- Accumulation functionality
- Airbag style lifting mechanism
- Sensor control for full travel detection
- Chain centers 12, 18, or 24" per application
- Mild, galvanized, or stainless steel
- Enamel, powder coated, or epoxy finishes

- Customizable for a variety of pallet types
- Up to 6000 lbs pallet capacity custom weights by design
- 35-120 feet per minute
- 2-4 strand chains
- 1.5"-3.5" rollers
- Custom designs available

# IRONCORE Pallet Dispenser

Standard Capacity Dispenser | High Capacity Dispenser

- Bottom dispensing location
- Safe & easy automatic operation
- Designed for interaction with forklift loading
- CSA approved control system
- Heavy duty construction





#### **Options**

- PLC and HMI control integrations
- High & low level indication
- Gate style pallet tip protection
- Slip sheet inserter
- Mild, galvanized or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Customizable for a variety of pallet types
- Pallet capacity: 1 20
- Pallet dispensing rate: up to 6 7 pallets per minute
- Customizable cycle times
- Made to order custom designs available

# IRONCORE Slip Sheet Inserter

Inline Stack Inserter | 90 Degree Rotational Inserter

- High efficiency vacuum generator & patterned suction cups for max hold
- Pnuematic or electric gantry system
- Linear guided actuators in X & Y axis for precise repeatable positioning
- Fully automated control of the sheet insertion process
- Suitable for corrugated cardboard, paper & other non-slip materials



#### **Options**

- Ultrasonic positional feedback for full system control & safety
- Mild, galvanized or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Up to 60" x 60" slip sheets
- 2-8 sheets per minute
- Made to order custom designs available

# IRONCORE Bag Flattener

Dual Belt Conveyor | Single or Double Drum

- Bag shaping for proper presentation to downstream packaging
- Increases shipper capacity
- Reduces transportation costs
- Heavy duty construction
- Easy access cleanout and inspection design



#### **Options**

- Adjustable height settings with handwheels, counterweight, pneumatic or spring loaded
- Scale verification integration
- Dual motor control
- Slave drive control
- Mild, galvanized or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Standard rate: up to 65 feet per minute
- Automatic or manual bag height adjustment
- Made to order custom designs available

# IRONCORE Tote Filling Station

Dual Column - Electric Lift | Fixed Frame Design

- Adjustable bag strap retainers for a variety of bag sizes
- Standalone or multi-fill station configurations
- Gravity, mechanical or pneumatic conveying infeeds
- Forklift or pallet jack entry for full bag removal
- Manual or fully automated operation



#### Options

- Pneumatically sealed inlet spout
- Dust capture vent
- Product densification bed
- Integrated fill weight monitoring
- Infeed hopper
- Mild, galvanized or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Filling capacity based on application requirements
- Suitable for FIBC tote bags, bins, and boxes
- Made to order custom designs available

# IRONCORE Bag Turner

Passive Turn - Bottom End Leading | Active Turn - Top End Leading

- Automatic bag reorientation
- Suitable for all types of bagging
- Single motor operation
- Positive belt tracking design
- Compact design for small foot print requirement



#### **Options**

- Tool free adjustable deflector positions
- Teflon coated or stainless steel diverter plates for efficient transfer
- Bottom end leading capacity at line rate
- Mild, galvanized or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Up to 14 bags per minute
- Made to order custom designs available

# IRONCORE Certo Tech Robots

Robotic Palletizing | Bag Filling & Handling | Robotic Case Box Handling

- Fully automated systems for palletizing
- End of arm tooling capable of managing bags, boxes, and bins
- Compatible with freezer applications
- Reliable and low maintenance build
- Custom footprint for spatial constraints



#### Options

- Skid dispensers
- Pacing conveyors
- Picking tables
- Stretch wrapper
- Stagging conveyors for finished product
- Proax guarding
- Horizontally milled robot bases
- SAS end of arm tooling
- Manual or automated options
- Mild, galvanized, or stainless steel build
- Enamel, powder coated, or epoxy finishes

- Payload 2kg 1300kg
- Reach 1200mm 3601mm
- Speeds up to 20 bags per minute
- Custom dimensions to fit your project



#### **Advance Millwrights**

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#### 24/7 Emergency Service Hotline

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