

CONN  WELD



HISTORY

Conn-Weld has been transforming raw materials into finished products since 1975. With a vision for the future and a commitment to excellence, our founder, James D. Connolly built a foundation for growth, expansion, and global success that demonstrates our dedication to customer success.

To meet the growing needs of our customers we now serve a comprehensive market portfolio around the world. Collectively, our sales team has well over a century of experience including onsite support and knowhow.

Come visit our state-of-the-art facility and imagine how we can work together to build your application-specific equipment. We're proud to be headquartered in West Virginia – and we aren't going anywhere.





TABLE OF CONTENTS

2	History	14	Dewatering Screen
4	Difference/Global Reach	16	Elliptical Horizontal Screen
5	Service & Support	18	Screen Media
6	Banana Style Vibrating Screen	20	Sieve Units
8	Horizontal Vibrating Screen	22	Screen Baskets
10	Circular Motion Incline Screen	23	Parts
12	Extreme Duty Vibrating Screen		



CONN WELD
conn-weld.com

THE CONN-WELD DIFFERENCE

Our robust approach to conducting business is driven by your passion. With a reliable operation located in the heart of the mountain state, we're more than just manufacturing – we're making a difference.

We design smart solutions utilizing the most advanced



technology, yet place a high priority on personal service. As your business thrives, we'll stand beside you with support, today and well into the future.

Better designs from a solid workforce. Modern technology, powered by real people. That's the Conn-Weld Difference!

CONN WELD

AMERICAN MADE GLOBAL REACH

WEST VIRGINIA PROUD. GLOBAL IMPACT.

We're passionate about finding unique solutions for unique problems. That's why we drive innovation and are a leading supplier of separation and sizing equipment utilized around the world.

From raw material to finished product, our vertically integrated approach to manufacturing is what sets us apart from the rest, ensuring you receive the best product, from the highest quality materials, and backed with the service you expect from a name like Conn-Weld.

Our team is strategically located to deliver high-quality vibrating screens and technical services around the globe.



CONN  WELD

**AGGREGATE & STONE ● SAND & GRAVEL ● COAL ● FOOD ● METAL ● MINERAL
PULP & PAPER ● WATER TREATMENT ● AND MORE**



SERVICE & SUPPORT

24/7 Accessible Service Personnel

Our in-house and global teams are available 24/7 to answer any of your questions and provide dependable customer service including onsite installation, startup support, and maintenance seminars.

ENGINEERING SOLUTIONS

Conn-Weld specializes in custom fabrication in separation technology and process solutions. Our experienced engineers evaluate your process, review data for your unique application, and analyze this information to create a custom-manufactured product to fit your exact specifications. We guide you in choosing the best equipment options, such as sub-base, wear liners, or motor brakes, to ensure you have the right equipment for optimal performance. Customized feed systems are included in every solution.

We understand changes can occur throughout your project and we are committed to working with you. In those circumstances, our engineers will measure and review your processes to support new installations or retro-fitting.



LEARN MORE ABOUT OUR ENGINEERING SERVICES





BANANA STYLE VIBRATING SCREEN

DESCRIPTION

Conn-Weld's Banana Style Screens offer superior quality and high-capacity screening. We pay attention to every unique request to ensure the proper fit. These multi-sloped, stellar screens take the place of the curved-sieve, horizontal screen combination, creating a thin bed depth. When paired with a Conn-Weld Fixed Flat Sieve you have greater capacity and separation efficiency.

Conn-Weld's custom-designed screens offer efficiency in a variety of screening applications, including mining, aggregate, and coal industries. The Banana Style Screens can be designed and built in a variety of options to suit your needs.

Take a closer look at the features of our Banana Screens, which we've engineered and perfected for almost 3 decades, in both single and double decks.

INDUSTRIES

- Aggregates
- Coal
- Minerals
- Potash



CONN  **WELD**

SCREEN SPECS



High-Capacity Screening

Engineered for increased capacity

Multiple Slope

Designed with multiple slopes for the most efficient screening

Thin Bed Depth

Optimized to create a thin bed depth

Fully Customizable

Equipped with multiple options to meet the demand of any application

PRODUCT FEATURES

- Thin bed depth with maximum throughput
- Multi-slope available in single and double decks
- Huck bolted for ease of maintenance
- Straight line driven with Cardan Shaft
- 3.1s and 4.1s Mechanisms with adjustable outboard counterweights

PRODUCT OPTIONS

- A variety of wear protection including ceramic, urethane, rubber or stainless steel
- A variety of screen surface
- Isolation base
- Key lock system

SIZES

- Available in sizes ranging from 6' x 20' to 14' x 28'

CUSTOM FABRICATED ITEMS

QUALITY PRODUCTS, **TIMELY DELIVERY**, DEPENDABLE SERVICE

Call 304-487-1421 or Email sales@conn-weld.com



HORIZONTAL VIBRATING SCREEN

DESCRIPTION

Conn-Weld's Horizontal Screens have proven performance in every application. Designed for low maintenance and high efficiency, our horizontal screens can be combined with the Conn-Weld Sieve. Also included are the G-Master® mechanisms with spherical roller bearings designed to reduce the risk of vibratory cracking, and oil reservoirs to assure constant bearing lubrication. Additionally, Conn-Weld's Horizontal Screens are manufactured using the highest painting standards in the Industry.

- Shot blast to near white metal
- One coat 2-part epoxy undercoat
- One coat 2-part blue epoxy topcoat (other color options available)

Conn-Weld Horizontal Vibrating Screens come in single and double decks and are custom designed to meet your specific needs.

INDUSTRIES

- Minerals
- Coal
- Aggregates
- Frac Sand
- Potash
- Recycling



CONN  **WELD**

SCREEN SPECS



A-Frame Option

Built with unmatched structural integrity

Wear Protection

Fortified by a variety of wear protection including ceramic, urethane, rubber or stainless steel

Fully Customizable

Equipped with multiple options to meet the demand of any application

Maximun Efficiency

Streamlined for optimal separating efficiency

Heavy-Duty Deck Frame

Forged from the most durable materials

PRODUCT FEATURES

- Wide-body H-Beam construction with twin H-Beams at feed and discharge
- Heavy-duty welded deck frame can be used in existing vibrating screen
- Cross members with a variety of liners to choose from
- Feed chutes and discharge lips can be custom designed to fit any plant arrangement
- Single & double decks

PRODUCT OPTIONS

- A-Frame
- Pivoting Motor Base
- Wear liners
- Numerous media selections and hold-down systems
- Spray bar assembly
- Customized feed systems: radial sieves, flat flume, feed box
- High quality paint of any color of your choice

SIZES

- Available in sizes ranging from 4' x 10' to 14' x 20'

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CIRCULAR MOTION INCLINE SCREEN

DESCRIPTION

Conn-Weld Incline Screens are designed for numerous applications, from primary scalping to finishing wash screens. We offer many deck frame designs offering a variety of media configurations, including bolt-in-plate, modular synthetic panels, or woven wire, all of which can be customized to your application. The circular motion allows material to roll out of the opening more efficiently, providing a low degree of particle plugging.

The Conn-Weld Incline Screen is available in single, double, triple, and quad decks. These screens can be designed and equipped with several mechanism sizes and options that include single, dual, or triple drives to give you maximum efficiencies and bearing life.

INDUSTRIES

- Minerals
- Coal
- Aggregates
- Sand & Gravel
- Crushed Stone
- Recycling



CONN WELD

SCREEN SPECS



Wear Protection

Fortified by a variety of wear protection including ceramic, urethane, rubber or stainless steel

Fully Customizable

Equipped with multiple options to meet the demand of any application

Maximum Efficiency

Streamlined for optimal separating efficiency

Heavy-Duty Deck Frame

Forged from the most durable materials

PRODUCT FEATURES

- Mechanism with spherical roller bearing
- External counterweights allow throw to be adjusted
- Customizable clearances between decks
- Field-proven steel coil springs
- Trunion mounted or fixed-bracket designs
- Heavy-duty deck support frames
- Site glass for viewing oil level
- Jacking pads for spring maintenance
- Spring guards

PRODUCT OPTIONS

- Manifold spray system
- Dust cover
- Wedge-base
- A variety of wear protection that includes ceramic, urethane, steel and rubber

SIZES

- Available in sizes ranging from 4' x 8' to 10' x 24'

SERVICE & SUPPORT

24/7 Accessible Service Personnel

Our in-house and global teams are available 24/7 to answer any of your questions and provide dependable customer service including onsite installation, startup support, and maintenance seminars.



EXTREME DUTY VIBRATING SCREEN

INDUSTRIES

- Minerals
- Aggregates
- Coal

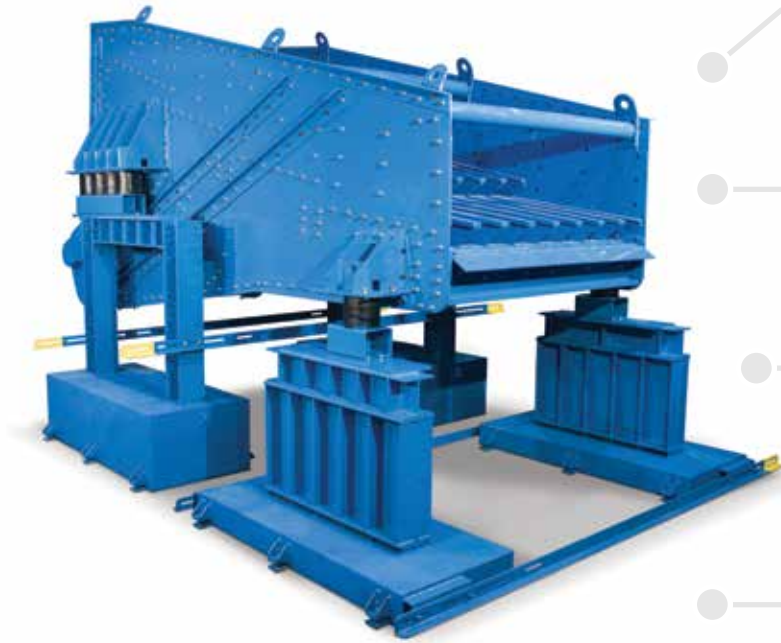
DESCRIPTION

Conn-Weld's Extreme Duty Scalping Screens stand up to the most demanding applications and large tonnages. The durable suspension is specifically designed to tolerate surge loads. The location of the mechanism is custom crafted to allow for clearance, while still supporting powerful performance. The heavy-duty deck is built to withstand the unforgiving impact of top-size material that can sometimes equate to the size of a compact car. This stalwart machine means serious productivity and easily handles heavy loads at maximum capacity.



CONN  **WELD**

SCREEN SPECS



High-Capacity Screening

Engineered for increased capacity

Wear Protection

Fortified by a variety of wear protection including ceramic, urethane, rubber, or stainless steel

Heavy-Duty Deck Frame

Forged from the most durable materials

Maximum Performance

Proven performance to outlast the toughest jobs

PRODUCT FEATURES

- Mechanism with outboard counterweights allow for adjustable stroke
- Heavy-duty modular designed deck support frame for large-particle feed
- Overload springs for surge loads
- Designed for large particle separation, large tonnage and extremely large top size
- Oil reservoirs assure constant bearing lubrication
- 3.1s and 4.1s Mechanisms with adjustable outboard counterweights
- Cardan Drive Shaft

PRODUCT OPTIONS

- Wear protection available for feed impact and discharge plate
- Grizzly Weldment openings designed per customer specifications
- Mild, abrasion resistant, or stainless-steel liners for side plates and support beams

SIZES

- Available in sizes ranging from 6' x 20' to 14' x 28'

CUSTOM FABRICATED ITEMS

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DEWATERING SCREEN

DESCRIPTION

Conn-Weld's High-Frequency Dewatering Screens are designed to handle one of the toughest challenges in screening – dewatering. The feed end is declined at 45 degrees, while the main deck is inclined at 5 degrees, creating a thick bed depth that traps fine particles and allows the water to drain more effectively. When combined with Conn-Weld's G-Master® Drive Mechanism, the heart of our vibrating screen, you have a premium performance, high-speed screen to tackle your toughest dewatering duties.

INDUSTRIES

- Aggregates
- Minerals
- Coal
- Frac Sand



CONN WELD

SCREEN SPECS



Thick Bed Depth

Optimized to create a thick bed depth

A-Frame Option

Built with unmatched structural integrity

Fully Customizable

Equipped with multiple options to meet the demand of any application

Heavy-Duty Deck Frame

Forged from the most durable materials

PRODUCT FEATURES

- Customized for above ground or underground installation
- Designed to trap fine particles allowing water to drain
- High speed performance with minimum maintenance
- Optional ceramic-lined feed box, underflow pan with UHMW Liner, & support structure
- Wide variety screen surface
- Maximum performance and minimum maintenance

PRODUCT OPTIONS

- Feed Box
- Underflow Pan
- Sub-base mounting frame
- Ceramic and Urethane lining
- A-Frame
- Pivoting Motor Base
- Variety of easily replaceable screen surfaces

SIZES

- Available in sizes ranging from 3' x 10' to 8' x 12'

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ELLIPTICAL HORIZONTAL SCREEN

DESCRIPTION

(Patent Pending)The Conn-Weld Elliptical Horizontal speaks to years of dedication for innovative solutions in unique challenges. Drive mechanicals are mounted beside the vibrating screen allowing for the angle of motion to be adjusted while still in operation. Driven by a single motor, adjusting the angle of motion is achieved mechanically thus eliminating sensitive electrical components which proves beneficial in harsh environments.

The mechanism is equipped with an indicator pin to monitor adjustments from 0 to 90 degree(s), and anywhere in between. All of these features work together providing users the ability to adapt the Elliptical Horizontal to applications as needed.

INDUSTRIES

- Aggregates
- Stone
- Recycling



CONN WELD

SCREEN SPECS



Wear Protection

A variety of wear protection options to extend life of components

Fully Customizable

Adapts to applications in both stationary and portable installations

Easy to Replace Parts

Standard motor, pulleys, and belts

Maximum Screening Efficiency

Can be adjusted to minimize screen blinding.

PRODUCT FEATURES

- Asymmetrical drive shafts with spherical roller bearings create elliptical motion
- Cardan shaft assembly compensates for misalignment
- Mechanism equipped with indicator pin to easily identify the adjustment phases
- Settings move weight into neutral positioning aiding in safer maintenance
- Portable or stationary

PRODUCT OPTIONS

- Numerous wear protection(s)
- A variety of screen media and systems
- Spray bar assembly
- Customized deck clearance
- Single, Double, and Triple Deck Units
- Can be adjusted to minimize screen blinding

SIZES

- Available in sizes ranging from 4' x 10' to 8' x 20'

SERVICE & SUPPORT

24/7 Accessible Service Personnel

Our in-house and global teams are available 24/7 to answer any of your questions and provide dependable customer service including onsite installation, startup support, and maintenance seminars.

SCREEN MEDIA

Every screen application presents a new challenge.

Over the years, Conn-Weld has met this challenge by engineering and designing screen systems to size, dewater, filter, and to work under abrasive tough jobs.



E-Z DECK FRAME

Conn-Weld's Patented E-Z Deck Frame allows for worn sections to be replaced individually. Designed for easy installation in hard-to-reach places.

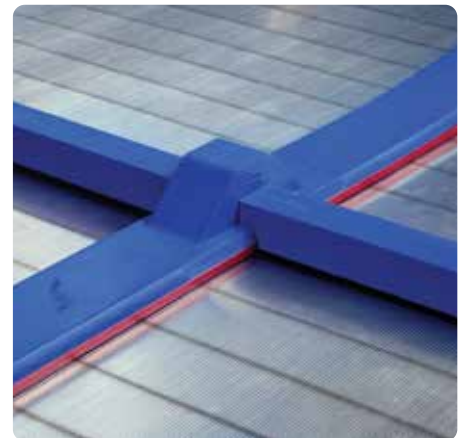
- **Cross beams are machined and stress relieved**
- **Drip rail on frame edges deflects water to underflow pan**
- **U bolts allow the frame to give without breaking welds**



PANELOK

Conn-Weld PANELOK systems are easy to install and easier to maintain!

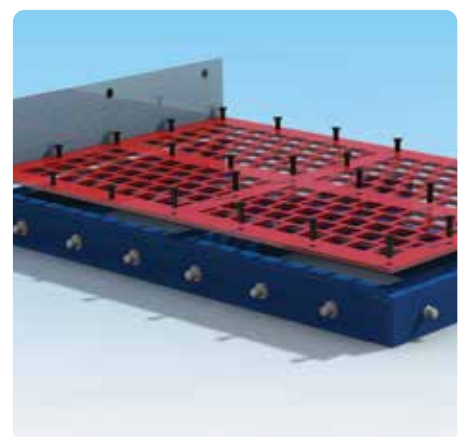
- **Designed for simple installation and replacement of individual screen panels**
- **Screen panels clamp uniformly**
- **Side hold-downs made of an extremely abrasive resistant material**



PERFORATED PLATE

Conn-Weld's Perforated Plate brings screening strength and efficiency to our vibrating screens in numerous applications. Resistant to plugging and sustaining size accuracy, our perforated plate is available in many selections:

- **Openings: 1/4" up to 12"**
- **Hold-down systems: Bolt-in and C-Type clamp**
- **Types: Round, slotted, square**



URETHANE

Conn-Weld's Urethane is made of the highest quality materials in the industry to suit the most abrasive applications, whether wet screening or dry screening:

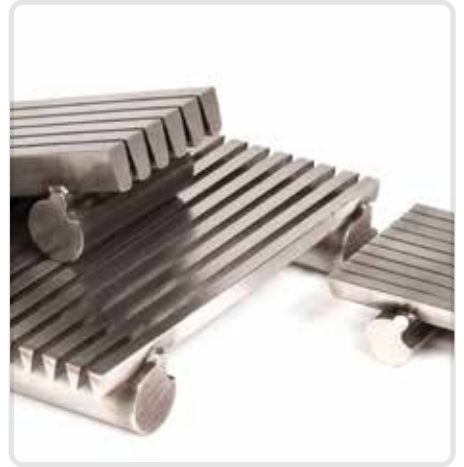
- **Non-blinding openings for better screen filtration**
- **Available in a variety of openings and thicknesses**
- **High open area panels for better screening capability**



PROFILE WIRE

Conn-Weld has perfected the manufacturing processes of our profile wire and we are experts when it comes to making sure you have the correct opening and wire size for your specific application, including:

- **Proper tolerances and sharp edges minimize the break-in period**
- **Panels framed using rubber, mild steel, or stainless steel**
- **Fine screening up to 100 microns**



DEFINED BY OUR PEOPLE

**WEST VIRGINIA PROUD, LOVING WHAT WE DO,
MAKING A DIFFERENCE IN THE WORLD**

We stand strong together. We proudly call southern West Virginia our home. For nearly 50 years we've forged a reliable workforce composed of local talent from our home state while welcoming employees from across the United States and around the world.

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SIEVE UNITS

Conn-Weld's Sieve units are manufactured with high specifications and durable components for maximum uptime and easy maintenance. Advantages such as the quick reversal turn-around system and adjustable feed gate are proof we listen to the unique requests of our customers.

Conn-Weld manufactures the widest range of profile sieve screens in the industry today, with particle separation

ranging from 50 microns and up. The profile screen surface has knife-sharp edges for removal of layers of liquid and undersize material as the liquid passes the opening thus preventing blinding of the slot opening. Conn-Weld's unique Feed Gate is designed so that the operator may adjust and clean the opening to evenly distribute the slurry across the entire width of the screen at right angles to each knife sharp profile wire and slot opening.



Conn-Weld profile sieve screens are manufactured with a sharp cutting edge to slice away the slurry.

CURVED SIEVES

DESCRIPTION

- Particle separation ranging from 50 microns and up.
- Profile sieve screens are manufactured with a sharp cutting edge to slice away the slurry.
- Unique Feed Gate is designed so that the operator may adjust and clean the opening.
- Even distribution for maximum screening efficiency.

PRODUCT OPTIONS

- Standard Sieve Bends are designed in various widths, arcs, and radii to fit your specific need
- Overflow and Underflow Chutes can be provided
- Various thickness Ceramic or AR Liner Feed Box and Sieve Holders are available

INDUSTRIES

Coal, Minerals, Aggregates, Sand & Gravel, Food, Waste Water, & Others



FIXED FLAT SIEVES

DESCRIPTION

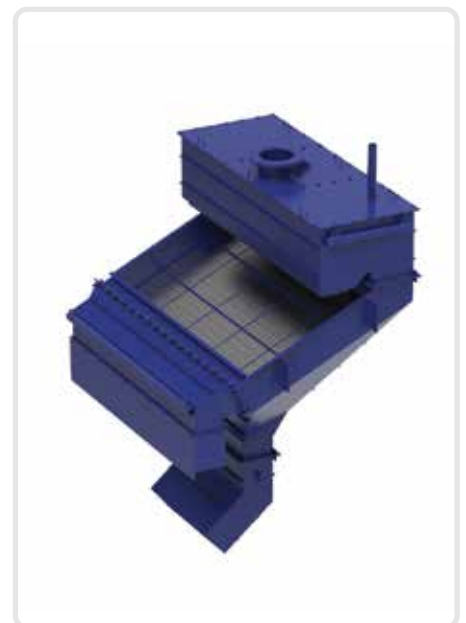
- Static operations
- Typically upstream of a Vibrating Screen for most efficient slurry cut and recovery while feeding the Vibrating Screen in a laminar fashion.
- With Flow applications extends wear life of screens
- Lower operating costs compared to Curved Sieve
- Higher capacity than conventional Sieve Units

PRODUCT OPTIONS

- Standardized screen panel to common sizes
- Can be custom engineered to retrofit specific applications

INDUSTRIES

Coal, Minerals, Aggregates, Sand & Gravel, Food, Waste Water, & Others



HYDRO SIEVES

DESCRIPTION

A "green solution" for water treatment applications, Hydro-Sieve is an efficient sieve using proven technology to screen out sediment and aquatic life. Conn-Weld uses tilted wedge wires to create a cutting action on the upstream sides of the wires that greatly enhance throughput over traditional wedge wire screens.

Hydro-Sieve can screen particles to 60 mesh and for heavy-duty needs, we can add grizzly protection ribs to protect the sieve during floods. Features like our unique flow relief gate reduce discharge flow barriers which can cause splashing and icing during cold months.

USE CASES:

- ROR hydroelectric
- Irrigation canals for weed seed control
- Municipal water screening
- Passive intake screening
- Fish barriers
- Fire sprinkler systems
- No additional materials are needed such as filters
- Quiet operation

It can be used in a wide variety of operations including fruit and vegetable washing, wine production, fish processing, fish cleaning, fish farming, cheese and dairy production, chicken processing, plastic recycling, and washing.

INDUSTRIES

Hydro Power & Water Treatment

PRODUCT OPTIONS

- Capacity to 25M3 /sec
- Low head loss > 0.50 Meters
- No electrical requirements
- No moving parts
- Can be retrofitted to existing structures
- All stainless-steel construction
- Capability for food application



UPRISING SIEVES

DESCRIPTION

- A fully customizable, self-contained unit. Can be pressurized or open vented to atmosphere
- Can be gravity fed or pump fed
- Adjustable feed gate

INDUSTRIES

- Cross Flow application for maximum efficiency
- Adjustable feed gate for easy maintenance
- Custom engineered to fit specific applications

PRODUCT OPTIONS

Pulp & Paper, Food, Minerals, Corn Screening, Coal



SERVICE & SUPPORT

24/7 Accessible Service Personnel

Our in-house and global teams are available 24/7 to answer any of your questions and provide dependable customer service including onsite installation, startup support, and maintenance seminars.

SCREEN BASKETS

Conn-Weld is a world leader in the development and manufacturing of profile wire shapes. Over 45 years of screen-making experience coupled with our unique fusion-welding process, enables us to furnish the strongest and most reliable welded bar screen-plate technology in the world today.



CENTRIFUGE SCREEN BASKETS

DESCRIPTION

The performance of our full line of centrifuge screens begins with the wire through extensive research at our wire plant, we have developed a "high-edge" wire, capable of generating close tolerances and sharp leading edges to break surface tension. This ensures a minimum "break-in" period for the operator.

To ensure correct alignment, the screen panels are machine welded to Conn-Weld's uniquely-designed base and wear ring. The expertly-designed distributors on the interior of the basket spreads the product evenly onto the wear ring and the screen surface to give better dewatering and longer life.

The exterior bracing and outer rings are designed to eliminate weight without sacrificing strength, reducing common torque and load issues the operator may experience, especially during startup and emergency stops. The Centrifuge Screen is dynamically machine balanced to extend the life of the screen, bearings, and entire centrifuge machine.



CUSTOM-MADE SCREEN BASKETS

DESCRIPTION

Conn-Weld's exclusive wedge wire baskets are the most durable in the industry. Utilizing a patented fusion-welding process, Conn-Weld equipment is capable of holding very close tolerances while providing a basket that will stand up to the harsh conditions of pulp, paper, and recycling processes.

In tests, our baskets beat the competition. Conn-Weld's customers see improved operating efficiency, reduced energy cost, and better overall fiber length and quality. And because of our methods, they experience more control, which yields a more consistent product.

Our experienced engineers partner with you to bring value to your overall operation.



INDUSTRIES

Coal, Minerals, & Others

PRODUCT OPTIONS

CMI: CW-3036 CW-1456 CW-1448 CW-1648 CW-2048

McNally: CW-1045 CW-1052

Wemco®: CW-1342 CW-1842 CW-1535 CW-1351 CW-1851

Bird: CW-1039 CW-1042

Heyl-Patterson: CW-1642

INDUSTRIES

Pulp & Paper

PRODUCT OPTIONS

- Custom-made screen baskets to improve existing screen performance
- Welded bar baskets with fine slots down to 0.076mm (0.003") for all types of screens
- Sidehill screens and replacement mats
- Cylinders for screw presses
- Coating kitchen and white water filter baskets



REPLACEMENT PARTS

Custom fabricated items and replacement parts.

Our fully stocked inventory of raw materials allows us to control our production schedule and quickly fulfill requests, reducing downtime for our customers. We follow a strict quality-control process, ensuring your part arrives on time and is easy to install. Main Components: Custom-fabricated to support heavy loads and accommodate the customer's screen media needs, our inventory includes support beams, side plates, and a variety of system components to promote optimal production. Drive Mechanicals: Our large inventory of parts and assembled mechanisms facilitate lower downtime for customers. Contact us to learn more about our rebuild exchange program. Wear Items: Designed for maximum wear protection, our inventory includes clamp bars, hold downs, and shaft housing covers to extend equipment longevity. Parts are customized to meet your specifications. Refer to your manual for a complete list of your equipment's replacement parts.

- MAIN COMPONENTS
- DRIVE MECHANICALS
- WEAR ITEMS



CONN WELD

CUSTOM FABRICATED ITEMS

QUALITY PRODUCTS, **TIMELY DELIVERY**, DEPENDABLE SERVICE

Call 304-487-1421 or Email sales@conn-weld.com



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24/7 Accessible Personnel

