

CONN WELD[®]





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CONN WELD[®] INDUSTRIES INCORPORATED



When Conn-Weld was founded in 1975, our philosophy and goal was to serve the customer by offering a quality profile screen, produced in a timely manner and backed by dependable service. As we analyze our outstanding growth two words come to mind: *"persistence and commitment."*

Guided by this *philosophy* Conn-Weld's state-of-the-art facility in Princeton, WV USA has grown to become the leading manufacturer of quality equipment – Banana,

Dewatering, Horizontal, Circular Motion Incline, Extreme Duty Scalping Screens, and Sieves service the industries of coal, aggregate, pulp and paper, minerals, corn, fine metals, and many more.

It is this same *philosophy* that comes with doing business with Conn-Weld - Commitment to you, aligning our equipment with your project, and building relationships based on integrity. If you are already a valued customer Conn-Weld thanks you for the opportunity to serve You and looks forward to a bright future. If you are new to Conn-Weld, get to know the quality our customers have come to rely on and experience the Conn-Weld Difference.

THE **CONN** **WELD**[®] DIFFERENCE



CONN-WELD INDUSTRIES EMPLOYS THE LATEST TECHNOLOGY AVAILABLE, GUIDED BY EXPERIENCE AND BACKED BY PERSONAL SERVICE.

SALES TO SERVICE

The Conn-Weld sales team begins in house and expands globally. We have district managers in all regions of the United States and sales representatives abroad. Our sales group is knowledgeable in all screening applications such as coal, aggregate, potash, sand and gravel, mineral processing, food processing, corn wet milling, pulp and paper, and many others. Because we know changes occur throughout implementation of the project our sales team communicates directly with you from proposal phase, equipment specification and design, to production and delivery. That same personal partnership is followed through after the sale with dependable service, spare parts recommendations, or just a friendly call.



Computer Aided Drafting/Computer Aided Manufacturing/Computer Numerical Controlled Software

- Replacement Parts fit with accuracy
- Custom fit equipment into existing plant
- Engineering solutions for unique needs

Application Review

- Application engineers ensure efficient equipment performance

Finite Element Analysis

- Predicts and evaluates equipment solutions

Vibration analysis

- Certifies installed equipment meets operating parameters

Technical Experts and Engineering Support

- Accessible 24 hours a day, 7 days a week



**TECHNOLOGY + KNOW-HOW =
ENGINEERING SOLUTION**

We utilize the latest technology available, but it's the experience, know-how, and personal service that trademarks Conn-Weld. Our Engineering Staff is headed by the most experienced engineers who understand systems. We have engineers specializing in individual areas such as Application, Finite Element Analysis, Design Research and Development. Our services are extended to you on site with Plant Surveys and Vibration Analysis.

More so, you can depend on Conn-Weld to be there for timely responses to any of your questions and requests. All combined, Conn-Weld brings you engineering solutions for your unique screening applications.

WE BUILD RIGHT SO YOU'RE BUILT RIGHT

Conn-Weld's corporate office and manufacturing facility, expanding over 300,000 square feet, is located in Princeton, West Virginia USA. Since 1975, quality can be seen in every one of our many manufacturing processes. From the time we take your call, we are concerned with providing You quality and service.

Once we determine your equipment needs, our Engineering department uses 3D modeling which enables us to find the center of gravity, do finite element analysis, examine critical speeds, and attain other information imperative in predicting the operation and life of your screen. The finalized design is sent to CNC equipment and programed for precision manufacturing of all sub-assembly and components.



Our state-of-the-art paint facility uses a 3 step painting method to ensure hard-wearing surface treatment. Moreover, Conn-Weld employees exercise consistent quality workmanship and are committed to producing a quality product custom designed for You.

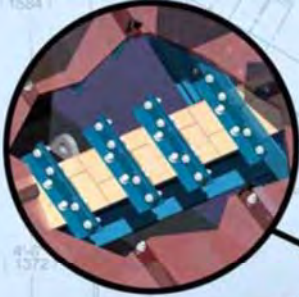
BANANA VIBRATING SCREENS

From your first inquiry Conn-Weld's experienced application engineers work with you to ensure the best equipment choice is made. Whether fitting a banana screen into an existing structure or trending towards larger screens in a new installation, we pay attention to every unique request and detail. These multi-sloped stellar machines take the place of the curved sieve – horizontal combination creating a thin bed depth. Paired with a Conn-Weld Flat Flume Sieve you have greater capacity and separation efficiency. Take a look at the Banana Screens Conn-Weld has built over the years in both single and double decks.

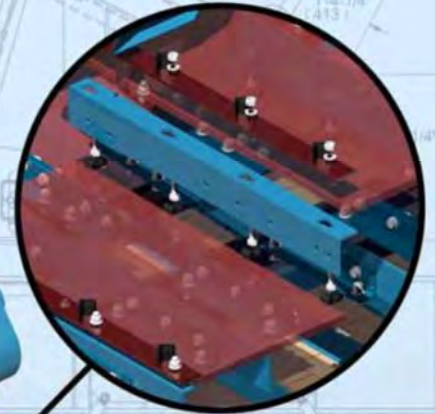
WE DESIGN FOR YOU -

6' x 20' | 7' x 20' | 8' x 20' | 8' x 24' | 10' x 20' | 10' x 24' | 10' x 30'

CERAMIC WEAR LINERS



KEY LOCK SYSTEM



VIEW A-A

VIEW B-B

VIEW A-A
BOTTOM SPRING SEAT
FEED & DISCHARGE ENDS

Banana Vibrating Screens

- High Capacity Screening
- Multiple Slope
- Thin Bed Depth
- Better Efficiencies
- 3.1s and 4.1s Mechanisms with Adjustable Outboard Counterweights
- Twin H-beams at Feed and Discharge Ends

Options:

- Cross Member Wear Liners: rubber, ceramic, urethane, steel
- Isolation Base
- Key lock System
- Side Plate Wear Liners: AR liners, urethane, mild steel
- Choice of Screen Surface

12' x 20' | 12' x 24' | 12' x 28' | 12' x 30' | 14' x 20' | 14' x 24' | 14' x 28'
AVAILABLE IN SINGLE AND DOUBLE DECKS



14' x 20' S.D.

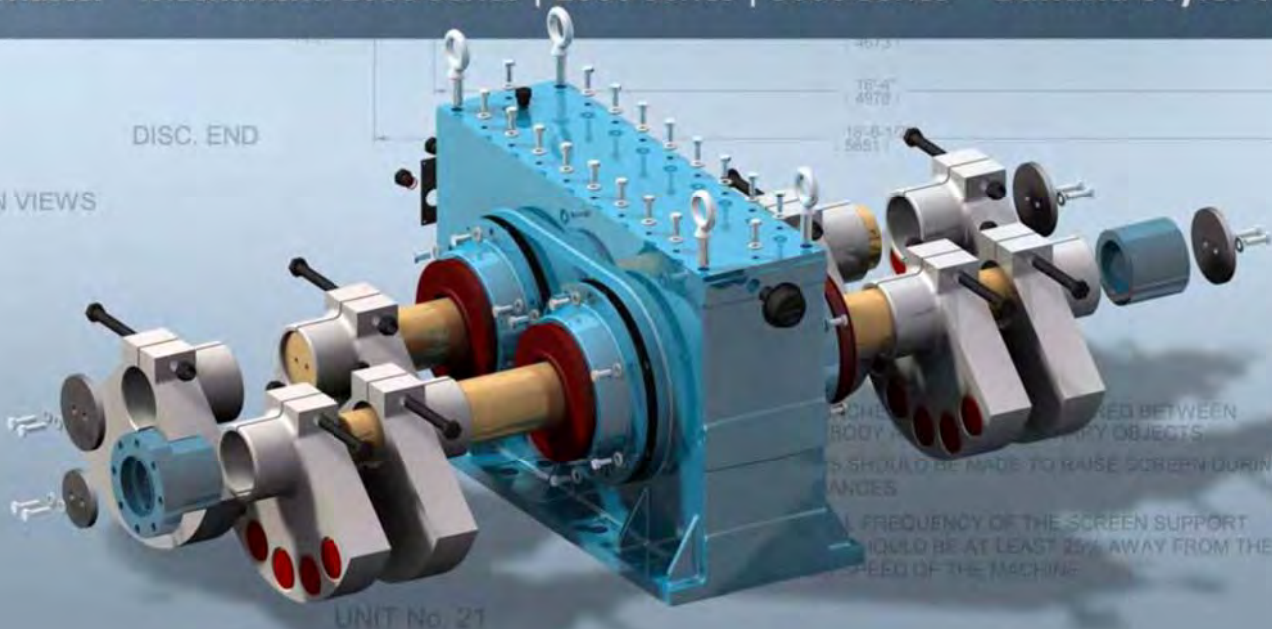


8' x 20' D.D.



10' x 30' S.D.

G-Master® Mechanism: 1000 Series | 2000 Series | 3000 Series **Banana Style: 3.1s | 4.1s**



DISC. END

SCALE OF MAIN VIEWS
 1/16

UNIT No. 21

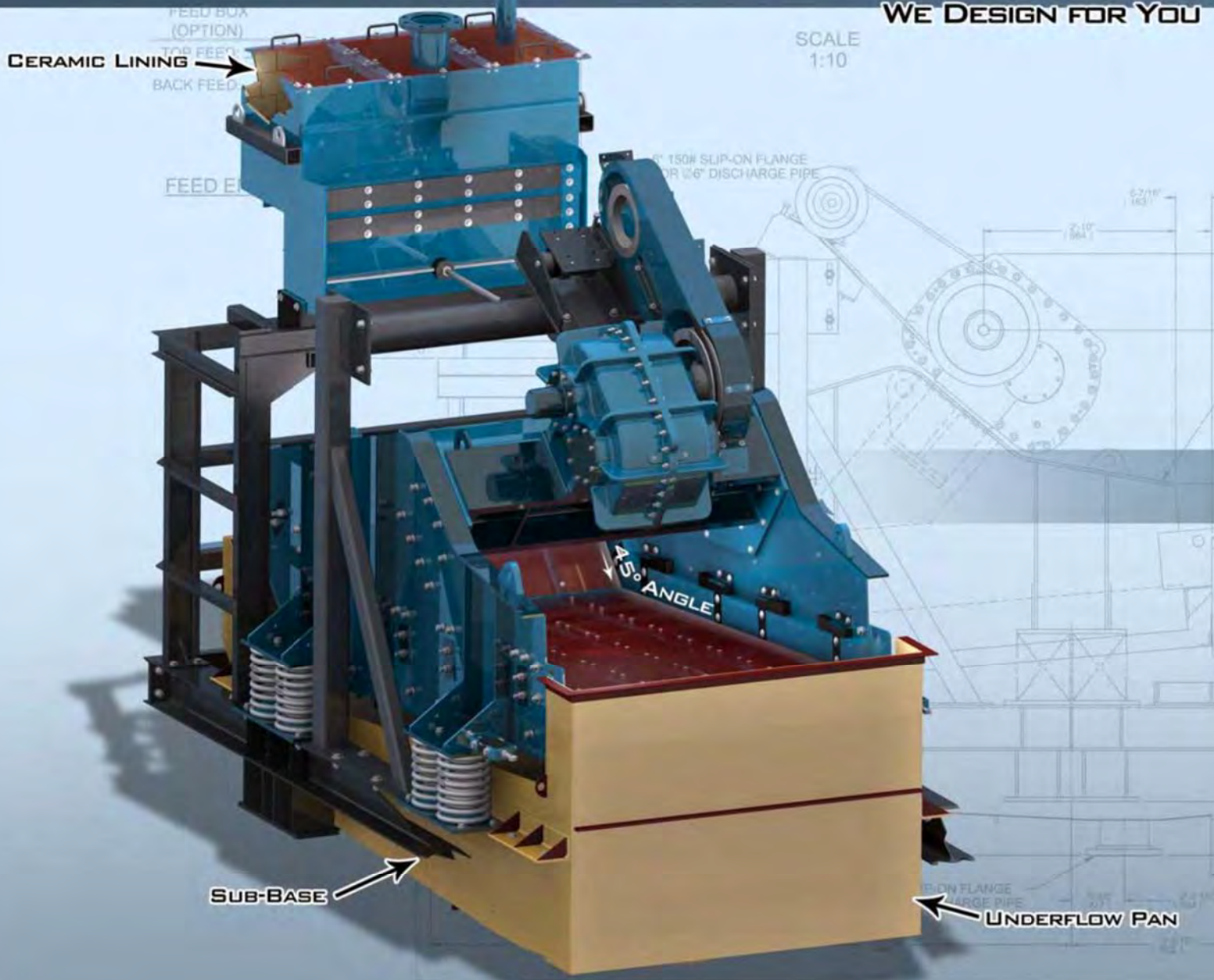
DO NOT OVERLOAD BETWEEN
 BODY AND SUPPORTING OBJECTS
 SHOULD BE MADE TO RAISE SCREEN DURING
 VIBRATIONS
 FREQUENCY OF THE SCREEN SUPPORT
 SHOULD BE AT LEAST 25% AWAY FROM THE
 SPEED OF THE MACHINE

DEWATERING VIBRATING SCREENS

Dewatering presents one of the toughest challenges in screening. Conn-Weld's High Frequency Dewatering is designed so that the feed end is declined at 45 degrees with the main deck inclined at 5 degrees, making for a thick bed depth that traps fine particles and allows the water to drain. Combined with the Conn-Weld G-Master® Mechanism, the heart of our Vibrating Screen, You have a Premium Performance High Speed Screen to tackle your toughest dewatering duties.

FROM COMPACT REPLACEMENT SCREENS TO NEW PLANT INSTALLATIONS
3' x 10' | 4' x 10' | 4' x 12' | 4' x 16' | 5' x 10' | 5' x 12' | 6' x 12' | 8' x 12'

WE DESIGN FOR YOU



NOTES:

Advantages

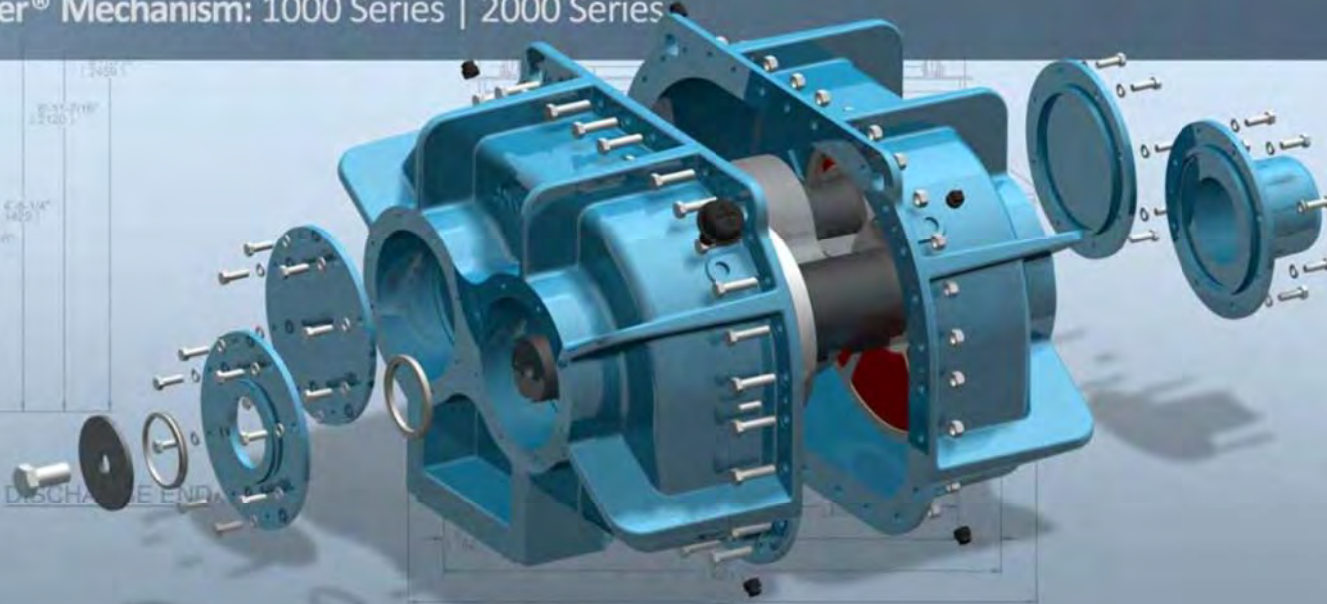
- High Capacity & Rapid Dewatering
- Customized for above ground or underground installation
- Proven G-Master® Drive Mechanism with Spherical Roller Bearings Oil Lubricated with patented reservoirs
- Heavy Duty Deck Support Frame
- Maximum Performance with Minimum Maintenance

Options:

- Feed Box
- Underflow Pan
- Sub-Base
- Ceramic & UHMW Lining
- A-Frame
- Pivoting Motor Base
- Variety of easily replaceable Screen Surfaces



G-Master® Mechanism: 1000 Series | 2000 Series



HORIZONTAL VIBRATING SCREENS

From subzero to near tropic installations, Conn-Weld Horizontal Vibrating Screens have proven performance in every application. Combined with the quality workmanship of a Conn-Weld Sieve, both of our Horizontal Style Vibrating Screens, traditional G-Master® welded body or minimum welded style, will provide you low maintenance and high efficiency. Our tested painting system, shot blast to near white metal, 2 part epoxy undercoat and top coat, ensures your equipment withstands the harshest industry environments. In every size we've made, Conn-Weld Horizontal Vibrating Screens prove durable and reliable.

Durable Features

- Wide body H-Beam construction with twin H-Beam at feed and discharge ends provides unmatched structural integrity
- Custom designed bodies manufactured to meet your specific needs
- Heavy Duty Welded deck frame can be used in existing Vibrating Screen

WE DESIGN FOR YOU -

3' x 14' | 4' x 10' | 4' x 16' | 5' x 10' | 5' x 12' | 5' x 16' | 6' x 12' | 6' x 14' | 6' x 16' | 6' x 20'



G-Master® Mechanism: 1000 Series | 2000 Series | 3000 Series

High Paint Standards to withstand Rigorous Conditions

- Shot blasted to near white metal
- One coat 2-Part Epoxy undercoat
- One coat 2-Part Blue Epoxy top coat (other colors available)

Options:

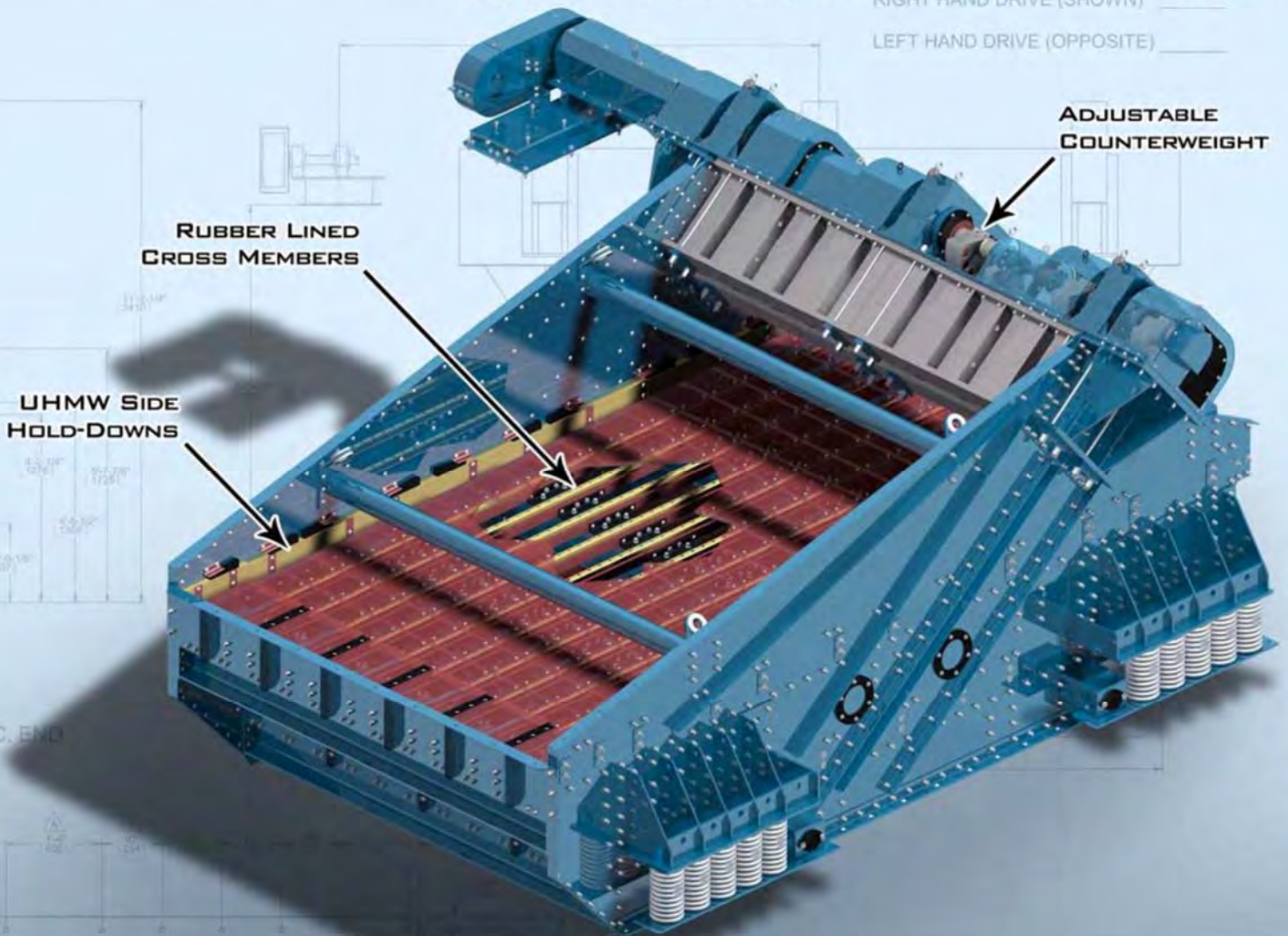
- A-Frame
- Pivoting Motor Base
- Wear Liners
- Numerous media selections and hold-down systems
- Spray Bar Assembly
- Customized Feed Systems: Radial Sieves, Flat Flume, Feed Box

7' x 16' | 8' x 12' | 8' x 16' | 8' x 20' | 10' x 16' | 10' x 20' | 12' x 16' | 12' x 20' | 14' x 20'

AVAILABLE IN SINGLE AND DOUBLE DECKS

RIGHT HAND DRIVE (SHOWN)

LEFT HAND DRIVE (OPPOSITE)



Banana Style: 3.1s | 4.1s

CIRCULAR MOTION INCLINES

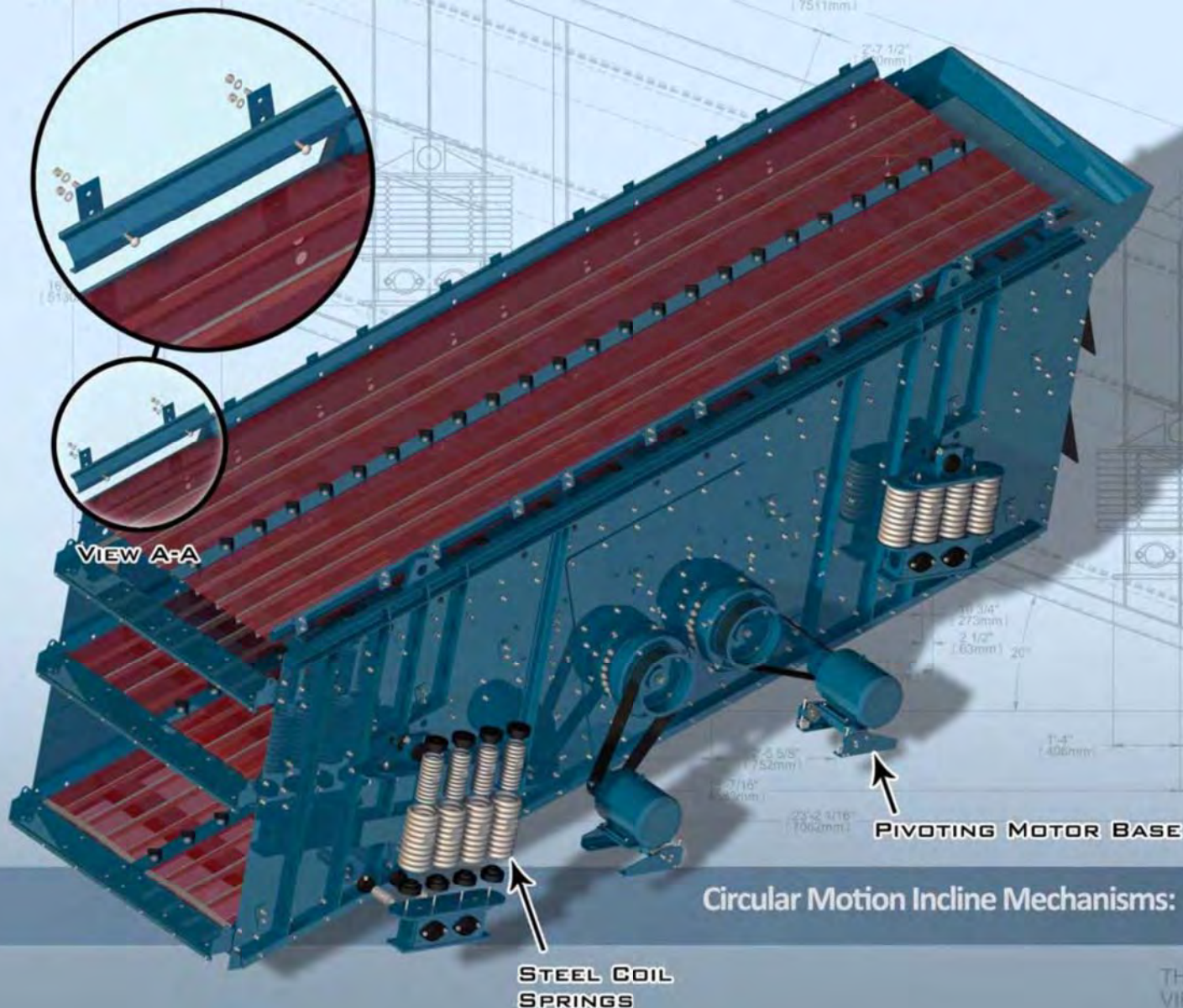
Conn-Weld works with you to design the best Circular Motion Incline for your specific needs. Engineers work directly with you to choose one of the several screen surfaces we supply for your application whether screening rock, sand & gravel, wood chips, coal, and more. Designs such as our bolt-down heavy duty scalping deck supply you with the durability you need. The circular motion allows material to roll out of the opening, providing low degree of particle plugging which means efficient separation.

For dependable equipment and service - You can depend on Conn-Weld

AVAILABLE IN SINGLE, DOUBLE, TRIPLE, QUAD DECKS

4' x 8' | 4' x 12' | 5' x 12' | 5' x 14' | 5' x 16' | 6' x 12' | 6' x 14'

C-STYLE CLAMPING BARS



NOTE:

Circular Motion Inclines

- Mechanism with Spherical Roller Bearing
- External Counterweights allow throw to be adjusted
- Uniform load across bearing
- Oil lubrication
- Customizable clearances between decks
- Field Proven Steel Coil Springs

Options:

- Manifold Spray System
- Dust Cover
- Sub-Frame
- Wedge-Base
- Wear Protections: Ceramic, Urethane, Steel, Rubber

6' x 16' | 6' x 20' | 7' x 16' | 7' x 20' | 8' x 16' | 8' x 20' | 8' x 24'

SPECIAL DESIGNS



8' x 20' D.D.



8' x 20' T.D.



8' x 24' T.D.



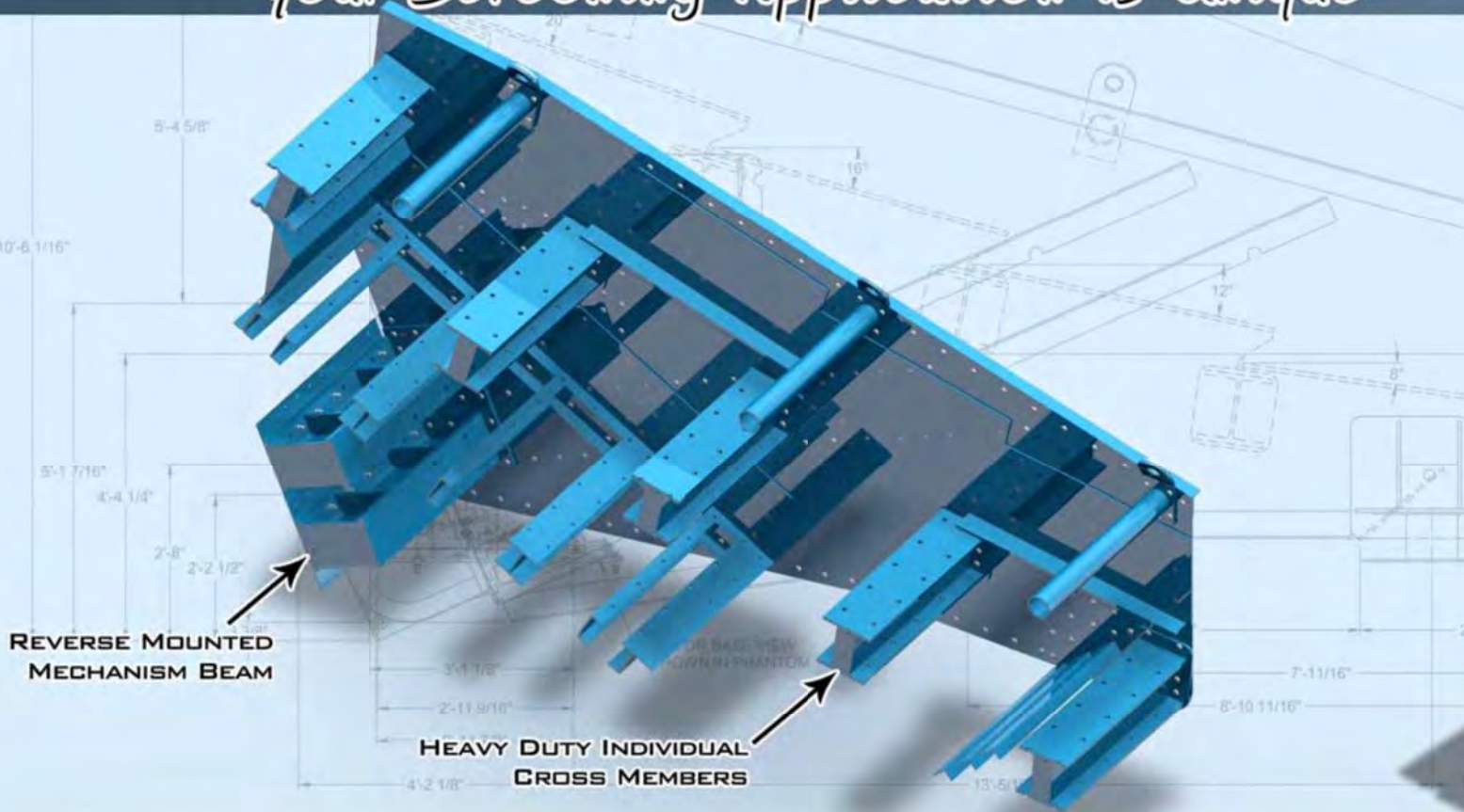
4400 | 5500 | 6500

(3) INCHES
VIBRATING SCREEN

EXTREME DUTY SCALPING SCREENS

Conn-Weld Scalping Screens stand up to the most severe applications and large tonnages. 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. Heavy duty decks withstand the unforgiving impact of top size material that can reach the size of a compact car. This stalwart machine means serious productivity and that's why we believe our *Extreme Duty Scalping Screen best proves...*

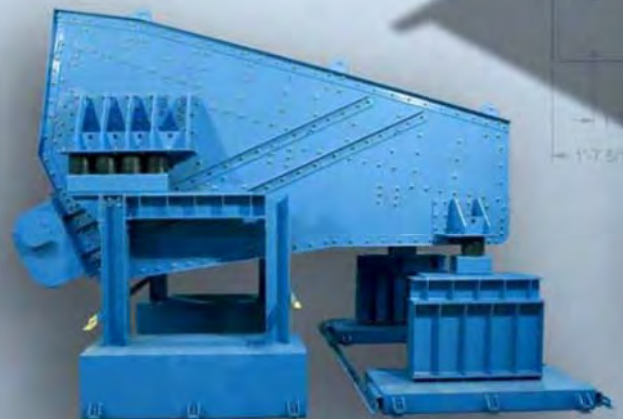
Your Screening Application is Unique —



Mechanism: 3.1s | 4.1s

FEED END BASE

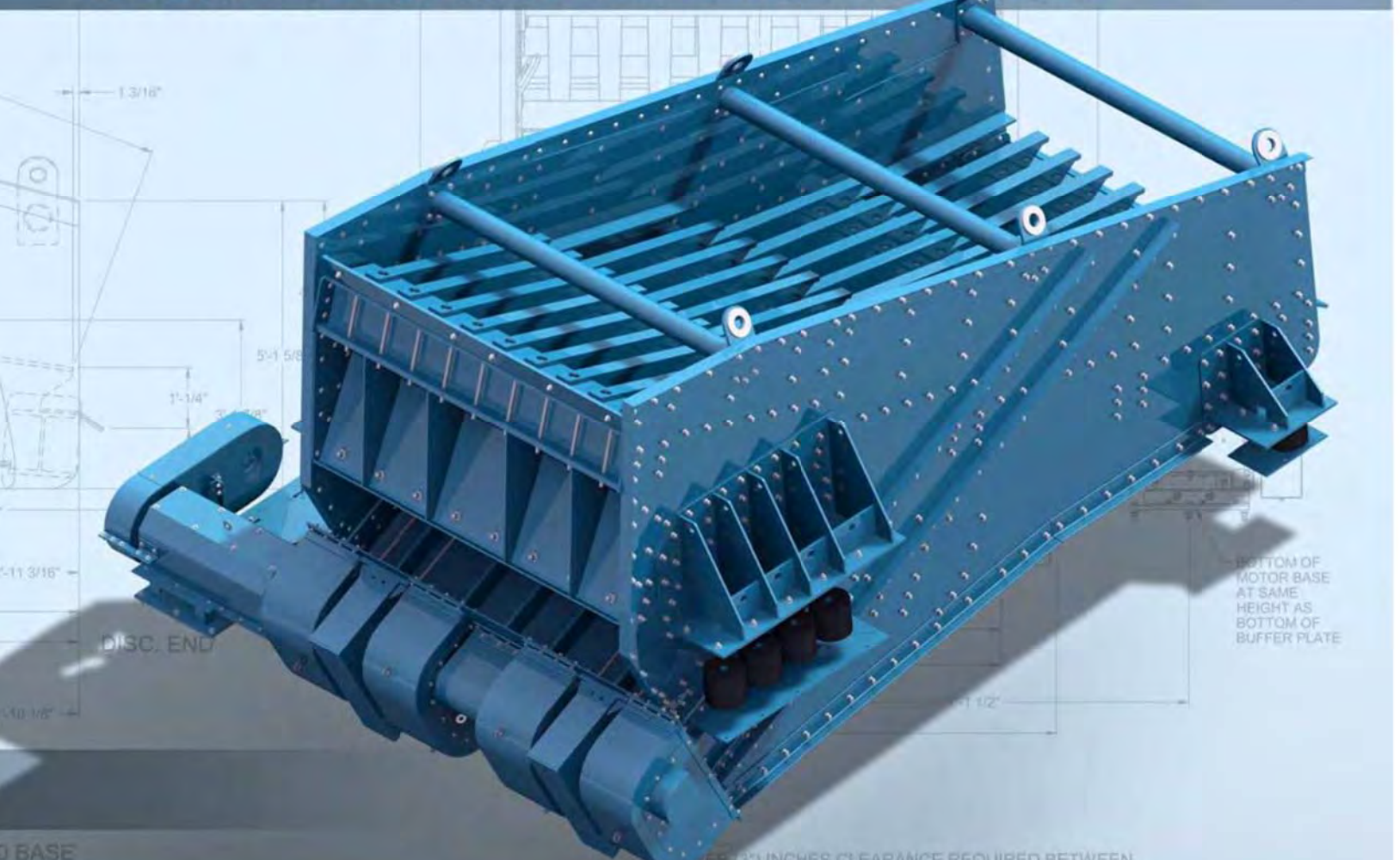
DISCHARGE END



Advantages

- Designed for large particle separation
- Tolerates surge loads
- Heavy duty modular designed deck support frame for large particle feed
- Mechanism with outboard counterweights allow for adjustable stroke
- Oil lubrication
- Oil reservoirs assure constant bearing lubrication
- Two part epoxy paint

— YOUR SOLUTION SHOULD BE TOO



CONN-WELD® SIEVES

Conn-Weld's Sieve Bends are the result of over 35 years field experience working with plant circuits and systems. Advantages such as the quick reversal turnaround system and adjustable feed gate are proof we listen to You and design for You. Every sieve is manufactured with high specifications and durable components for maximum uptime and easy maintenance.

Advantages

- Requires minimal amount of space for installation.
- Minimum structural support
- No moving parts or vibration
- No horse power required
- Turnaround designed for quick reversal of screen

STANDARD WIDTHS FROM 2' TO 10' IN 6" INCREMENTS

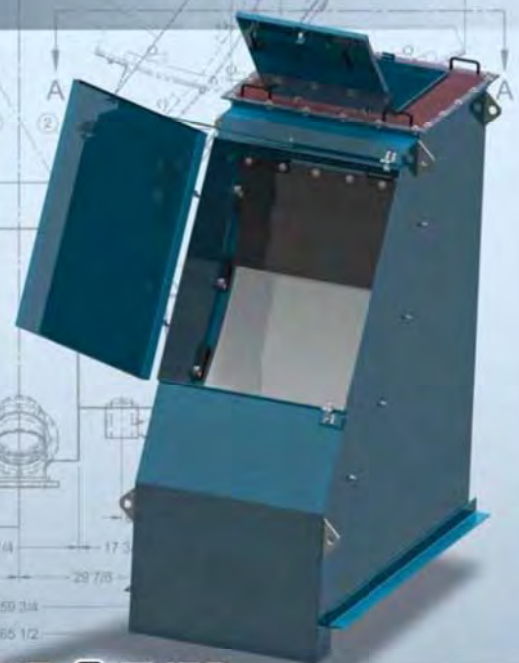
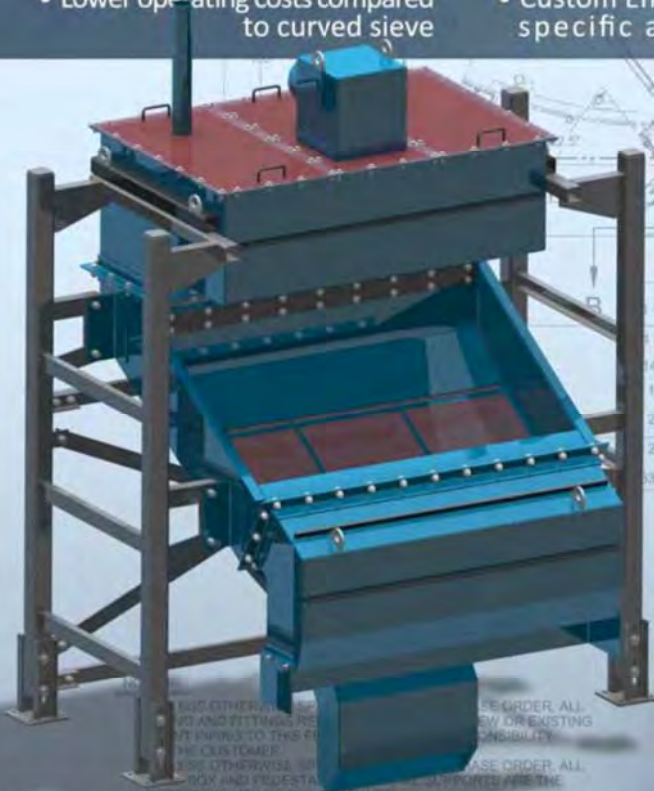
Radius:	80	60	80	40	40
Degree:	45	60	60	60	45

WILL DESIGN TO YOUR SPECIFICATIONS.



FLAT AND FLUME STYLE SIEVES

- Combine with Vibrating Screen for efficient feed distribution
- Saves on wear life of screens
- Lower operating costs compared to curved sieve
- Higher capacity than conventional sieve
- Standardized Screen Panel Sizes
- Custom Engineered to fit specific applications

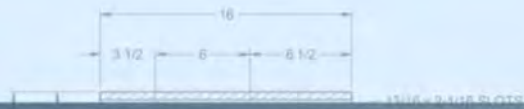


UPRISING SIEVES

- A fully customizable self-contained unit
- Adjustable feed gate

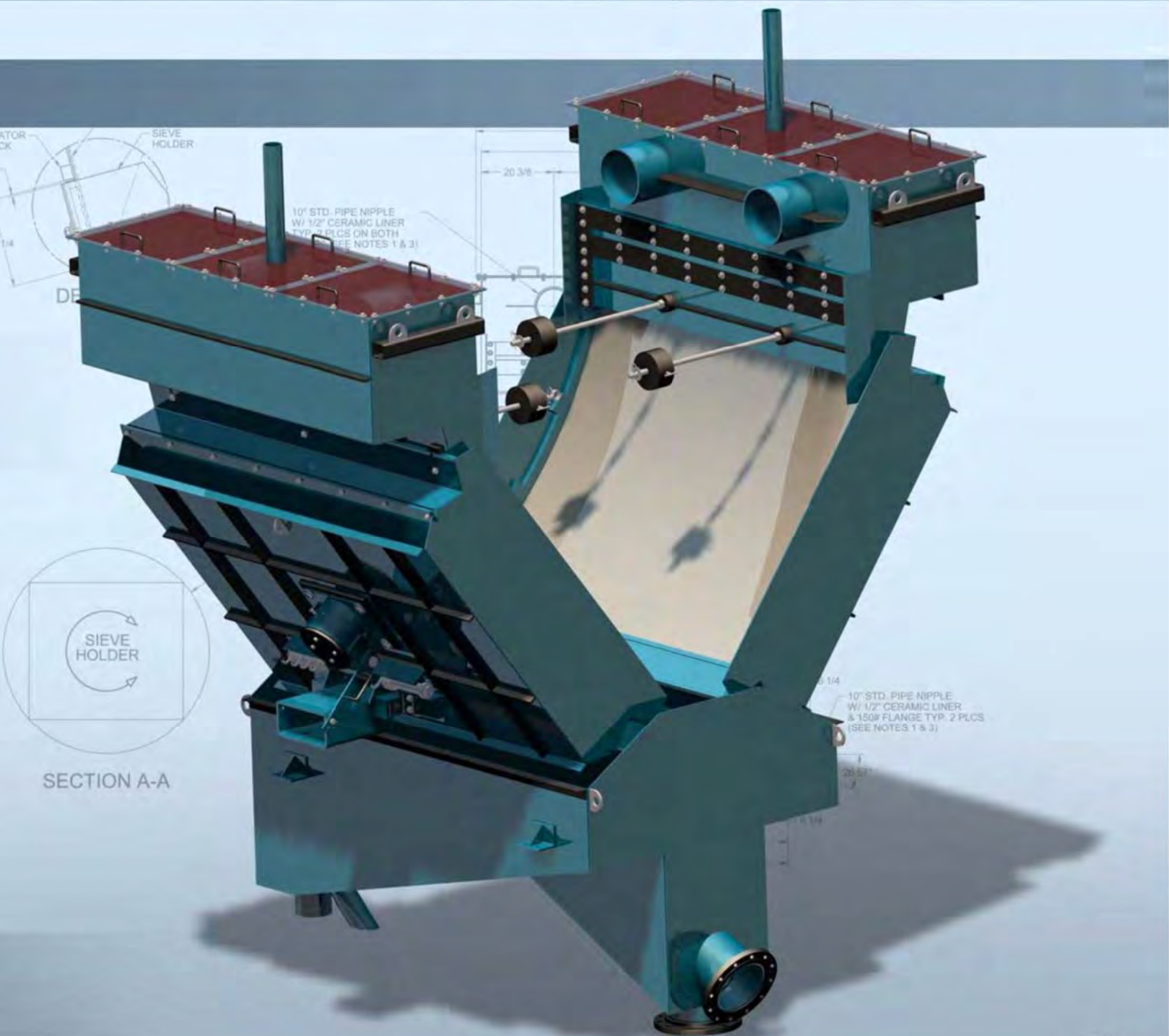
IF OTHERS ARE TO BE ORDERED, ALL NEW OR EXISTING EQUIPMENT MUST BE CHECKED FOR PERPENDICULARITY OF THE MOUNTING PIPES AND/OR FLANGES, BEFORE COMPLETING INSTALLATION OF THE FEED BOX. IT MAY BE NECESSARY TO SHIM THE FEED BOX SIDE SUPPORTS TO OBTAIN PROPER POSITIONING.

ADEQUATE VENTILATION BEFORE WELDING.



Options:

- Conn Weld Profile Sieve Screens are manufactured with a sharp cutting edge to slice away the slurry.
- Screening efficiency and separation capacity will equal or exceed other conventional screening with separation of 50 microns and up
- Standard Sieve Bends are designed in various widths, arcs, and radii to fit your specific need
- Feed Boxes, Screen Holders, and Turnarounds
- Overflow and underflow chutes
- Ceramic Lined Feed Boxes and Screen Holders are available
- 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.



SECTION A-A

CONN-WELD® SCREENING SYSTEMS AND MEDIA



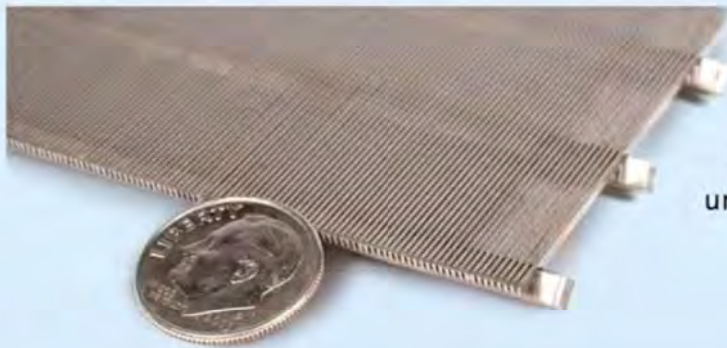
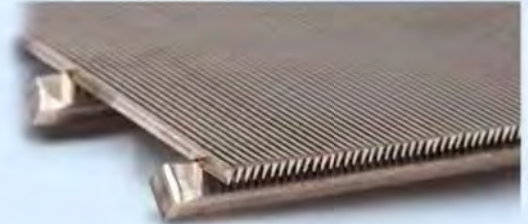
RELY ON THE PEOPLE WHO KNOW SCREEN SYSTEMS

Conn-Weld thrives under the toughest challenges that come our way. From scalping to pond recovery, wood and corn wet milling, scrap metal to fine metal, minerals and organic fertilizers, sand and gravel, cement and asphalt, to the unforgiving impact in the aggregate industry; we have engineered innovative solutions through our screen media and hold-down systems. And that's why at Conn-Weld we are confident in saying 'rely on the people who know screen systems'.

CONN-WELD TUFF-SCREENS® AND PROFILE WIRE

Proper tolerances & sharp edges minimize break-in period.

Reliable wire support accomplished by Conn-Weld's exclusive Fusion Welding Process & Forge Welding Process known as **Tuff-Screens®**



Profile wire shapes designed and engineered in various screen configurations to size, dewater, filter, and work under abrasive tough jobs.

Optimum screen life, Optimum Performance.

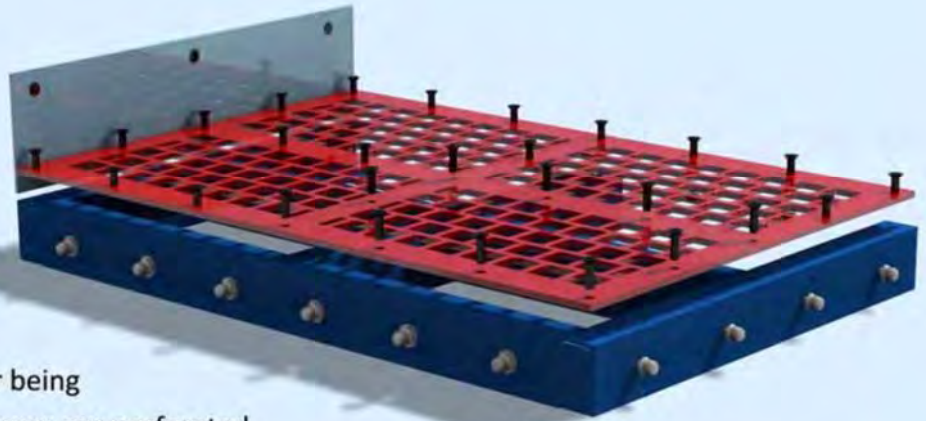


Options:

- Screen openings from .0015" to 3"
- 304 and 316 Stainless Steel others available upon request
- Fine screening up to 100 microns
- Rubber, mild steel, stainless steel and other framing options available
- Additional support features available if needed

PERFORATED PLATE

Conn-Weld's Perforated Plate brings screening strength and efficiency to our Vibrating Screens in numerous applications. Computer Automated Design combined with precision manufacturing assure your specific screen type and opening is achieved. Renowned for being resistant to plugging and sustaining size accuracy our perforated plate is available in many selections.



Options:

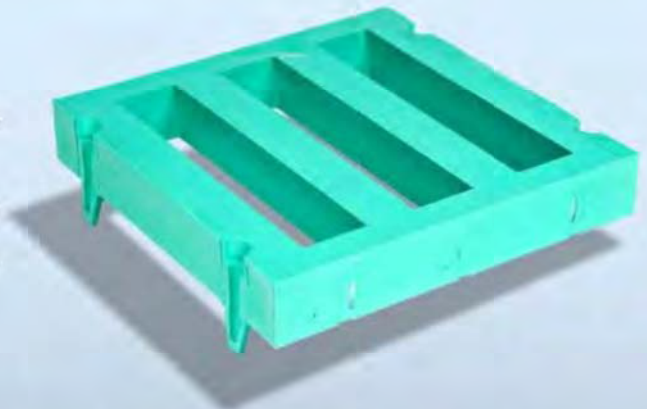
- Material: AR, Mild Steel, Stainless Steel (others available)
- Thickness: 1/4, 3/8, 1/2
- Openings: 1/4" up to 12"
- Hold-Down System: Bolt in and C-Type clamp
- Types: Round/Slotted/Square

CONN-WELD URETHANE

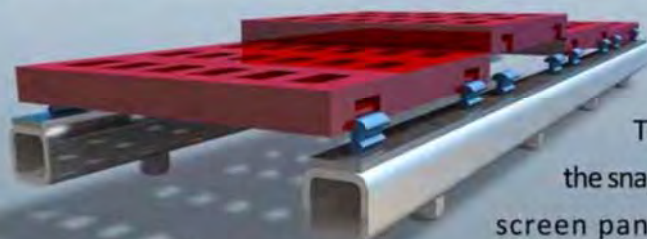
Conn-Weld's Urethane is made from the highest quality materials in the industry to suit the most abrasive applications whether wet screening or dry screening. Our injection molding process delivers consistent screen size opening resulting in high open area panels.

Benefits

- Injection molded openings of many sizes from .25mm to 2" slotted.
- High open area panels.
- Open cast poured panels as well for large opening screens and large surface areas up to 2' x 4' in overall dimensions.
- Pin and pin-less style 30mm and 40mm thick panels.



CONN-WELD TUFFLOK® SCREEN PANEL LOCKING SYSTEMS

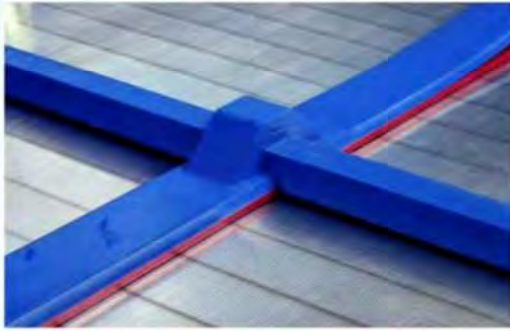


Our newest system incorporates a new T shaped retainer system with the snap pockets molded into the screen panel edges.

- No extra pieces required
- No difficult pins to remove
- Easy snap in installation
- Easy removal when time for replacement
- Lower cost to install

CONN-WELD® PATENTED PANELOK® SCREEN HOLD-DOWN SYSTEM

Our first innovative system we developed.

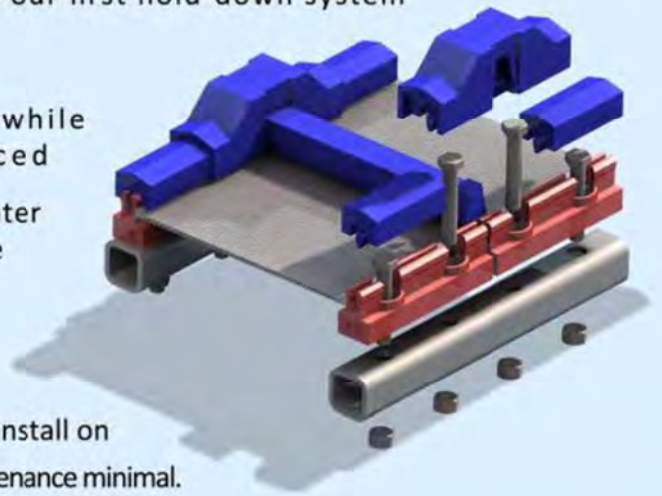


- No nuts, bolts, steel dams, or steel hold-down bars in material flow to wear out
- Highly durable polyurethane components that lock all of your screens and dams securely in place
- PANELOK® dams are same width as the screen panels to simplify installation
- Dam retainer doubles as screen clamping lock strip

CONN-WELD PATENTED PANELOK II® LOCKING SYSTEM

Conn-Weld takes the same time saving innovations from our first hold-down system and provides even more adaptable options:

- Firmly holds your screen components in place while allowing for worn parts to be easily replaced
- A “tongue in groove” method secures lock strips to center retainer sandwiching the screen panel securely in place
- Using locking strips, secured dams seal joining screen panels slowing material for maximum screenability



We have developed screen hold-down systems that are easy to install on existing frames making screen panel replacement trouble free and maintenance minimal.

CONN-WELD SCREEN HOLD-DOWN SYSTEMS

Conn-Weld understands the effect that high maintenance costs and down-time have on your plant operating costs. That's why we have developed screen hold-down systems that are right for you. Our systems are easy-to-install on existing frames, making screen panel replacement trouble free and maintenance minimal.



CONN-WELD'S OTHER INNOVATIVE PRODUCT LINES

Take a look at some of the other product lines Conn-Weld has available:



CENTRIFUGE BASKETS AND PARTS

We have developed a "high edge" wire, capable of close tolerances and sharp leading edges to break surface tension.

- Profile wires are held in a fixture to ensure the most accurate opening possible.
- Screen panels are machine welded inside and out to Conn-Weld's uniquely designed base and wear ring to insure correct alignment.
- Exterior bracing and outer rings have been designed to eliminate weight without sacrificing strength.



Consult your Conn-Weld representative for the centrifuge to best meet your requirements.

CONN-WELD HYDRO-SIEVE

A GREEN SCREEN SOLUTION



Hydro-Sieve is a proven technology to screen out sediment and aquatic life at your intake site. We use tilted wedge wires to create a cutting action on the upstream sides of the wires that greatly enhance throughput over traditional wedge wire screens.

Uses:

- ROR Hydroelectric
- Irrigation Canals for Weed
- Seed Control
- Municipal Water Screening
- Passive Intake Screening
- Fish Barriers
- Fire Sprinkler systems

Consult Conn-Weld to review your project data so we can determine the maximum throughput and address other design considerations.

PAPER MILL PRESSURE SCREENS – ACCU-TUFF®

We manufacture tailor-made baskets to improve your existing screen performance. We supply Accu-Tuff® coating which far exceeds the lifetime of chrome coatings.



Conn-Weld supplies the pulp and paper industry with:

- ACCU-TUFF® welded bar baskets, having fine slots down to 0.076 mm (0.003") for all types of screens
- Sidehill screens and replacement screen mats
- Cylinders for screw presses
- Screen rotors for high and low consistency applications
- Coating kitchen and white water filter baskets

Contact Conn-Weld today to discuss your Pulp and Paper Screening needs.

SPARE, REPLACEMENT, AND RETROFIT PARTS

Conn-Weld minimizes down-time by keeping a large inventory of parts in stock ready to ship to site. In addition to our facility in Princeton WV, we have warehouses strategically located at our Canadian and Midwest locations.

Whether stocking recommended spare parts, replacing parts, or refurbishing equipment, Conn-Weld measures and manufactures a complete line of components to ensure a perfect fit. Our knowledgeable sales staff is ready to take your call to keep your equipment up and running.

Here are just a few of the parts we have available or can custom build for You.



Main Component

Side Plates
Heavy Duty Deck Support Frame
Stabilizer Tube
Discharge Lip
Cross Beams
Wedge Kits
Back Plate
Feed Box
A-Frames

Suspension Systems

Steel Coil Springs
Spring Retainers
Spring Boxes
Rubber Buffers
Cable Suspension
Tension Band

Mechanism & Drive Mechanicals

Mechanism
Mechanism Mounting Beam
Mechanism Bolts
V-Belts
Pivoting Motor Base
Sheaves and Bushings
Guards

Wearing Parts


Screen Surfaces
Center Hold-Downs
Side Hold-Downs
Intermediate Hold-Downs
Bucker Rubber
Clamping Bars



INNOVATIVE FUTURE

Conn-Weld continues to expand product lines such as filtration equipment to bring you innovative solutions combined with experience for all of your processing requirements





CONN-WELD'S RICH HISTORY HAS BEEN THE FOUNDATION FOR STRATEGIC GROWTH

Aligning your project with Conn-Weld's equipment creates both productivity and profitability

Building relationships based on integrity

Embracing change and innovative solutions have created progress and sustainability

Unmatched engineering support and service during and after the sale

Utilizing information technology while not losing personal connectivity

Global market growth

Recognizing environmental responsibility in the industry

Today Conn-Weld does business around the world still guided by the same philosophy James D. Connolly started Conn-Weld on in 1975 - To serve the customer by offering a quality product, produced in a timely manner and backed by dependable service. As we analyze our outstanding growth two words come to mind: *"persistence and commitment."*

CONN-WELD® INVITES

You

FOR A PLANT TOUR



See first hand how Conn-Weld engineers, designs, and manufactures specifically for your individual needs by using cutting edge technology.



Conn-Weld welcomes everyone, call to schedule your own personal tour today.

CONN WELD®

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www.Conn-Weld.com

