

SIZING UP SOLUTIONS



THE WESTERN GROUP

LOCALLY MADE



From our start 100 years ago making residential fencing in Portland Oregon, we are now the largest full-range domestic manufacturer of screening media for the processing industries. We have grown that business – customer by customer, geography by geography, and industry by industry – by providing great customer service. That high level of service only comes from years of experience and knowing that the correct screening media choice will help to produce quality product.

We are often local where you are, so we can meet your needs in days and not months, which can be the case when products are shipped from overseas. We also make the whole range of media – on our machines, with our people – so we are not going to force you into one type of media. Different applications require different media, and we make it all.

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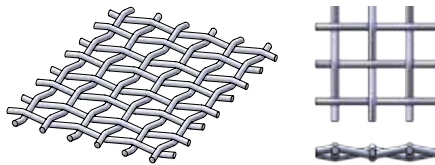
LOCATIONS & CONTACTS 46

THE BASICS

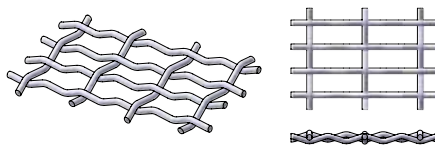


WEAVES

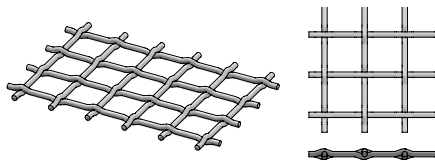
Matching screen weave patterns to your application will help increase production.



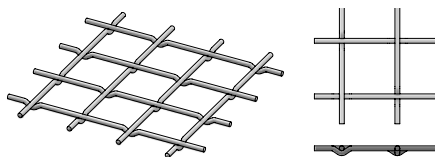
OVER & UNDER – Used for general screening in small and intermediate openings.



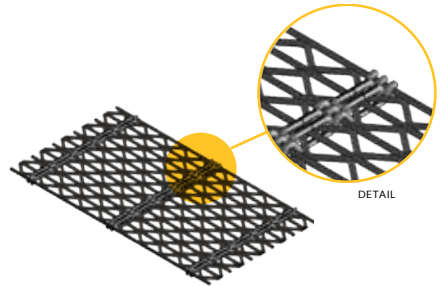
INTERMEDIATE CRIMP – Used for efficient screening where openings are large in relation to the wire size.



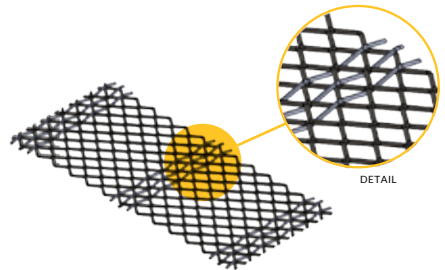
SCALP/LOCK – Here, a deep crimp locks wires in place, which is recommended for heavy-duty screening and often used for heavy load applications.



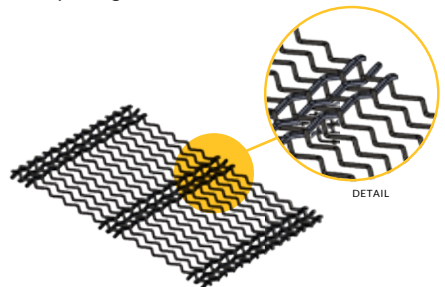
FLATTOP – Crimps are all on the underside of the screen, leaving a smooth, flat top that extends the life of the screen.



Z-SLOT – Alternating crimped and straight wires on a horizontal plane offer self-cleaning benefits while maintaining sizing accuracy.



Z-DIAMOND – Crimped wires arranged on a horizontal plane in a diamond pattern increase open areas and reduce pegging when running material close to the size of the opening.



Z-HERRINGBONE – Crimped wires arranged on a horizontal plane create a long slot with no pinch points to increase production of wet or sticky material.

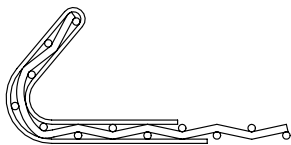
HOOKS

Many screen types require formed hooks on the edge of the screens to allow the media to be pulled taut for the most effective media life. Choosing the correct hook for your machine and application is key to production and screen life.



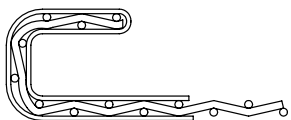
PLAIN BEND (TYPE 1)

- Edge formed at 45°.
- Common for light perforated metal media.



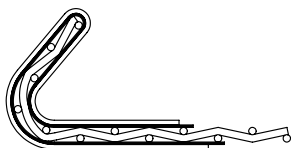
PLAIN BEND WITH METAL SHROUD (TYPE 2)

- Metal shroud reinforces hook strength.
- Common for screens using .072" wire and larger.
- Common for some polyurethane media.



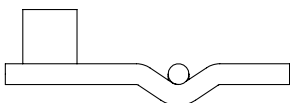
U-HOOK WITH METAL SHROUD (TYPE 2U)

- Special edge formed with "U" shape.
- Common for end-tension machines.



PLAIN BEND WITH METAL AND CANVAS (TYPE 3)

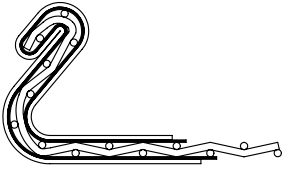
- Metal shroud adds strength for thinner screens.
- Common for screens using .063" wire and smaller.
- Canvas or synthetic strip prevents wire from slipping.



SQUARE BAR WELDED ON SCREEN EDGE (TYPE 4)

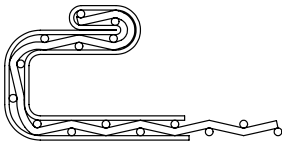
- Specialty edge for some machinery.

HOOKS *Continued*



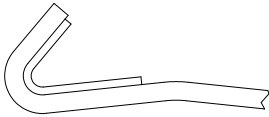
METAL BANDS WITH FORMED OVERLAP AND CANVAS (TYPE 5)

- Metal shroud adds strength for thinner screens.
- Common for wire screens using .063" wire and smaller.
- Canvas or synthetic strip and additional forming prevents wire from slipping.



U-HOOK METAL BANDS WITH FORMED OVERLAP (TYPE 5U)

- Special edge formed with "U" shape.
- Common for end-tension machines.
- Additional forming prevents wire from slipping.



STEEL ANGLE WELDED INSIDE HOOK (TYPE 6)

- Common for screens using 3/8" wire and larger.
- Metal angle adds wear protection for screen.



STEEL ANGLE WELDED ON SCREEN EDGE (TYPE 7)

- For thicker screens.
- Common for heavy wire screens and perforated plate.



U-HOOK STEEL ANGLE WELDED ON SCREEN EDGE (TYPE 7U)

- For thicker screens.
- Common for end-tension machines.

COMPARATIVE USE TABLE

This table gives a good overview of the performance of different types of screens in different applications – that said, with the variety of aggregates, final product specs desired, and local conditions, there are always exceptions to what works best. Contact us to discuss specific conditions and solutions.

| KEY: • Good ••• Better ••••• Best | | | | | | |
|---|------------|---------|-------------|------------------|--------------|--------|
| SCREENING APPLICATIONS | WOVEN WIRE | Z-SLOTS | HARP SCREEN | PERFORATED PLATE | POLYURETHANE | RUBBER |
| Primary Scalping (dry, high-impact) | ••• | • | • | ••••• | • | ••••• |
| Primary Slurry (wet, high-impact) | ••• | • | • | ••••• | ••••• | ••••• |
| Secondary Dry | •••• | ••••• | ••• | ••••• | •• | ••••• |
| Secondary Wet | •••• | •••• | ••• | •••• | ••••• | •••• |
| Tertiary Dry | •••• | ••••• | •••• | ••• | ••• | •••• |
| Tertiary Wet | •••• | •••• | ••• | ••• | ••••• | ••• |
| Dewatering | ••• | ••• | ••• | ••• | ••••• | • |
| SCREENING PROBLEMS | | | | | | |
| Wet, plugging | ••• | ••••• | ••••• | ••• | ••••• | •••• |
| Dry, plugging | ••• | ••••• | ••••• | ••• | • | •••• |
| Blinding or sticking | ••• | ••••• | ••••• | • | •••• | •••• |
| Dry, high-abrasion | •••• | •••• | •••• | ••••• | ••• | ••••• |
| Wet, high-abrasion | •••• | •••• | •••• | ••••• | ••••• | •••• |

OPEN AREA TABLES

SLOTTED OPENINGS

| SLOTTED OPENING SIZE | WIRE SIZE GAUGE (INCHES) | % OPEN AREA | SHOT TYPE |
|-------------------------|-----------------------------|----------------|--------------|
| 8 MESH x 1/2" | 18/16 (.047"/.063) | 57.7 | Single |
| 8 MESH x 1" | 18/16 (.047"/.063) | 56.4 | Triple |
| 7 MESH x 1/2" | 18/16 (.047"/.063) | 60.7 | Single |
| 7 MESH x 1" | 18/16 (.047"/.063) | 59.8 | Triple |
| 1/8" x 1/2" | 14 (.080") | 55.7 | Single |
| 1/8" x 1" | 14 (.080") | 53.4 | Triple |
| 3/16" x 1/2" | 13 (.092") | 58.2 | Single |
| 3/16" x 1" | 13 (.092") | 58.0 | Triple |
| 1/4" x 1/2" | 11 (.120") | 55.3 | Single |
| 1/4" x 1" | 11/9 (.120"/.148") | 62.6 | Single |
| 1/4" X 3" | 11 (.120") | 64 | Triple |
| 3/8" x 1/2" | 10 (.135") | 58.0 | Single |
| 3/8" x 1" | 10 (.135") | 65.8 | Single |
| 3/8" X 3" | 10 (.135") | 64 | Triple |
| 1/2" X 4" | 7 (.177") | 68 | Triple |

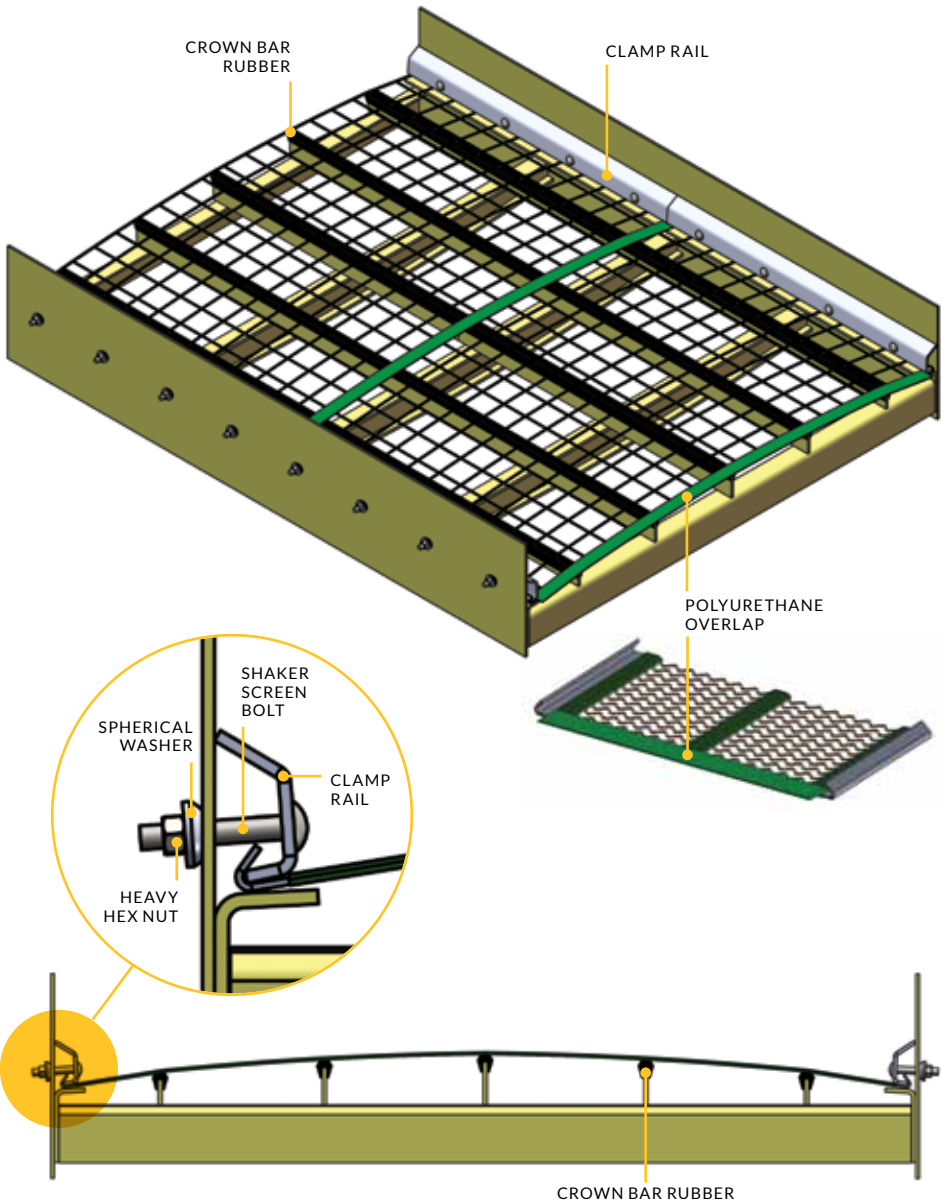
SQUARE OPENINGS

| SQUARE OPENING SIZE | WIRE SIZE GAUGE (INCHES) | % OPEN AREA |
|---------------------|--------------------------|-------------|
| 10 MESH | 20 (.035") | 42.3 |
| 8 MESH | 18 (.047") | 38.9 |
| 7 MESH | 18 (.047") | 45.0 |
| 6 MESH | 18 (.047") | 51.6 |
| 1/8" (.125") | 16 (.063") | 44.2 |
| | 14 (.080") | 37.2 |
| | 13 (.092") | 33.2 |
| 5/32" (.156") | 14 (.080") | 43.5 |
| 3/16" (.187") | 16 (.063") | 56.0 |
| | 14 (.080") | 49.1 |
| | 13 (.092") | 45.1 |
| | 12 (.105") | 41.1 |
| | 11 (.120") | 37.2 |
| | 10 (.135") | 33.8 |
| 7/32" (.219") | 14 (.080") | 53.6 |
| 1/4" (.250") | 14 (.080") | 57.4 |
| | 13 (.092") | 53.4 |
| | 12 (.105") | 49.6 |
| | 11 (.120") | 45.6 |
| | 10 (.135") | 42.2 |
| 5/16" (.312") | 12 (.105") | 56.0 |
| | 11 (.120") | 52.2 |
| | 10 (.135") | 48.8 |
| 3/8" (.375") | 12 (.105") | 61.0 |
| | 11 (.120") | 57.4 |
| | 10 (.135") | 54.1 |
| | 9 (.148") | 51.4 |
| | 8 (.162") | 48.7 |
| 7/16" (.4375") | 10 (.135") | 58.4 |
| | 9 (.148") | 55.8 |
| | 8 (.162") | 53.2 |
| 1/2" (.500") | 9 (.148") | 59.5 |
| | 8 (.162") | 57.1 |
| | 7 (.177") | 54.5 |
| | 6 (.192") | 52.2 |
| 9/16" (.563") | 8 (.162") | 60.3 |
| | 7 (.177") | 57.9 |
| | 6 (.192") | 55.6 |
| 5/8" (.625") | 8 (.162") | 63.1 |
| | 7 (.177") | 60.7 |
| | 6 (.192") | 58.5 |
| 11/16" (.687") | 6 (.192") | 61.0 |

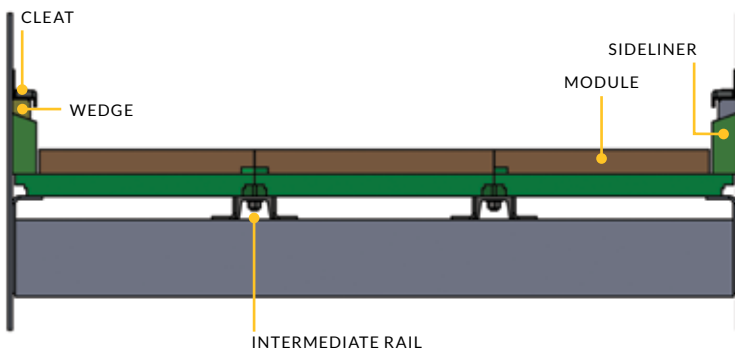
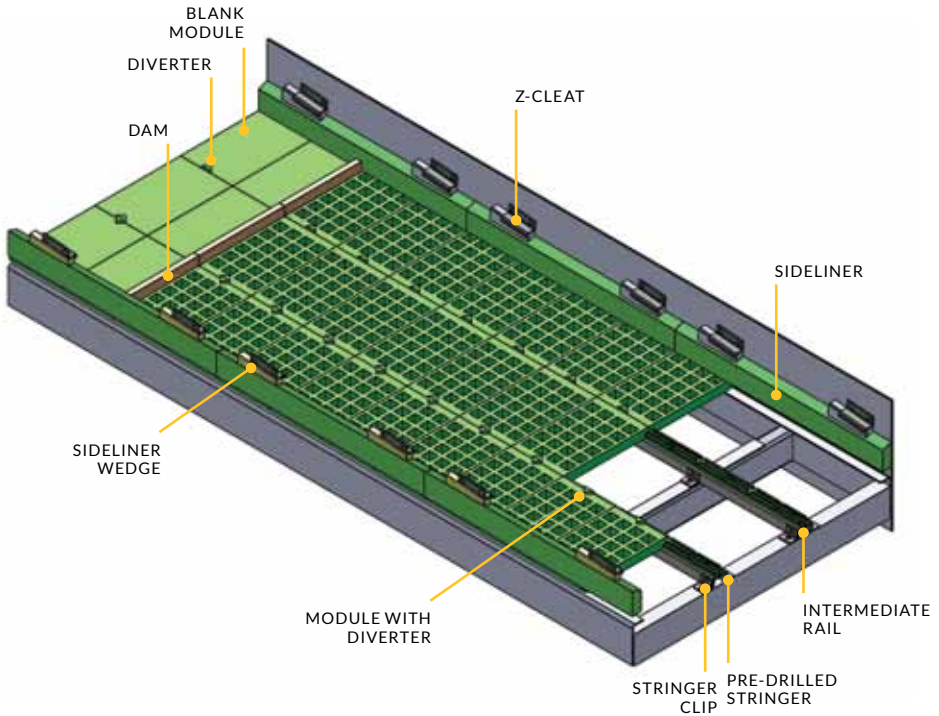
| | | |
|------------------|----------------|------|
| 3/4" (.750") | 5 (.207") | 61.4 |
| | 4 (.225") | 59.2 |
| | 3 (.243") | 56.3 |
| 13/16" (.813") | 5 (.207") | 62.1 |
| 7/8" (.875") | 4 (.225") | 63.3 |
| | 3 (.243") | 60.5 |
| | 1 (.283") | 57.1 |
| | 5/16" (.312") | 54.3 |
| 15/16" (.937") | 3 (.243") | 62.3 |
| 1" (1.000") | 4 (.225") | 66.6 |
| | 3 (.243") | 64.0 |
| | 1 (.283") | 60.8 |
| | 5/16" (.312") | 58.0 |
| 1-1/16" (1.063") | 3 (.243") | 65.5 |
| 1-1/8" (1.125") | 3 (.243") | 66.9 |
| | 5/16" (.312") | 61.2 |
| 1-1/4" (1.25") | 3 (.243") | 69.4 |
| | 1 (.283") | 66.5 |
| | 5/16" (.3125") | 64.0 |
| | 3/8" (.375") | 59.2 |
| 1-3/8" (1.375") | 1 (.283") | 68.8 |
| | 5/16" (.312") | 66.4 |
| 1-1/2" (1.500") | 6 (.192") | 78.6 |
| | 3 (.243") | 73.4 |
| | 5/16" (.312") | 68.5 |
| | 3/8" (.375") | 64.0 |
| 1.5/8" (1.625") | 5/16" (.312") | 71.3 |
| | 3/8" (.375") | 68.0 |
| 1-3/4" (1.750") | 5/16" (.312") | 71.9 |
| | 3/8" (.375") | 67.8 |
| 1-7/8" (1.875") | 3/8" (.375") | 71.8 |
| 2" (2.000") | 5/16" (.312") | 74.8 |
| | 3/8" (.375") | 70.9 |
| | 7/16" (.437") | 67.3 |
| | 1/2" (.500") | 64.0 |
| 2-1/4" (2.250") | 3/8" (.375") | 73.4 |
| 2-1/2" (2.500") | 3/8" (.375") | 75.6 |
| | 7/16" (.437") | 72.4 |
| | 1/2" (.500") | 69.4 |
| 3" (3.000") | 1/2" (.500") | 73.5 |
| 3-1/2" (3.500") | 1/2" (.500") | 76.6 |
| 4" (4.000") | 1/2" (.500") | 79.0 |

DECK DIAGRAMS

CROWN DECK



MODULAR FLAT DECK



COMMON ISSUES & SOLUTIONS

CONDITION 1

You like your high-open area screens that give you good throughput, but your application is wearing screens too quickly and you have too much maintenance downtime. You do want to stay with a standard tensioned system.

SOLUTION **PAGE 26**

***WESTCOAT** polyurethane-covered wire screens blend the utility of tensionable wire systems with the wear characteristics of polyurethane. Hybrid Westcoat screens fill side- or end-tensioned machines and offer up to 5x the wear life of standard wire screens. Westcoat screen hooks capture both the wire and the polyurethane screen components for superior connection and life.*

CONDITION 2

Your spraybar jets are doing their job reasonably well, helping you create efficient screening conditions across the entire deck, but they're also blowing holes in your screens.

SOLUTION **PAGE 43**

*The **WESTROUGH** protection system bolts over your existing screens where the water is impacting them and accomplishes two things: it protects the media and spreads material for better cleaning.*

CONDITION 3

Your square opening screens produce well initially, but blind over too quickly.

SOLUTION **PAGE 18**

*After considering increasing top-size particle feed to help scrub the screen or reducing the wire diameter within reason, switch to a **Z-SLOT** blinding-resistant self-cleaning screen. For heavier blinding issues, try a **Z-DIAMOND** screen, or a **Z-HERRINGBONE** screen for sticky material.*

CONDITION 4

You're happy with the production efficiency of your wire screens, but the constant change-outs are bringing production to a halt too frequently which costs you time and money.

SOLUTION PAGE 27, 30

*Talk to us about our modular systems: **WESTRAIL**, **WESTDECK**, **POWERRAIL**, and **POWERDECK**.*

We can show you how our systems can save you both time and money through the reduction of changeouts while maximizing deck load and production tonnage.

CONDITION 5

You like your high open-area screens that give you good throughput, but your application is wearing through your first position screen too quickly, although the rest of the deck wears normally. You keep having to shut down to change out that single screen where the majority of material hits the screen. You could use rubber impact pads but you don't want to lose open area.

SOLUTION PAGE 29

***POWERFLEX** rubber tension screens can withstand the impact of heavy materials, use standard tension hooks, and offer up to 10x the wear life of woven wire screens. These screens are made with rubber-encapsulated high-tensile cable wire screens with solid rubber crown bar strips.*

CONDITION 6

You're dropping large rocks on your feed deck, which is causing screens to break before they have a chance to wear, and you don't want to modify your deck.

SOLUTION PAGE 35

***RUBBER-COVERED PERFORATED PLATE** absorbs the energy from large rocks on the feed end and can be tensioned to fit on your crowned deck.*

WIRE



INTRODUCTION

Woven wire screens are the most accurate method for sizing product and can be produced in the widest variety of sizes. TWG's pre-crimped wires ensure accurate openings and tightly woven screens that will extend wear life, and our wide range of tooling and local stock will get you the product you want in the time you need it.

TO ORDER, THE FOLLOWING INFORMATION IS NECESSARY:

1. **Quantity:** Quantity of screens or rolls.
2. **Width:** Expressed in inches or fractions of inches.
3. **Length:** Expressed in inches or fractions of inches.
4. **Opening:** There are a variety of ways to express opening size:
 - A. **Square Openings:** Specify opening desired – only one dimension necessary.
 - B. **Slotted Openings:** Specify opening desired – both the length and width of slot.
 - For slots, also specify if the long opening is parallel to the length or width of the machine.
 - C. **Mesh Callouts:** Specify the number of openings per lineal inch, starting from the center of a wire.
 - D. **Sieve Callouts:** Specify the sieve number.
5. **Wire Size:** Expressed in decimals of an inch or gauge number.
6. **Wire Type:** Specify type of wire: common types are high carbon, WX, oil-tempered, or stainless steel.
7. **Screen Forming:** Usually for tensioning systems, but could be other special finishing.
 - A. **Hook Type:** Specify type of hook (see pages 7-8).
 - B. **Finished Dimensions:** Specify the width and length of the screen media.
Width can be measured from the outside of hook to outside of opposite hook (OD), or inside of hook to inside of opposite hook (ID).
 - C. **Special Finishing:** Specify any special features such as hook orientation (both hooks down, hooks one up / one down), center hold down holes (what size and location), center crown and any overlaps desired.
 - D. **Machine Type:** Specify make of machine and dimensions.

For Trommels – In addition to the above, the following information is required:

- A. **Length of cylinder**
- B. **Outside or inside diameter of media**
- C. **How many pieces to the round?**



Z-SLOTS

Z-Slot screens are recommended in applications with a high occurrence of blinding, pegging, and slivers.


FEATURES & BENEFITS

- Offered in 3 configurations: **Standard Z-Slot** (most accurate sizing), **Z-Diamond** (increased cleaning over Standard Z-Slot) and **Z-Herringbone** (excellent for sticky blinding).
- Wires vibrate independently, allowing for self-cleaning and increased production.
- Available with wire fill or polyurethane strips on crown bar locations to extend wear life.
- Available in high carbon, WX, and stainless wire.

COMMON SPECS


- 1/4" x 13ga (.092)
- 3/16" x 14ga (.080)
- 1/8" x 16ga (.063)
- 3/8" x 11ga (.120)

STANDARD ADD-ONS:




POLYURETHANE CROWN BAR PROTECTORS

42



CLAMP RAILS

41



SCREEN BOLTS, NUTS, AND WASHERS

40



POLYURETHANE OVERLAPS

12



SQUARES

Square opening screens are the most common media used as they are the most accurate and offer versatility in openings, wire sizes, and wire types.

FEATURES & BENEFITS

- Accurate openings offer precise sizing, holding spec over time.
- Versatility in openings and wire sizes allows you to match production needs.
- Standard specs are readily available for quick delivery.

COMMON SPECS

1-1/2" opening 5/16" (.3125) HC
 2" opening 3/8" (.375) HC
 3/4" opening 5ga (.207) HC
 1" opening 3ga (.244) HC
 3/8" opening 10ga (.135) HC

STANDARD ADD-ONS:



CLAMP RAILS

41



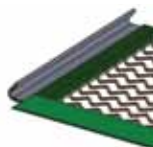
CROWN BAR RUBBER

42



SCREEN BOLTS, NUTS, AND WASHERS

40



POLYURETHANE OVERLAPS

12



SLOTS

Slots improve screening capacity while decreasing blinding and plugging, and are especially effective when processing flats and slivers.

FEATURES & BENEFITS

- Available in many slot lengths and wire diameters.
- Higher open area and more throughput than squares.
- Better suited for sticky applications.
- Available in HC, WX, and stainless steel wire.
- Often used in trommel screens, where the material flow is both forward and lateral.

COMMON SPECS

3/4" x 3" 3ga T304

5/8" x 2" 3ga

1/4" x 3" 11ga (.120")

1/2" x 4" 7ga (.177")

STANDARD ADD-ONS:



CROWN BAR
RUBBER

42



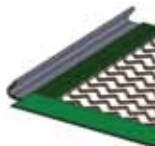
CLAMP RAILS

41



SCREEN BOLTS,
NUTS, AND
WASHERS

40



POLYURETHANE
OVERLAPS

12



STRAIGHT SLOTS

Straight slots are used when passing elongated material is not a problem and the desire is to pass near-sized material with an abundance of slivers.

FEATURES & BENEFITS

- Added open area resulting in greater throughput.
- Reduced blinding and pegging of material.
- Often less expensive than square opening styles.
- Used where specifications are not tight.
- Commonly used in mulching for separation of foreign material.

COMMON SPECS

1/4" x 9" 12ga with 6-wire clusters

1/2" x 10" 6ga with 5-wire clusters

3/4" x 12" 3ga with 3-wire clusters

STANDARD ADD-ONS:



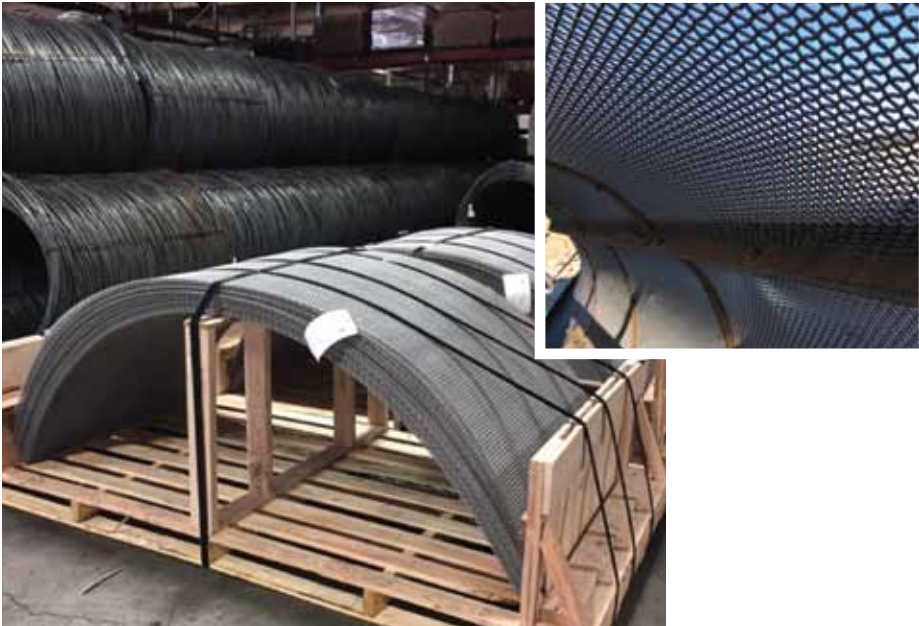
**POLYURETHANE
CROWN BAR
PROTECTORS**

42



**SCREEN BOLTS,
NUTS, AND
WASHERS**

40



TROMMELS

A trommel screen is a screened cylinder where the material runs through a rotating screen. Trommels are often used for topsoil, compost, and greenwaste applications.

FEATURES & BENEFITS

- Ability to make several products by changing openings throughout the screen.

COMMON SPECS

- 1/4" square opening 11ga (.120")
- 7/16" square 9ga (.148")
- 1/2" square 8ga (.162")
- 3/4" x 3" slotted 3ga (.244")
- 1-1/2" square 5/16" (.3125")

STANDARD ADD-ONS:



SHAKER
SCREEN BOLTS

40



HEAVY
HEX NUTS

40



INDUSTRIAL

We produce a variety of fabricated screen panels used for sizing, grading, dewatering, and separating. We provide screens used in agriculture, chemical, food, mineral, and plastics industries.

FEATURES & BENEFITS

- We have one of the largest inventories in North America, offering the finest 300 mesh to the heaviest woven product using 1 inch diameter steel rods.
- We make edging for most high-frequency gyratory vibrating screen machines, including mounting holes.
- Finer mesh screens are sandwiched with a coarser mesh backing screen before forming to increase the overall strength of the tensioned mesh.
- Hemmed edges available on fine mesh to prevent fraying.

COMMON SPECS

40mesh .010" T304

36mesh .0065" T304 with 8mesh .025" T304 backing

STANDARD ADD-ONS:



**SHAKER
SCREEN BOLTS**

40



**HEAVY
HEX NUTS**

40



NON-METALLICS

INTRODUCTION

Non-metallic systems often lower costs per ton for producers over time. The initial investment is higher than traditional metal screens and the ongoing cost is lower due to fewer screen changes and less maintenance.

Most of our systems are available in both rubber and polyurethane. TWG's polyurethane products are produced using a higher-quality open-cast production method which results in better wear life and abrasion resistance than that found in injection-molded products. We source natural rubber instead of synthetic rubber, resulting in a longer-lasting rubber product.

The following products form the core of our non-metallic lineup:

Westcoat: light- to medium-duty polyurethane-coated wire screen

Westrail: 12"x24" polyurethane modular system

Powerrail: 12"x24" rubber modular system

Westvibe: light- to medium-duty polyurethane tension screen

Powervibe: light- to medium-duty rubber tension screen

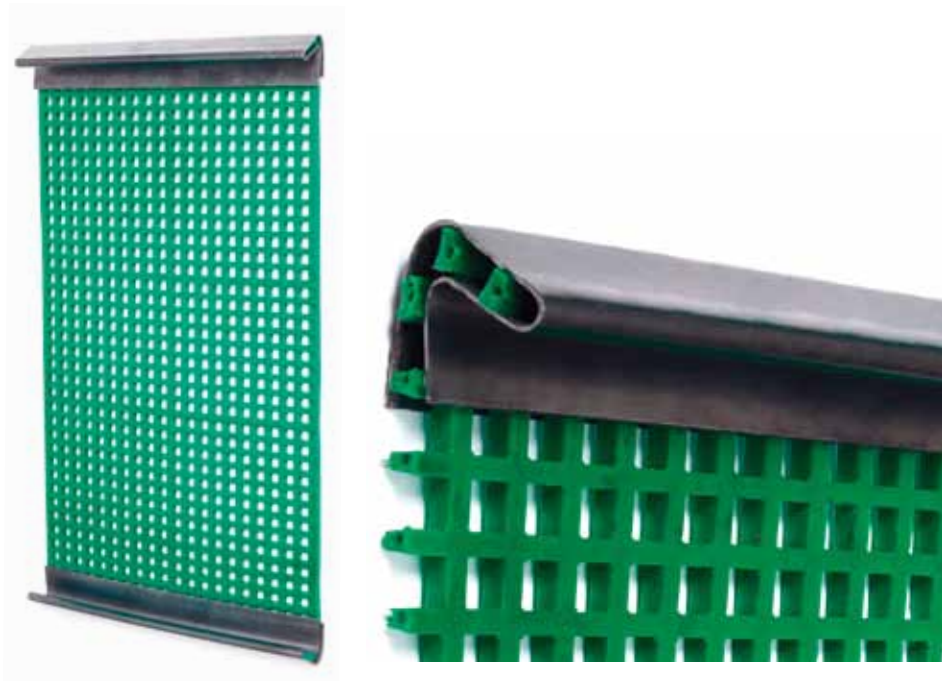
Westflex: heavy-duty polyurethane tension screen

Powerflex: heavy-duty rubber tension screen

Westdeck: 12"x12" polyurethane modular system

Powerdeck: 12"x12" and 12"x24" rubber modular system

PROFrame: Our open-cast production process allows us to frame a variety of metal inserts inside a polyurethane modular frame.



WESTCOAT

Westcoat combines the life of polyurethane with the open area of wire cloth, and can be used as a direct substitute for tensioned wire cloth screens, offering up to 5 times the life of wire cloth.

FEATURES & BENEFITS

- Improved wear life over wire.
- Direct replacement of wire cloth on crown decks without altering machine structure.
- Higher open area than other synthetics.
- Finished screen edges for easy screen handling.
- Can be manufactured without openings for high-wear areas.

COMMON SPECS

- 3/16" square x 5/16" thick
- 1/2" square x 3/8" thick
- 7/8" square x 1/2" thick

STANDARD ADD-ONS:



POLYURETHANE
CROWN BAR
PROTECTORS

42



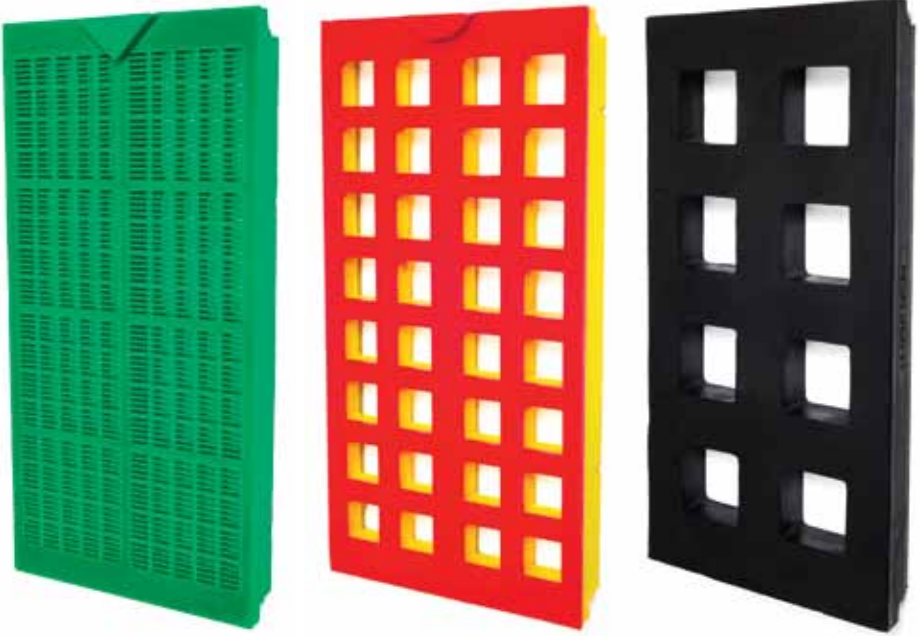
CLAMP RAILS

41



SCREEN BOLTS,
NUTS, AND
WASHERS

40



WESTRAIL / POWERRAIL

Westrail is TWG's 12"x24" modular polyurethane panel system. Powerail is the same size panel but in rubber. TWG's locking system allows panels to be mixed across the deck. Customers have the option of dual-colored modules to assist in determining proper changeout time.

FEATURES & BENEFITS

- Dual-colored panels indicate when panels need to be replaced.
- Improved wear life versus wire screening.
- Poly-to-poly (and rubber-to-rubber) press fits increase wear life.
- 24" length results in fewer sub-structure requirements.
- Flat decks allow for effective screening across the entire deck.
- Multiple opening styles: squares, slots, rounds, Zs.
- Excellent for aggressive and long-running situations.

COMMON SPECS

.5mm x 13mm slots

4mm Diamond Z

1/2" square

3/4" Z fingers

1-1/2" square

STANDARD ADD-ONS:



**Z-CLEATS,
WEDGES &
SIDLINERS**

43



**SHOULDER
CAP BOLTS,
WASHERS,
AND NUTS**

40



WESTVIBE / POWERVIBE

Westvibes and Powervibes are light-duty flexible polyurethane or rubber standard tensioned screens with small openings and are approximately 1/2" thick. Crown bar locations are blocked out, which enhances wear life.

FEATURES & BENEFITS

- Openings up to 1/2".
- Flexibility reduces plugging and blinding.
- Reinforced with high-tensile cable.
- Recued noise generation over metal decks.
- No deck modification required.

COMMON SPECS

- 3/16" x 1" slotted openings
- 1/4" round openings
- 1/2" square openings

STANDARD ADD-ONS:



RUBBER-
COVERED
CLAMP RAILS

41



SHAKER BOLTS

40



CROWN BAR
RUBBER

42



POLYURETHANE
CROWN BAR
PROTECTORS

42



WESTFLEX / POWERFLEX

Westflex and Powerflex provide a heavier-duty version of our Westvibes and Powervibes.

FEATURES & BENEFITS

- Available up to 4" openings.
- Flexibility reduces plugging and blinding.
- Reinforced with high-tensile cable.
- Reduced noise generation over metal decks.
- No deck modification required.

COMMON SPECS

1-1/2" square opening

2" square opening

3" square opening

STANDARD ADD-ONS:



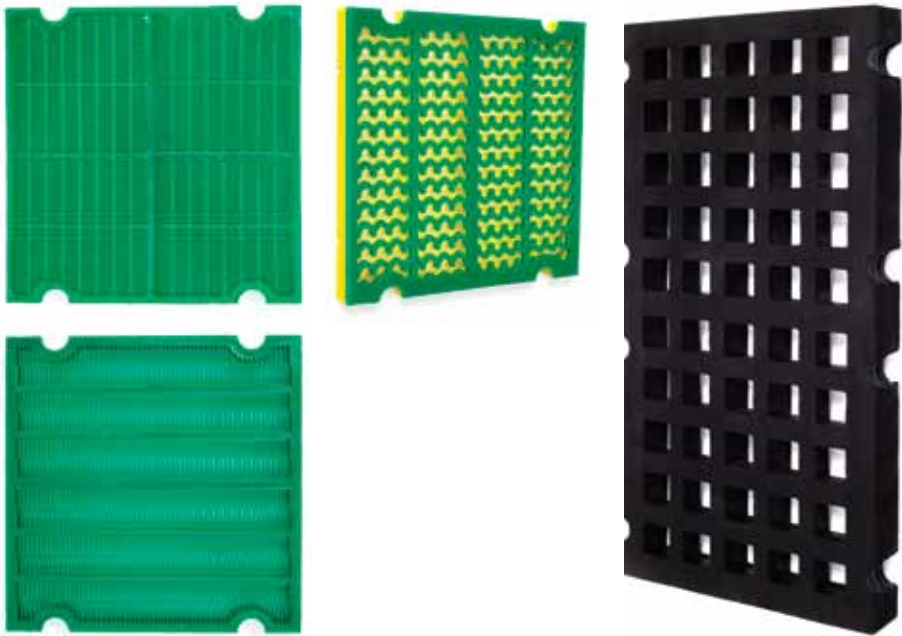
RUBBER-COVERED CLAMP RAILS

41



J-BOLTS & PROTECTORS

41



WESTDECK / POWERDECK

Westdeck is TWG's 12"x12" modular polyurethane panel system. Powerdeck is the same locking style but in rubber, and also comes in 12"x24" size. TWG's locking system allows panels to be mixed across the deck. We manufacture these 12"x12" panels in variable thicknesses.

FEATURES & BENEFITS

- Improved wear life versus wire screening.
- Dual-colored panels indicate when panels need to be replaced.
- Flat decks allow for effective screening across the entire deck.
- Multiple opening styles; squares, slots, rounds, Zs.
- Resident pins allow for quick changeouts without new pins.

COMMON SPECS

| | |
|--------------------|----------------|
| .35mm x 13mm slots | 3/8" square |
| 1" square | 1/4" Diamond Z |
| 3/4" Z fingers | |

STANDARD ADD-ONS:

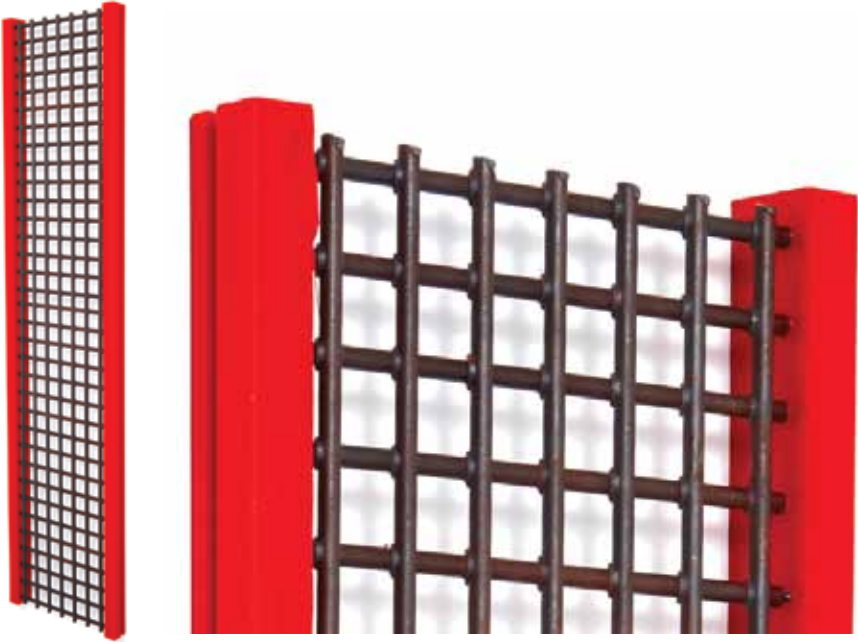


MALE & FEMALE
LOCKING PINS



Z-CLEATS,
WEDGES &
SIDELINERS

43



PROFRAME

There are a variety of media types that we can manufacture in a polyurethane frame to fit into a modular system where producers are looking for higher throughput.

FEATURES & BENEFITS

- Can fit into modular systems of all sorts.
- Screen media is molded into a polyurethane frame for ease of installation.
- Squares, slots, Zs, perforated plate, and welded wire can be framed with polyurethane.
- Wire inserts offer more open area versus many polyurethane systems.

COMMON SPECS

1-1/4" square welded (.312) inserts AR500 wire

1/2" square woven (.312) inserts WX wire

1/2" Z-slot (.192) inserts WX wire

STANDARD ADD-ONS:



Z-CLEATS,
WEDGES &
SIDLINERS

43



SHOULDER
CAP BOLTS,
WASHERS,
AND NUTS

40



PERFORATED

INTRODUCTION

Perforated plates are often used in scalping operations to improve overall system efficiency. Appropriate media selection can reduce fines before they reach crushing, which will dramatically improve capacity. In addition, choosing the right screen media for your application can increase wear life and reduce maintenance downtime.

TO ORDER, THE FOLLOWING INFORMATION IS NECESSARY:

- Material thickness.
- Alloy.
- Opening shape, spacing, and size.
- Required mounting (e.g., bolt down, tension, rail or pin mounted).
- Specify blank out locations for crown bars or impact zones.



PLATE

Perforated plate provides increased wear and impact resistance over woven wire. Perforated screens can be used in flat bolt-down systems as well as in hooked edges for crowned decks. Blanked out areas can be designed to cover crown bar locations or other areas where solid plate is a benefit.

FEATURES & BENEFITS

- Many hole patterns available – round, square, hex, and slotted.
- Non-ferrous alloys (T304, T316) are available for corrosive situations or food processing.

COMMON SPECS

- 2" round holes on 2-3/4" centers, 1/4" plate
- 1-1/2" square holes on 2-1/4" centers, 1/4" plate
- 3" hex holes on 4" centers, 3/8" plate
- 4" square holes on 5-1/2" centers, 1/2" plate
- 2-1/2" round holes on 3-1/4" centers, 3/8" plate

STANDARD ADD-ONS:



D-STYLE
CROWN BAR
RUBBER

42



CLAMP RAILS

41



BOLTS, NUTS,
WASHERS

40



RUBBER-COVERED PLATE

Rubber-covered plate is used in extremely high-impact situations. Our natural rubber is bonded to the top of plate for extended wear life. Often the rebound effect of the rubber surface will reduce pegging. These products can be manufactured with welded hooks for standard tensioned installation or bored with attachment holes allowing it to be bolted to a subframe.

FEATURES & BENEFITS

- Rubber absorbs impact, extending life over standard punch plate.
- Tapered holes reduce pegging.
- Rubber covering reduces noise.
- Excellent for scalping decks.

COMMON SPECS

3" square opening, staggered
4" square opening, in-line

STANDARD ADD-ONS:



**D-STYLE
CROWN BAR
RUBBER**

42



CLAMP RAILS

41



**BOLTS, NUTS,
WASHERS**

40



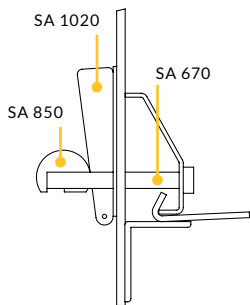
ACCESSORIES

INTRODUCTION

Producers that refresh their screening accessories when changing out screens decrease screen failure and increase production. These items are a small part of your overall operation's cost and can have a oversized impact on screening performance. Crown bar rubber, clamp rails, and tensioning bolts are subject to the same wear and tear as your screens. We carry everything you need and can send the appropriate accessories with your screen order.

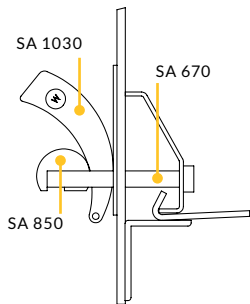
TENSION SYSTEMS

Proper tensioning creates optimum screening production and increases media life. Regular maintenance and replacement of your tension assemblies is crucial to screening success.



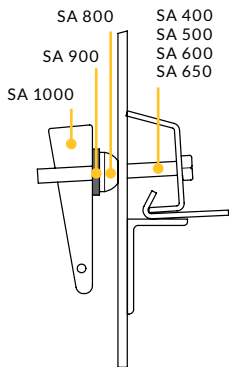
ALLIS-CHALMERS STYLE TENSION SYSTEM

| Part | Description |
|---------|------------------------------------|
| SA 670 | Slotted 3/4" x 5-7/8" Tension Bolt |
| SA 850 | Adjuster Plate |
| SA 1020 | Tension Wedge |



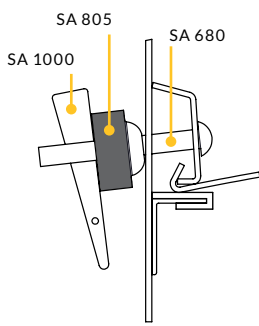
NEW SVEDALA/AC STYLE TENSION SYSTEM

| Part | Description |
|---------|------------------------------------|
| SA 670 | Slotted 3/4" x 5-7/8" Tension Bolt |
| SA 850 | Adjuster Plate |
| SA 1030 | Tension Wedge |



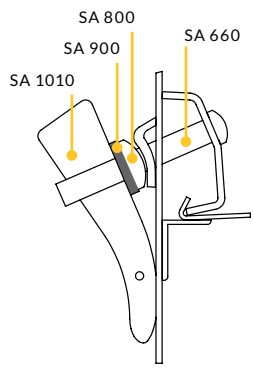
WESTERN UNIVERSAL STYLE TENSION SYSTEM

| Part | Description |
|---------|-------------------------------------|
| SA 400 | Slotted 3/4" x 4-3/4" Tension Bolt |
| SA 500 | Slotted 3/4" x 5-1/2" Tension Bolt |
| SA 600 | Slotted 3/4" x 6-5/16" Tension Bolt |
| SA 650 | Slotted 3/4" x 7-5/16" Tension Bolt |
| SA 800 | 7/8" ID Spherical Washer |
| SA 900 | 7/8" ID Hardened Flat Washer |
| SA 1000 | Tension Wedge |



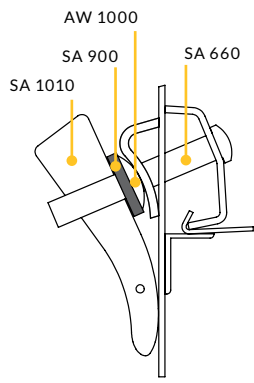
DEISTER STYLE TENSION SYSTEM

| Part | Description |
|---------|------------------------------------|
| SA 680 | Slotted 3/4" x 7-3/8" Tension Bolt |
| SA 805 | Rubber Tension Spring |
| SA 1000 | Tension Key-Wedge |



CEDARAPIDS STYLE TENSION SYSTEM

| Part | Description |
|---------|--------------------------------|
| SA 660 | Slotted 5/8" x 5" Tension Bolt |
| SA 800 | 7/8" ID Spherical Washer |
| SA 900 | Hardened Flat Washer |
| SA 1010 | Tension Wedge |



EL JAY® STYLE TENSION SYSTEM

| Part | Description |
|---------|--------------------------------|
| SA 660 | Slotted 5/8" x 5" Tension Bolt |
| SA 900 | Hardened Flat Washer |
| SA 1010 | Tension Wedge |
| AW 1000 | Aligning Washer |

WASHERS

Used to evenly distribute the load of the fastener and to provide spacing where required.

FEATURES & BENEFITS

- Made of high-grade steel for longer life.
- Zinc-plated to reduce corrosion.
- Stocked in a variety of openings to fit different bolt sizes.

HOW TO SPECIFY

- What type of washer is required:
 - Aligning washer:** helps align bolt with clamp rail
 - Spherical washer:** for uneven, angled surfaces
 - Flat washer:** for even, flat surfaces
- What ID is required.



OFTEN ORDERED WITH:

- Shaker bolts
- Heavy hex nuts

SHAKER BOLTS & NUTS

Shaker screen bolts & nuts are designed to put tension on the clamp rail to keep the screen tensioned properly.

FEATURES & BENEFITS

- Made from high-grade steel.
- Fully heat-treated.
- Zinc plated to reduce corrosion.
- Stocked in a large variety of diameters and lengths.

HOW TO SPECIFY

Measure the total length of the shaker screen bolt minus the square neck of the bolt, as well as the diameter of the bolt. For nuts, measure ID of nut.

COMMON SPECS

- | | |
|---------------|-----------|
| 1/2" x 6" | 3/4" x 5" |
| 5/8" x 4-1/2" | 3/4" x 6" |
| 5/8" x 6" | |



OFTEN ORDERED WITH:

- Clamp rails
- Spherical washers
- Tension bolts



J-BOLTS & PROTECTORS

J-Bolts are designed to securely attach screen media to the crown bar to reduce wear. J-bolt protectors protect the thread and the nut holding the J-bolt, and are available in both rubber and polyurethane.

FEATURES & BENEFITS

- Rounded hook end to prevent breakage.
- Protector supplies added tension to eliminate vibration.

COMMON SPECS

1/2" x 4"

5/8" x 6"



OFTEN ORDERED WITH:

- Heavy-duty hex nuts

CLAMP RAILS

Clamp rails are used to attach the screen to the side of the screen box in a properly-tensioned fashion. TWG manufactures clamp rails to your specific needs. Clamp rails often get bowed or notched over time, which leads to screen failure.

FEATURES & BENEFITS

- Mounting holes are included.
- The correct clamp rail will protect the side walls – generic rails often allow for damage.
- Poly-covered or rubber-covered clamp rails are available for extended life.
- We can provide non-standard lengths.

COMMON SPECS

4', 2-5 holes for both 5/8" and 3/4" bolts



OFTEN ORDERED WITH:

- Tension bolts with wedge slots
- Spherical washers
- Tension wedges
- Heavy-duty nuts

CROWN BAR RUBBER/POLYURETHANE

Crown bar rubber is designed to reduce shock and vibration to the shaker screen and extend the life of both the frame and screen.

FEATURES & BENEFITS

- Protects crown bar supports.
- Protects bottom of screen surface from excess wear against substructure.

COMMON SPECS

3/8" standard CBR

3/16" flat top CBR

3/8" round top CBR



CENTER HOLD DOWNS

Used as an additional mechanism to hold down tensioned and modular screens. Center hold downs further minimize movement and increase screen life.

FEATURES & BENEFITS

- Available in rubber and polyurethane.
- Internal steel plate provides additional strength.

HOW TO SPECIFY

- Length required
- Number of bolt holes and pattern of holes

COMMON SPECS

10' rubber covered

10' polyurethane

8' rubber covered



OFTEN ORDERED WITH:

- Shaker bolts
- Heavy hex nuts
- J-Bolts
- J-Bolt protectors

Z-CLEATS, WEDGES & SIDELINERS

Beveled sideliners secure non-metallic media on the sides of a flat deck. With our proprietary Z-cleats and wedges, sideliners hold modules in place while protecting the machine sidewalls.

FEATURES & BENEFITS

- Sideliners are available in UHMW and polyurethane.
- Bevels push the sideliner tight against the side wall, which prevents rocks from getting between the wall and sideliner.
- Wedges make for quick removal of modules.
- Unlike straight angle cleats, Z-cleats secure the wedge in place.

COMMON SPECS

48" long beveled sideliner

Left- and right-hand beveled wedges

Z-cleat



OFTEN ORDERED WITH:

- Westrail
- Powerrail
- Westdeck

SPRAY PIPE ACCESSORIES

There are several wash plant accessories that produce a cleaner product and extend the life of your screens. Spraymates are polyurethane spray deflectors that increase washing efficiency. Westrough or Washrock protect your media from water abrasion as well as spread material for more complete cleaning.

FEATURES & BENEFITS

- Spraymates direct spray and create a smooth fan-shaped water stream for maximum coverage.
- Westrough and Washrock spread material for increased efficiency and better cleaning.
- Easy to install.
- Polyurethane lasts under wet conditions.

OFTEN ORDERED WITH:

- Polyurethane crown bar protectors
- Polyurethane chute liners



DUST SUPPRESSOR

Dust suppressors are rubber sheets to reduce noise and dust and are made to fit all vibrating screens. Sheets come in a 48"-wide roll.

FEATURES & BENEFITS

- Can be attached to the top, feed end, or discharge end of the vibratory shaker.
- Absorbs and reduces noise.
- Reduces dust in surrounding area.
- Lightweight and easy to carry.

COMMON SPECS

48" sheets for a 6' x 16' deck

OFTEN ORDERED WITH:

- Snap rubber
- 7/16" cold-roll rod

MISCELLANEOUS

We carry hundreds of other screening-related accessories, from the skirt board rubber on your conveyor to the T-scale rubber used around your scale.

We stock a number of idlers for your conveyor systems. If you have an accessory need, we probably have it; just ask one of our specialists.



CONTACT US

Whenever we can be of assistance, please contact our sales team directly or connect with one of our eleven North American locations near you.

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