

VIBRATING EQUIPMENT

FEEDERS ■ SCREENS ■ SCALPERS



CRUSHERS SCREENS FEEDERS PLANTS

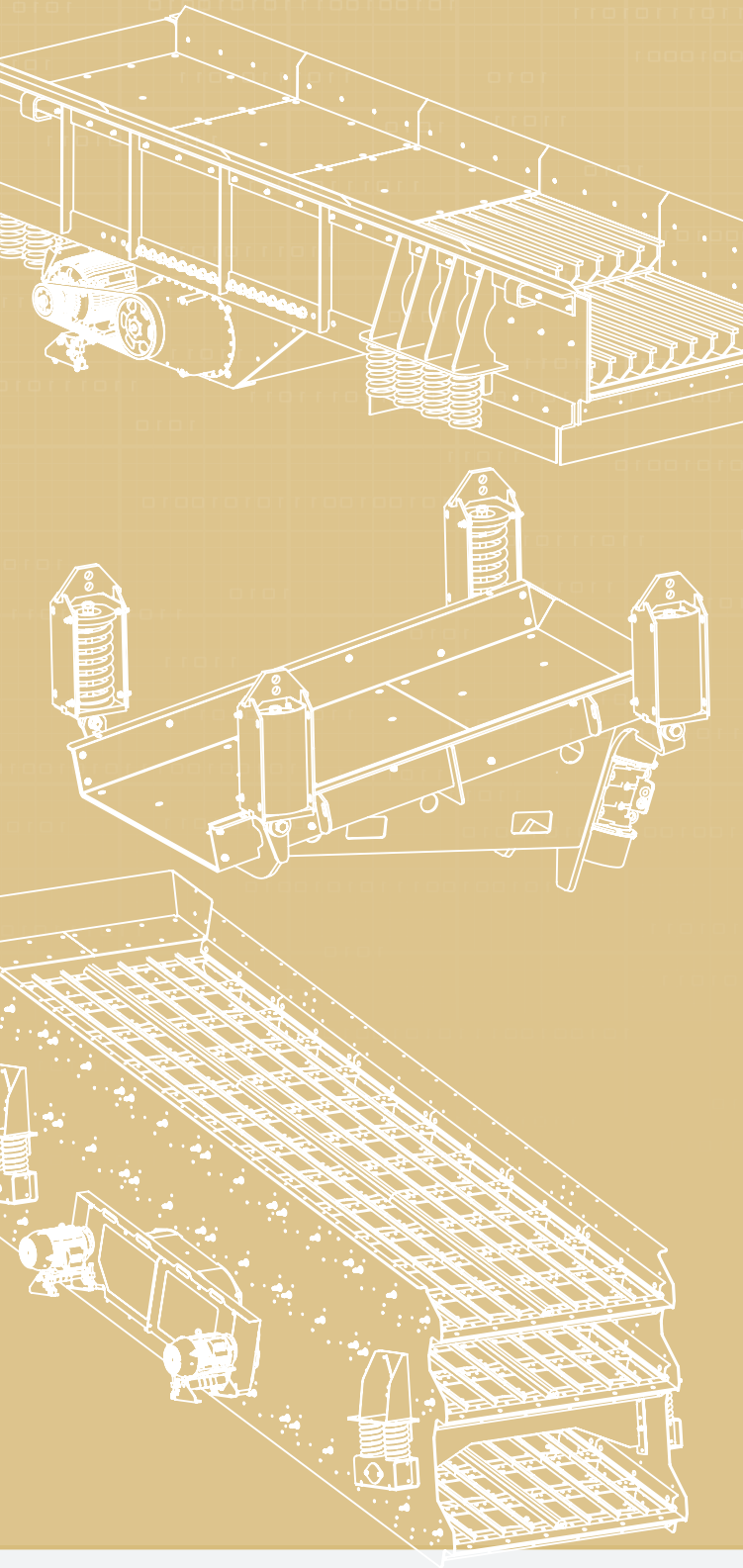


TELSMITH

an Astec Industries Co.

VIBRATING EQUIPMENT

OVERVIEW



Telsmith offers a full line of vibrating equipment with models specifically designed to serve industries ranging from 24 hour mining operations, to heavy-duty aggregate processing and sizing, to recycling asphalt and concrete products. Products include grizzly and pan feeders, inclined screens, horizontal screens and inclined vibrating grizzly screens.

Telsmith vibrating equipment excels at providing advanced technologies combined with outstanding product support. From initial needs assessment through years of service, Telsmith people are the backbone of delivering the Telsmith Difference.

- **Expertise:** Application engineers listen to you and help develop solutions that work. With a complete line of vibrating equipment, Telsmith can work with you to find the ideal equipment to fit your needs.

- **Innovative Solutions:** Utilizing modern design tools, Telsmith engineers develop reliable equipment with unique cost saving features. From the development of the Never-Wear™ sealing system that reduces maintenance and operating costs, to the creation of custom deck designs that accommodate unique screen media and improve screen efficiency, Telsmith engineers deliver innovation that works.

- **Quality:** Manufacturing craftsmen combine the discipline of an ISO 9001: 2015 environment with precision CNC machining and the skill of dedicated master welders. All Telsmith equipment goes through rigorous testing prior to shipping to ensure it measures up to the Telsmith standard.

- **Parts Availability:** Large stock parts inventories and people who know the machines are in place to ensure a quick turnaround. Telsmith Parts will work with you 24 hours a day, seven days a week.

- **Field Service:** Worldwide on-site service comes from a team of technical specialists ready to respond to a downtime emergency. Trained Telsmith service specialists are placed in strategic locations to provide prompt response with less travel time.

- **Training:** Telsmith offers several seminars geared towards educating your staff on your equipment for optimum performance. Separate seminar sessions are held for equipment maintenance and plant operations giving you the opportunity to focus on your interests.



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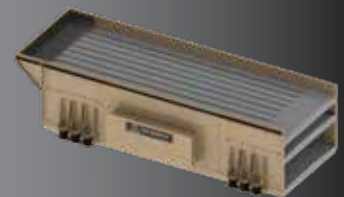
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VIBRATING FEEDERS



Telsmith feeders are available in sizes ranging from 36" x 12' up to 72" x 34', in a variety of models and configurations.

Severe-duty (truck dump) models, built to absorb the impact from trucks dumping large stone, incorporate deep side plates and massive formed steel cross supports.

Standard duty models offer lower profiles and are commonly used in portable applications that are loader or excavator fed.

All Telsmith feeders incorporate a heavy-duty vibrator assembly with cast shafts, open housing, flow-through oil lubrication, double-row spherical roller bearings and precision-cut gears. Adjustable gear timing and bolt-on counterweights allow for maximum stroke adjustment (both angle and length) to achieve optimum feed control and consistent production.

Solid pan, straight deck and step deck configurations offer additional versatility in feeder design to consistently deliver on the promise of outstanding performance.



HEAVY DUTY VIBRATOR MECHANISM

Telsmith feeders are equipped with a heavy-duty, model HF vibrator mechanism. With decades of operating history, the HF mechanism is among the most reliable available in the mining industry today.

Model HF vibrator housings are fabricated from heavy plate in an open-tube style for rigidity and strength. Side plates are precision machined to ensure tight sealing and proper bearing alignment.

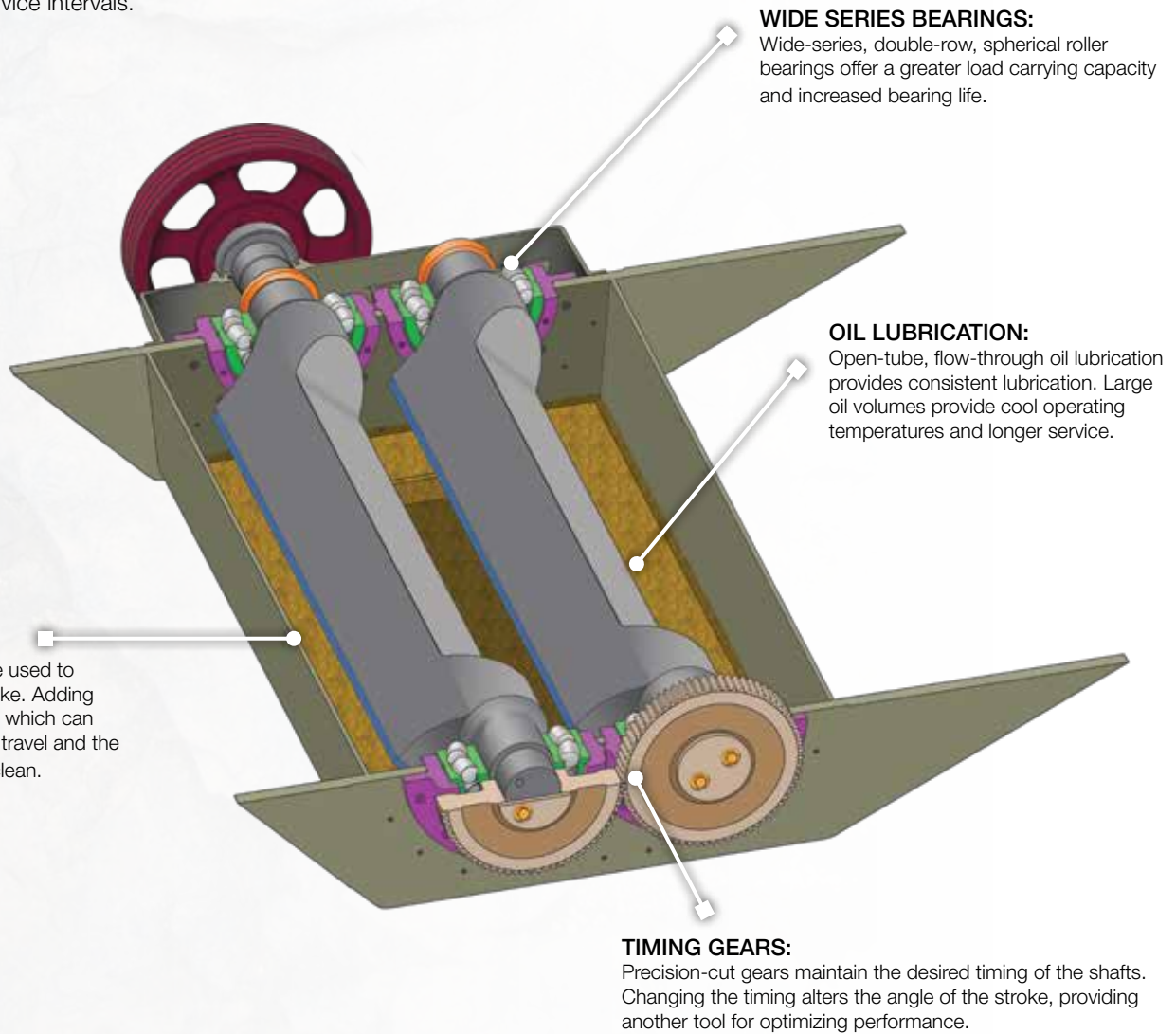
Wide-series, double-row spherical roller bearings deliver greater load carrying capacity than standard-series bearings, providing long service life even in 24 hour operations.

Using the open-tube design, the HF units carry large oil volumes to insure the proper lubrication of bearings and gears with extended service intervals.

Bolt-on positive counterweights allow simple field adjustments to increase (or decrease) the length of the stroke.

Precision cut gears maintain the proper shaft timing, generating an efficient straight line stroke to convey material down the feeder pan. This type of mechanism allows for the gear timing to be field altered, changing the angle of the stroke. The ability to modify the stroke angle and length allows versatility to optimize performance in a variety of applications.

Rugged, reliable and versatile, Telsmith HF vibrator mechanisms deliver outstanding performance in the toughest work environments.



SPECIFICATIONS & CAPACITIES

Standard Duty Vibrating Grizzly Feeders

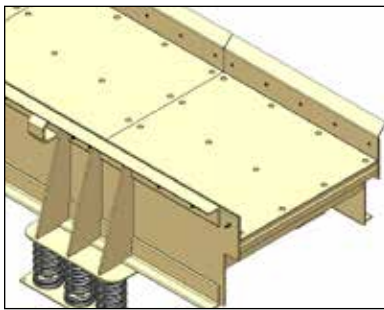
Width x Length	Bearing Size	Grizzly Selection	Grizzly Bar Length	Weight		Electric Motor HP
				Lbs	Kgs	
36" x 12'	N/A	5' Straight	1 @ 5'	6,100	2,767	2 X 7.9 HP Exciters
36" x 14'	N/A	5' Straight	1 @ 5'	6,700	3,039	2 X 7.9 HP Exciters
42" x 16'	110 mm	6' Straight	1 @ 6'	10,050	4,559	30
42" x 18'	110 mm	6' Straight	1 @ 6'	11,100	5,035	30
48" x 16'	110 mm	6' Straight	1 @ 6'	11,800	5,352	40
48" x 20'	110 mm	8' Step	2 @ 4'	15,600	7,076	40
54" x 20'	140 mm	5' Straight	1 @ 5'	17,250	7,824	50
60" x 20'	140 mm	5' Straight	1 @ 5'	18,250	8,278	50

Heavy Duty Vibrating Grizzly Feeders

48" x 20'	140 mm	9' Step	2 @ 4.5'	17,250	7,824	50
54" x 20'	140 mm	8' Step	2 @ 4'	25,500	11,567	60
60" x 20'	140 mm	8' Step	2 @ 4'	23,750	10,773	60
60" x 24'	140 mm	10' Step	2 @ 5'	27,500	12,474	60
60" x 30'	160 mm	10' Step	2 @ 5'	43,350	19,663	125
66" x 30'	160 mm	10' Step	2 @ 5'	46,000	20,865	125
72" x 26'	160 mm	10' Step	2 @ 5'	41,250	18,711	125
72" x 34'	160 mm (4-Shaft)	12' Step	2 @ 6'	65,750	29,824	200

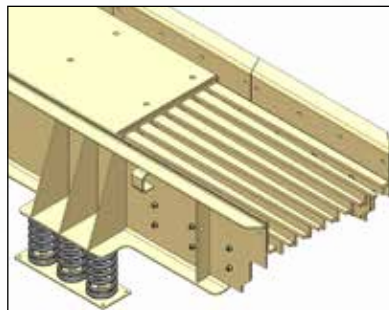
FEEDER DECK CONFIGURATIONS

SOLID PAN CONFIGURATION



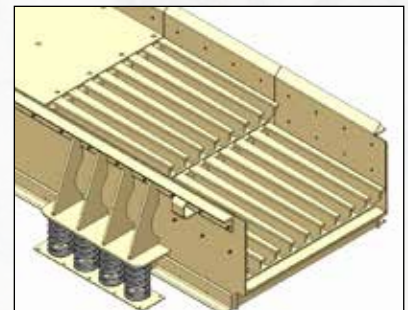
Solid pan configurations provide a rugged pan to withstand the impact of heavy loads and still provide consistent feed control. A common application for the solid pan configuration is a high-production sand and gravel operation where the haul trucks dump into a hopper and the feeder discharges onto a scalping screen.

STRAIGHT-DECK CONFIGURATION



Straight-deck configurations incorporate one set of grizzly bars at the discharge end of the feeder, allowing smaller material to be "screened out" of the feed material. This arrangement is common on standard duty models in portable plant applications, feeding the oversized material directly into a crusher. Grizzly sections are typically 4' to 6' long.

STEP-DECK CONFIGURATION



Step-deck grizzly feeders incorporate two or more sections of grizzly bars, increasing the screening area and allowing material to tumble between decks, significantly improving efficiency. Due to the additional height requirement of the step, this arrangement is most common in severe duty models.



PAN FEEDERS

FEATURES

- Heavy-duty formed deck
- Mechanically driven with regreaseable bearings
- Designed to easily replace competitive models
- Support springs with guards included
- Built with bolt-in replaceable liners
- Exposed exciters provided for ease-of-access
- Simple adjustment of stroke and operating speed
(with optional VFD)
- One-year warranty included



ADDITIONAL OPTIONS



- Cone discharge (CD) spout
- Rubber liners
- Variable frequency drive

SPECIFICATIONS

Vibrating Pan Feeders

Width x Length	Exciter Motor HP	Max Current (460V)	Total Weight		Capacity	
			Lbs	Kgs	STPH	MTPH
36" X 60"	2 X 2.41 HP	6.0 amps	2,225	1,009	600	544
36" X 72"	2 X 2.41 HP	6.0 amps	2,425	1,100	600	544
36" X 84"	2 X 3.22 HP	8.6 amps	2,575	1,168	600	544
36" X 84" CD	2 X 3.22 HP	8.6 amps	2,646	1,200	600	544
42" X 60"	2 X 3.22 HP	8.6 amps	2,375	1,077	750	680
42" X 72"	2 X 3.22 HP	8.6 amps	2,525	1,145	750	680
42" X 84"	2 X 3.22 HP	8.6 amps	2,675	1,213	750	680
42" X 84" CD	2 X 3.22 HP	8.6 amps	3,103	1,407	750	680
48" X 84"	2 X 3.22 HP	8.6 amps	2,825	1,281	900	816
48" X 84" CD	2 X 4.02 HP	8.6 amps	3,410	1,547	900	816
48" X 96"	2 X 4.02 HP	9.8 amps	2,975	1,349	900	816
48" X 96" CD	2 X 5.23 HP	9.8 amps	3,469	1,574	900	816
54" X 96"	2 X 4.02 HP	9.8 amps	3,175	1,440	1000	907

Notes: Capacity is based on feeder with 10 degree down slope, proper hopper transition, and skirt board arrangement, feeding dry material weighing 100 pounds per cubic foot.

VIBRO-KING TL® SCREENS



Vibro-King TL® screens are the latest in a long history of TelSmith vibrating screen excellence. Incorporating new technologies and packed with features, TL screens are the most reliable, low maintenance inclined screens in the mining and aggregates industries today.

With the TL screen, TelSmith takes a new approach to screen design and application. Recognizing that modern screen media takes many forms and is critical to achieving optimum performance, TelSmith builds each screen around the media selected for the application. Each deck may be custom selected for a different media type.

The screen selection process begins with identifying the media for each deck. TelSmith has designed deck frames specifically for performance and endurance for each media type (side tension wire cloth, modular urethane or rubber panels, punch plate or steel backed rubber).

Once the media type, openings and deck frames are defined, 1/2"-thick side plates are used on all screens for superior strength.

With an approximate live weight and load requirement determined, TelSmith selects the vibrator mechanism based on delivering outstanding bearing life, while achieving the proper speed, stroke and "G" force for the application. Again, TelSmith has taken a modular approach with 130mm, 160mm and 200mm bearing vibrator mechanisms available in single and dual shaft assemblies, allowing outstanding flexibility and range.

The Vibro-King TL® approach to screen design creates outstanding performance and longevity. From heavy-duty scalping of coarse stone to fine sizing of finished products in wet or dry applications, the Vibro-King TL® is feature-packed and built to deliver low-cost performance.



TL BODY CONSTRUCTION

FEED BOX:

The feed box incorporates abrasion-resistance liners to absorb impact and distribute feed, improving efficiency and reducing maintenance.

RUBBER CURTAIN:

Rubber curtains hang from the back plate, sealing in dust and allowing easy access to screen media.

TL VIBRATOR MECHANISM:

The TL vibrator mechanism incorporates wide series bearings, Never-Wear™ sealing system, large oil volumes and oil level sight gauges for reduced operating costs.

SINGLE & DUAL SHAFT MODELS:

Dual shaft arrangements are available with 130mm, 160mm and 200mm bearings providing versatility in load bearing capacity and bearing life.

NO-WELD SIDE PLATES:

Telsmith's "no weld" policy on screen side plates eliminates the possibility of stress concentrations in heat-affected zones. Huck bolts finish the screen assembly.

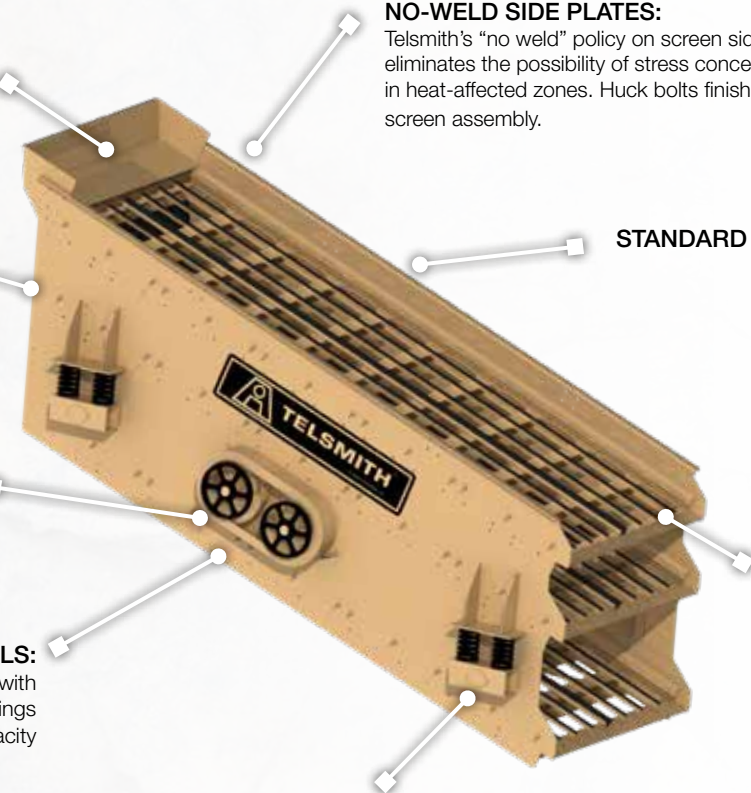
STANDARD 1/2" THICK SIDE PLATES

EXTRA DECK SPACING:

Extra clearance improves access for media changes, reducing maintenance downtime.

VIBRATION DAMPENERS:

Spring pedestals incorporate vibration dampeners in spring loaded, low-maintenance design.



TL SHAFT ASSEMBLY

ADVANCED TECHNOLOGY:

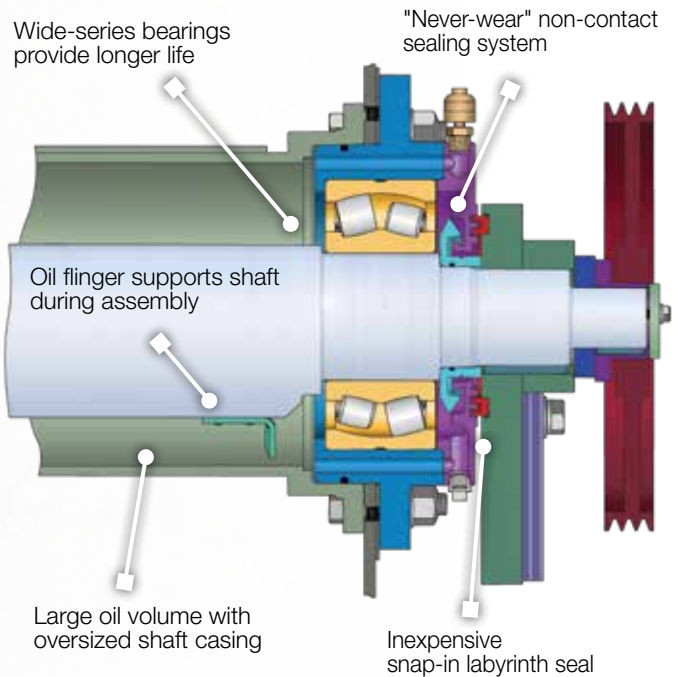
Telsmith utilizes the TL Never-Wear™ sealing system by using centrifugal force to cast oil away from the shaft casing, eliminating the need for a contact lip seal. This eliminates the downtime and expense of repairing worn seals or shaft grooves. An inexpensive, snap-in, urethane labyrinth seal keeps dust out.

LOW MAINTENANCE:

All TL shaft assemblies use wide series bearings for extended service life. In addition, the large shaft casing allows increased oil volumes, reducing maintenance frequency.

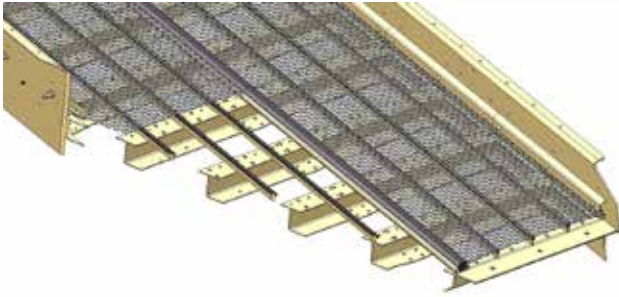


Oil level sight gauges are located outside of the guard protected area. Built into the sight gauge are oil drain, oil fill and grease zerk fittings for quick maintenance including oil changes, without removing the guard.

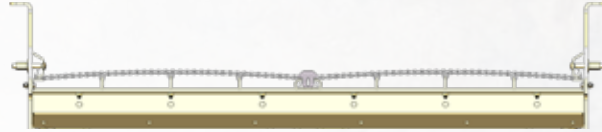


TL DECK FRAME DESIGNS

SIDE TENSION DECK:

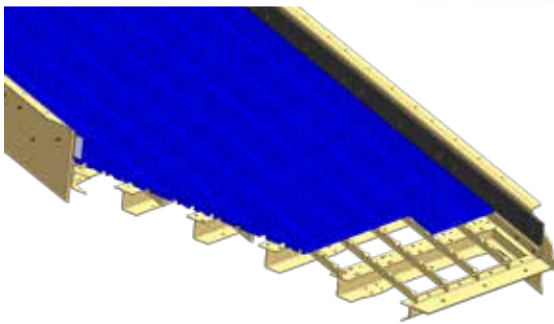


The side tension deck is designed for wire cloth (up to 1/2" dia. wire) or side tension urethane or rubber panels. It is fabricated with heavy J-Beams welded into formed channel sides creating a rigid deck that resists torsional deflection. 6" discharge lips incorporate 3/8" thick AR400 liner.



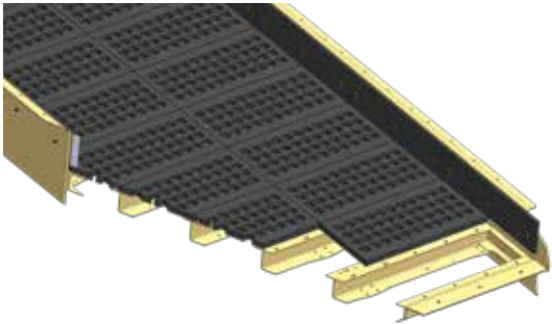
7' & 8' wide screens utilize double crown hook up / hook down design

MODULAR URETHANE DECK:

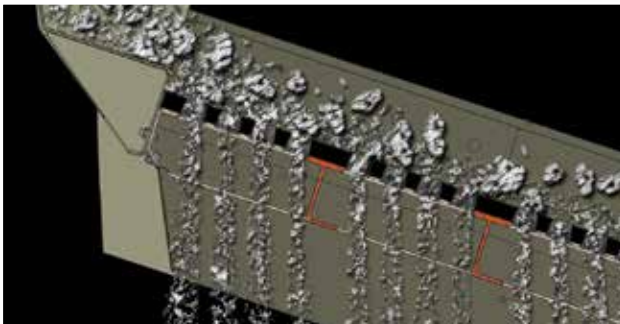


The modular urethane deck is designed for mounting urethane panels of almost any style. It is fabricated with heavy J-Beams welded into formed channel side, creating a rigid deck that resists torsional deflection. Telsmith will factory install customer-supplied girders or rails at no charge. Telsmith recommends that the media be installed at the factory (nominal charge) to allow for resonant frequency testing with the media installed. Special discharge lip and side liners are sold separately and are typically supplied with the media.

HEAVY DUTY J-BEAM DECK:



A heavy duty J-Beam deck is designed for mounting bolt-down punch plate or steel-backed rubber media. The design utilizes a unique J-Beam concept that allows stone to fall without wearing on the structural members. Telsmith recommends that the media be installed at the factory (nominal charge) to allow for resonant frequency testing with the media installed. Discharge lip and side liners are bolt-in 3/8" thick AR400 or steel-backed rubber.



The J-Beam concept allows for deep and strong deck frame construction with minimal exposure of the structural cross member to abrasive wear.

SPECIFICATIONS

Vibrator Bearing Size

Screen Size (Width x Length Ft.)	# of Decks	Vibrator Bearing Size			
		TL26 (130 mm)	TL32 (160 mm)	Dual TL26 (130 mm)	Dual TL32 (160 mm)
5' X 12'	Single Deck	X	X		
	Double Deck	X	X		
	Triple Deck	X	X		
	Quad Deck	X	X		
5' X 16'	Single Deck	X	X		
	Double Deck	X	X		
	Triple Deck	X	X		
	Quad Deck	X	X		
6' X 16'	Single Deck	X	X		
	Double Deck	X	X		
	Triple Deck	X	X		
	Quad Deck	X	X		
6' X 20'	Single Deck	X	X	X	X
	Double Deck	X	X	X	X
	Triple Deck	X	X	X	X
	Quad Deck	X	X	X	X
7' X 20'	Single Deck		X	X	X
	Double Deck		X	X	X
	Triple Deck		X	X	X
	Quad Deck		X	X	X
8' X 20'	Single Deck		X	X	X
	Double Deck		X	X	X
	Triple Deck		X	X	X
	Quad Deck		X	X	X
8' X 24'	Single Deck			X	X
	Double Deck			X	X
	Triple Deck			X	X
	Quad Deck			X	X

ADDITIONAL OPTIONS



- Wash screen spray pipe assembly bolts directly to the spring pedestal. The option includes spray pipes, deflectors, support frame and mounting hardware.
- Heavy-Duty Support Frame
- Installation of Customer-Supplied Rails or Girders
- Installation of Customer-Supplied Standard Polydeck
- Standard Wire Cloth
- Spray Pipe Assembly
- V-Belt Drive
- Drive Guard
- Support Spring Guards
- Side Plate Extensions
- Pivotal Motor Base
- Drive Motor
- 2" Rubber Feed box/Discharge Lip Liners
- Rubber Support Frame Liners

VALU-KING® SCREENS



The TelSmith Valu-King® line-up of screens offers outstanding value with built-in standard features not normally available in these screen sizes. Ranging from 4' x 8' single deck up to 6' x 16' triple deck, Valu-King models are both versatile and economical.

Ideal for finish sizing, light-duty scalping or fitted with spray bars for rinsing operations, the Valu-King® is tough enough to serve in a variety of applications.

The standard deck frame is fabricated using tubular cross members.

Designed for long service life, the vibrator mechanism incorporates spherical roller bearings and grease lubrication.

For ease of installation, all Valu-King® screens include a sub-frame with motor mount and pivotal motor base. V-belt drive, drive guard and balance wheel guard are all packaged with the screen. Lifting eyes, prefabricated into the sub-frame, provide a safe and fast method for installing the screen once it arrives.

Versatility, rugged design, long service life and ease of installation are why the Valu-King® leads the industry in features and value.



VALU-KING® FEATURES

FEED BOX:

The feed box incorporates AR liners and absorbs impact and distributes feed, improving efficiency and reducing maintenance.

NO-WELD SIDE PLATES:

Telsmith's "no weld" policy on screen side plates eliminates the possibility of stress concentrations in heat-affected zones. Huck bolts finish the screen assembly.

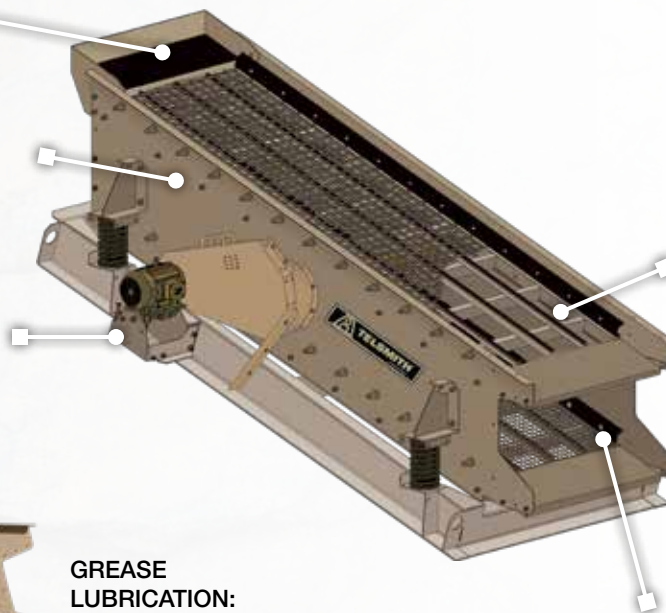
SUB-FRAME AND MOTOR MOUNT:

Offering great value and ease of installation, Valu-King screens include a sub-frame, motor mount, pivotal motor base and V-belt drive.



GREASE LUBRICATION:

Double-row, spherical roller bearings are grease lubricated for long service life.



TUBULAR DECK DESIGN:

Screen decks are fabricated using rectangular tubing, yielding a rugged construction.

SIDE TENSION MEDIA:

Side tension media accepts wire cloth, side tension urethane or rubber media.

Valu-King® Specifications

Screen Size (Width x Length Ft.)	Number of Decks	Bearing Size (mm)	Electric Motor HP	Total Weight	
				Lbs	Kgs
4' x 8'	1	90	7.5	4,310	1,955
	2	90	7.5	4,570	2,073
4' x 10'	1	90	10	4,700	2,132
	2	90	10	5,050	2,291
4' x 12'	1	90	10	5,140	2,331
	2	90	10	5,610	2,545
4' x 14'	1	90	10	5,600	2,540
	2	90	10	6,070	2,753
5' x 12'	1	90	10	5,400	2,449
	2	90	15	5,950	2,699
5' x 14'	1	90	15	5,910	2,681
	2	90	20	6,600	2,994
5' x 16'	1	110	20	6,910	3,134
	2	110	20	7,690	3,488
6' x 16'	1	110	25	7,660	3,475
	2	110	25	8,550	3,878

- Notes:
- 1) Live weight includes live body, feed box, discharge lips and counter weights.
 - 2) Total weight includes live weight plus sub-frame, springs, pivoting motor base, drive and guard (electric motor not included).
 - 3) Maximum TPH Carrying Capacity is defined as the total feed (TPH) to the screen minus the bottom deck thru's (TPH).
 - 4) Maximum recommended top size feed is 5" (127 mm).
 - 5) Maximum recommended top deck screen opening is 3" (76 mm).
 - 6) Triple Deck Screens are available - consult factory.

GRIZZLY SCALPING SCREENS

FEED PLATE:

The Heavy-Duty impact plate reduces wear on grizzly bars.

SIDE PLATE WEAR LINERS:

The side plate wear liners are made of 3/8" AR steel.

RUGGED DESIGN:

The 1/2" side plates are reinforced with huck bolts.

HEAVY DUTY GRIZZLY BARS:

The Deep section, stepped design grizzly bars allow up to 6" nominal spacing (rubber cap grizzly bars are optional).

VIBRATION DAMPENERS:

Spring pedestals incorporate vibration dampeners in spring-loaded, no-maintenance design.

TL VIBRATOR MECHANISM:

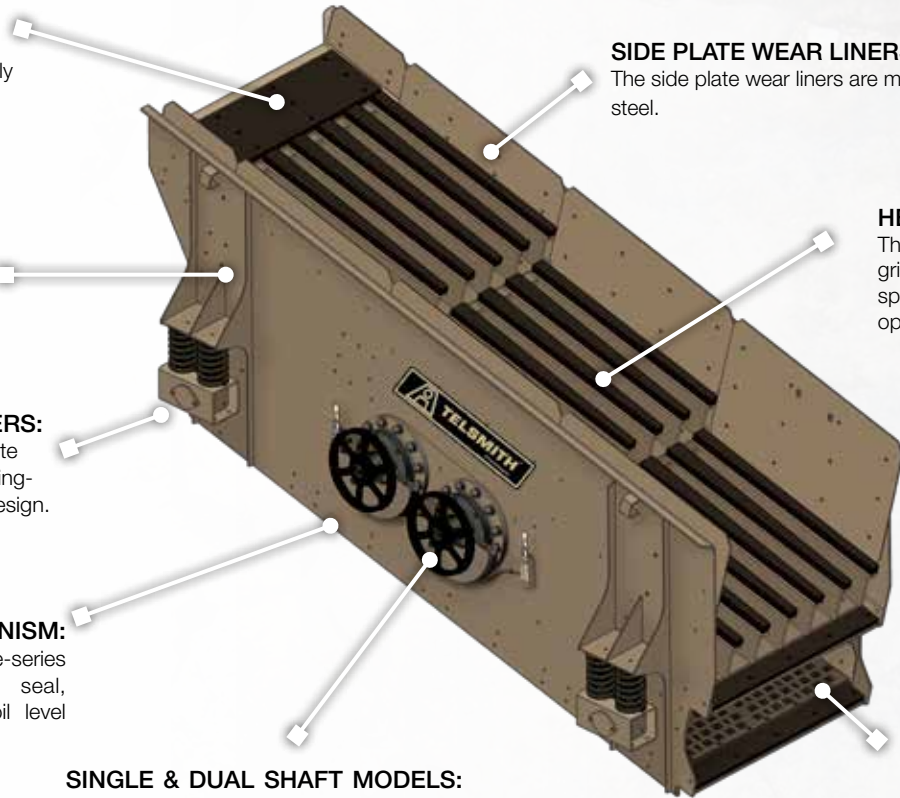
The TL incorporates Wide-series bearings, Never-Wear™ seal, large oil volumes, and oil level sight gauges.

SINGLE & DUAL SHAFT MODELS:

Dual shaft arrangements are available with 130mm and 160mm bearings providing versatility in load bearing capacity and bearing life.

DOUBLE DECK OPTION:

A heavy-duty flat deck for punch plate, rubber clad plate or modular media is an option.



Vibrator Bearing Size

Screen Size (Width x Length Ft.)	Number of Decks	TL26 130mm	TL32 160mm	Dual TL26 130mm	Dual TL32 160mm	Grizzly Bar Sections
4' x 12'	1	X	X			2 @ 6'
	2	X	X			
5' x 12'	1	X	X			2 @ 6'
	2	X	X			
5' x 16'	1			X	X	3 @ 5'
	2			X	X	
6' x 12'	1	X	X			2 @ 6'
	2	X	X			
6' x 16'	1			X	X	3 @ 5'
	2			X	X	
7' x 16'	1			X	X	3 @ 5'
	2			X	X	

Notes: 1) Optional grizzly bar spacing for 4", 5" and 6" openings are available. For openings larger than 6" consult factory.
2) Maximum recommended lump feed size is 42" (1067 mm).



HORIZONTAL SCREENS

FEED BOX:

The feed box AR liners evenly distributes material onto the screening deck, improving efficiency and reducing maintenance.

WET OR DRY CONFIGURATIONS:

Optional spray bars and distribution manifold convert the horizontal screen for wet applications.

VERSATILE DECK DESIGNS:

Both crowned and flat decks are available to accommodate side tension or flat panel media. Heavy duty decks are utilized in coarse scalping applications. Bolt-in X-bracing, included on all models, provides extra rigidity.

RUBBER SPRINGS:

The rubber springs reduce noise and prevent premature failure of springs in wet or corrosive applications.

TRIPLE SHAFT VIBRATING UNIT:

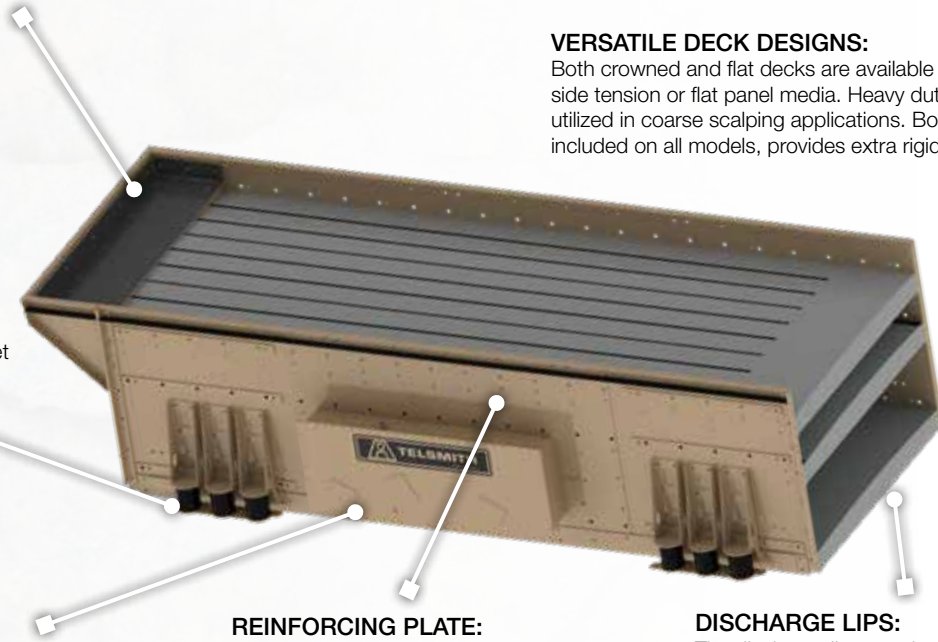
The three shaft vibrator mechanism is oil lubricated. Utilizing six bearings, loads are distributed over a wide area eliminating stress concentrations and providing long bearing life.

REINFORCING PLATE:

The Reinforcing Plate adds strength and rigidity through the bearing mount area.

DISCHARGE LIPS:

The discharge lips consist of replaceable, bolt-on AR liners.



Horizontal Screen Specifications

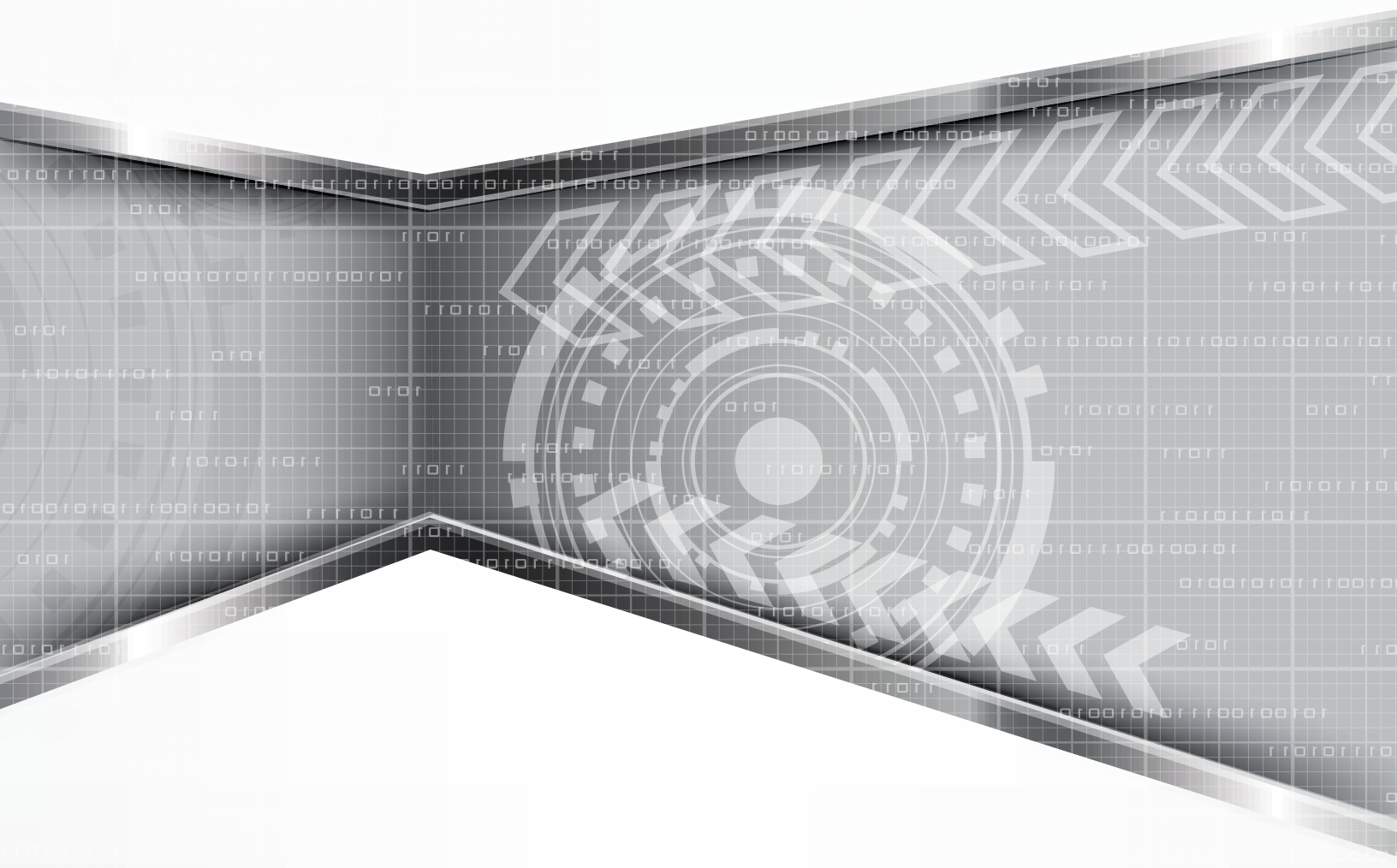
Screen Size (Width x Length Ft.)	Number of Decks	Bearing Size	HP of 1200 RPM Electric Motor	Weight	
				Lbs	Kgs
5' x 14'	2	160mm	25	11,500	5,216
	3		25	14,000	6,350
5' x 16'	2	160mm	25	12,500	5,670
	3		30	15,300	6,940
6' x 16'	2	160mm	30	15,100	6,849
	3		40	19,100	8,664
6' x 20'	2	160mm	40	19,200	8,709
	3		40	22,700	10,297
7' x 20'	2	190mm	50	21,600	9,798
	3		50	22,500	11,567
8' x 20'	2	190mm	60	25,500	11,567
	3		60	29,100	13,200

Notes: 1) Specifications represent the finish screen configuration equipped with standard items. Alternate configurations (medium or heavy duty) are not shown.
2) Weight includes sub-frame, motor mount, belt guard and typical wire cloth weight.

STANDING STRONG FOR OVER A CENTURY

HONESTY ■ INTEGRITY ■ QUALITY

Providing Global Processing Solutions for Aggregate,
Mining, Industrial and Recycling Operations Worldwide



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