# **SCREENING**





# VIBRO-KING TL® INCLINE SCREENS

Vibro-King TL® screens are ideal for aggregate processing, mining operations and recycled asphalt and concrete products. This incline screen series was designed for outstanding performance and longevity for heavy-duty scalping and fine sizing in both wet or dry applications.





#### Wide Series Oil Lubricated Bearings

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

#### 2 Non-Contract Centrifugal Seal

The centrifugal seal in the vibrating unit contains oil without the use of contact seals.

#### **3** Standard No-Weld Half-Inch Side Plates

Our no-weld screen side plates eliminate the possibility of stress concentrations in heat-affected zones. Huck bolts finish the screen assembly.

#### 4 J-Beam Deck Design

The J-beam deck design provides long life with the ease of adapting bolt-in liners to the cross members.

#### 5 Feed Box

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

#### **6** Screen Decks

Screen decks incorporate a single crown design, accepting sidetensioned wire cloth or urethane media.

Models	Decks	Width		Length		Power Required		Weight		Bearing Size
		Feet	Millimeters	Feet	Millimeters	HP	kW	Pounds	Kilograms	Millimeters
5' Screens	2 - 4	5	1,520	12 - 16	3,660 - 4,880	25 - 40	19 - 30	13,455 - 21,192	6,103 - 9,613	130 - 160
6' Screens	2 - 4	6	1,830	16 - 20	4,880 - 6,100	25 - 40 x 2	19 - 30 x 2	14,863 - 29,865	6,742 - 13,524	130 - 160
7' Screens	2 - 4	7	2,130	20	6,100	20 x 2 - 40 x 2	15 x 2 - 30 x 2	26,410 - 40,969	11,979 - 18,583	130 - 200
8' Screens	2 - 4	8	2,430	20 - 24	6,100 - 7,320	25 x 2 - 50	19 x 2 - 37	28,363 - 49,855	12.865 - 22,614	130 - 200
Mine Duty	2-3	8	2,430	20 - 24	6,100 - 7,320	25 x 2 - 40 x 2	19 x 2 - 30 x 2	31,954 - 41,613	14,494 - 18,875	160

## **VALU-KING® INCLINE SCREENS**

The Valu-King® incline screens offer outstanding value with built-in standard features. These incline screens are ideal for finish sizing, light-duty scalping or can be fitted with spray bars for rinsing operations. Designed for long service life, the vibrator mechanism incorporates spherical roller bearings and grease lubrication.





#### No-Weld Side Plates

Our no-weld screen side plates eliminate the possibility of stress concentrations in heat-affected zones. Huck bolts finish the screen assembly.

#### 2 Feed Box

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

#### **3** Grease Lubrication

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

#### 4 Side-Tension Media

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

#### 5 Tubular Deck Design

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

Models	Decks	W	/idth	Length		Power Required		Weight		Bearing Size
		Feet	Millimeters	Feet	Millimeters	HP	kW	Pounds	Kilograms	Millimeters
3' Screens	1	3	910	6	1,830	5	3.7	878	398	61.9
4' Screens	1 - 3	4	1,220	8 - 14	2,430 - 4,270	7.5 - 15	5.5 - 11	4,310 - 8,180	1,955 - 3,710	90 - 110
5' Screens	2 - 3	5	1,520	12 - 16	3,660 - 4,880	10 - 25	7.5 - 19	5,400 - 9,730	2,449 - 4,413	90 - 110
6' Screens	3 - 3	6	1,830	16	4,880	25 - 30	19 - 22	<i>7</i> ,660 - 10,650	3,475 - 4,831	110

### **HORIZONTAL SCREENS**

Our horizontal screens deliver high productivity and efficiency in a low-profile package. The low screen height allows for operation in height-restricted areas and maximum portability. The triple-shaft design employs an oval motion stroke pattern that generates a more aggressive screening action, reducing plugging and blinding while providing extended bearing life. Multiple configurations are available for a wide range of applications, from fine screening to heavy scalping.





#### Eccentric Crescent Weights

Eccentric crescent weights reduce friction in oil for reduced oil temperature.

#### 2 Triple-Shaft Design

Our triple-shaft design employs an oval motion stroke pattern that generates a more aggressive screening action, reduces plugging and blinding and provides an extended bearing life.

#### 3 Tuned and Bolt-In Deck Bracing

Our horizontal screens operate free of natural frequencies with minimal welds, which reduces cracking in the cross members and ensures maximum service life.

#### 4 Oil Seals

Non-contact centrifugal force drives the oil back to the wheel case, while a labyrinth seal keeps contaminants out and an O-ring maintains the seal between the shaft and oil flinger.

#### **5** Application Flexibility

Adjustable oval motion length and timing angle provide optimal application flexibility. Standard and medium-duty scalping configurations ensure optimal performance in varied applications.

#### **6** Portability

The low screen height allows for operation in heightrestricted areas and maximum portability.

#### Wet/Dry Configurations

A consistent and adjustable material travel speed, coupled with a low-profile height, makes these screens ideal for both wet and dry applications. Our horizontal screens are equipped with standard spray bar knock-out holes. An optional spray system, complete with manifold and spray nozzles, is also available. These screens are ideal to install on portable washing plants.

Model	Speed	Maxi Stre	mum oke		imum ed	Size Range		Decks
	RPM	ln.	mm	ln.	mm	Feet	Meters	
"QF" Four-Deck Screen	775 - 975	0.5	12.7	8	203	6 x 20	1.8 × 6.1	4
"LP" Low-Profile Screen	675 - 875	0.75	19	10	254	5 x 14 up to 8 x 24	1.5 x 4.3 up to 2.4 x 7.3	2 to 3
"MS" Medium Scalper	675 - 875	0.75	19	14	355	5 x 16 up to 8 x 20	1.5 x 4.9 up to 2.4 x 6.1	2 to 3
"HS" Heavy Scalper	575 - 775	0.875	22.22	18	457	5 x 14 up to 8 x 20	1.5 x 4.3 up to 2.4 x 6.1	2

### **VARI-FREQUENCY SCREENS**

Positioned on the bottom deck of a horizontal screen, the vari-frequency screen increases throughput and efficiency while further reducing plugging and blinding. This patent-pending innovation takes a novel approach to screen cloth blinding reduction—delivering increased performance and lower operating costs. Engineered for versatility, it performs reliably across a wide range of applications. Fewer maintenance requirements and simplified service access help keep downtime to a minimum. The low screen height allows for operation in height-restricted areas and maximum portability.





#### Screen Technology

The screen's functionality is achieved through a flexible deck surface supported by cables that create novel g-force spikes across the entirety of the screen. This new technology reduces blinding and increases performance.

#### Reduced Maintenance

Screen blinding prevention lowers cleaning frequency and maintenance demands, helping extend runtime and improve overall productivity.

#### **3** Screen Efficiency & Capacity

Innovative design allows for significantly increased feed rates and throughput.

#### Commonality of Parts

The novel design of the screen's bottom deck uses standard, side-tensioned screen cloth.

#### **5** Compatible Interface

Easily integrates into existing systems.

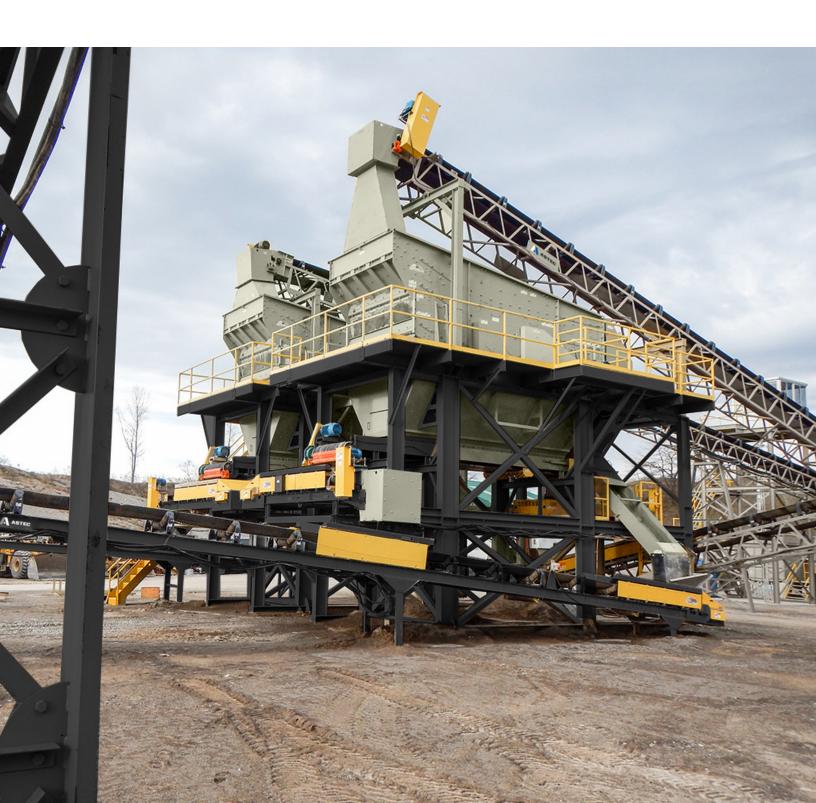
#### **6** Energy Independent

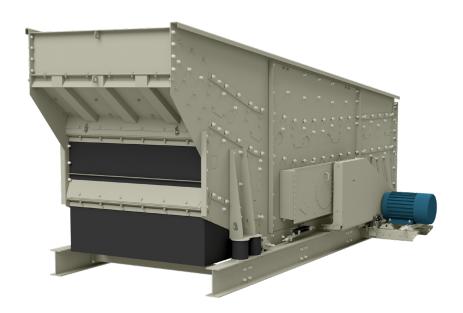
Requires no external power source, ensuring cost-effective operation.

	Width		Length		No. of	We	ight		Power R	equired
Model	ft	m	ft	mm	Decks	lb	kg	Size (mm)	hp	kW
6203-32LP w/ Vari-Frequency Deck	6	1.8	20	6.1	3	22,200	10,100	160	40	30

### **COMBO SCREENS**

Developed from extensive side-by-side testing of traditional incline and horizontal screens, the Astec combo screen is a new kind of tool that delivers unsurpassed capacity and efficiency. This unique innovation combines the best characteristics of both incline and horizontal screens and has proven to deliver unsurpassed productivity, efficiency and flexibility in both wet and dry applications.





#### Sloped Decks

A sloped feed zone accelerates material to provide a thinner bed depth for quicker fines separation. A horizontal discharge zone decelerates near-size material for increased efficiency.

#### 2 Triple-Shaft Screening

The combo screen is the only sloped screen that provides the benefits of a triple-shaft vibrating mechanism. These advantages include anti-plugging/blinding, extended bearing life, application flexibility and stroke amplitude adjustment.

#### **3** Hinged Tailgate for Rear Access

Screen media changes are quick and easy compared to conventional designs.

#### 4 Punched Plate Feed Box Design

Punched plate feed box design provides a 10% bonus area to start introducing fines to lower decks immediately.

Model	Speed	Max. Stroke		Slope	Max. Feed		Size	Decks	
	RPM	Inches	Millimeters		Inches	Millimeters	Feet	Meters	
CS Combo	675 - 875	.75	19	20°/10°/0°	10	254	6 x 20 - 8 x 20	1.8 x 6.1 - 2.4 x 6.1	2 to 3

### **HIGH FREQUENCY SCREENS**

Astec high frequency screens offer ideal gradation control for reclaiming fines in both wet and dry applications. All high frequency screen decks are driven by variable-speed hydraulic vibrators for optimal screen efficiency and production. Producers save time and money with easy hydraulic screen angle adjustments and our unique rotary tensioning system, ensuring the quickest screen media changes in the market.





#### Hydraulic Vibrators

Astec high frequency screen decks are driven by variable-speed hydraulic vibrators (up to 4,200 RPM) for optimal screen efficiency and production. Electric vibrators operating at 3,600 RPM are available upon request.

#### Rotary Tensioning System

Unique rotary tensioning system provides the quickest screen media changes in the market, up to 50% faster than competitive models. Easy replacement of each screen section translates into less downtime for screen changes and increased operation time.

#### 3 Low Maintenance

The high frequency screen induces vibration directly into the screen media, leading to reduced maintenance and increased production and uptime.

#### 4 Screen Applications

Astec high frequency screens are ideal for postscreening applications and offer high frequency vibrations on all decks. These screens achieve the highest screen capacity in the market for fines removal, chip sizing, dry manufactured sand and more.

#### **5** Hyrdraulic Screen Angle Adjustment

Hydraulic screen angle adjustment makes adjustments quick and easy, reducing downtime.

High Frequency	Speed	Slope	Siz	Decks	
Туре	RPM		Feet	Meters	
Vari-Vibe	4,200	38° - 45°	3 x 3 up to 6 x 24	0.9 x 0.9 up to 1.8 x 7.3	1 to 4

## **DEWATERING SCREENS**

Our dewatering screens dewater sand products to a level typically not possible with fine material washers. Depending on product gradation and other material characteristics, our dewatering screens will produce material with a moisture content as low as 8%. Our single-deck, adjustable-incline, linear-motion screens are available in sizes ranging from  $2' \times 7'$  to  $8' \times 16'$  with processing rates up to 400 STPH on a single unit.





#### Fabricated Motor Bridge

Our stress-relieved, fabricated motor bridge with engineered motor-mounting studs increases equipment lifespan and reduces operating costs.

#### 2 Bolted Screen Assembly

A predominately-bolted screen frame assembly features integral stiffener tubes and lifting lugs for increased durability and long life.

#### 3 Polydeck® Media

Our dewatering screens utilize abrasion-resistant 1' square x 30 millimeters thick modular urethane Polydeck® screen media with slotted apertures for increased reliability and availability.

#### A Side Liners

Bolt-in UHMW pan side liners protect pan sides from premature wear.

#### **5** Application Flexibility

Adjustment of the angle of inclination, motor stroke, discharge dam height and media opening sizes allow the unit to be configured for most applications, ranging from production of a coarse concrete sand to dewatering of waste fines from the effluent stream of a wash plant.

Model	Power		Capacity	y* (-#50 x + #325)	Capacity*(-#4 x + #150)		
	HP	kW	TPH	МТРН	TPH	МТРН	
DWS 38	2 at 3.9	2 at 2.9	20	18	65	59	
DWS 410	2 at 4.7	2 at 3.5	43	39	144	131	
DWS 513	2 at 8.4	2 at 6.3	65	59	216	196	
DWS 613	2 at 9.4	2 at 7.0	<i>7</i> 8	<i>7</i> 1	259	235	
DWS 716	2 at 11	2 at 8.1	106	96	353	321	
DWS 816	2 at 12.7	2 at 9.4	121	110	403	366	

<sup>\*</sup>Assumes a 2.67 S.G.

<sup>\*</sup>Capacities provided are estimates only. Consult factory for specific applications.

### **GRIZZLY SCALPING SCREENS**

Astec grizzly scalping screens are built with a rugged, heavy-duty design for large feed and tonnages. These screens are most commonly utilized in conjunction with an apron or pan feeder ahead of the primary crusher. Grizzly scalping screens are often utilized when excessive clay or an abundance of fines are present, making them capable of efficient scalping in the most difficult applications.





#### Cross Members

Heavyily-fabricated cross members absorb the impact of large feed and form the basis for the grizzly support deck.

#### 2 Huck Bolt Assembly

The huck bolt assembly eliminates welding on the side plates and the problematic stress concentrations that can result.

#### **3** Feed Plate

The feed plate absorbs the impact and extends grizzly bar life for reduced maintenance and down time.

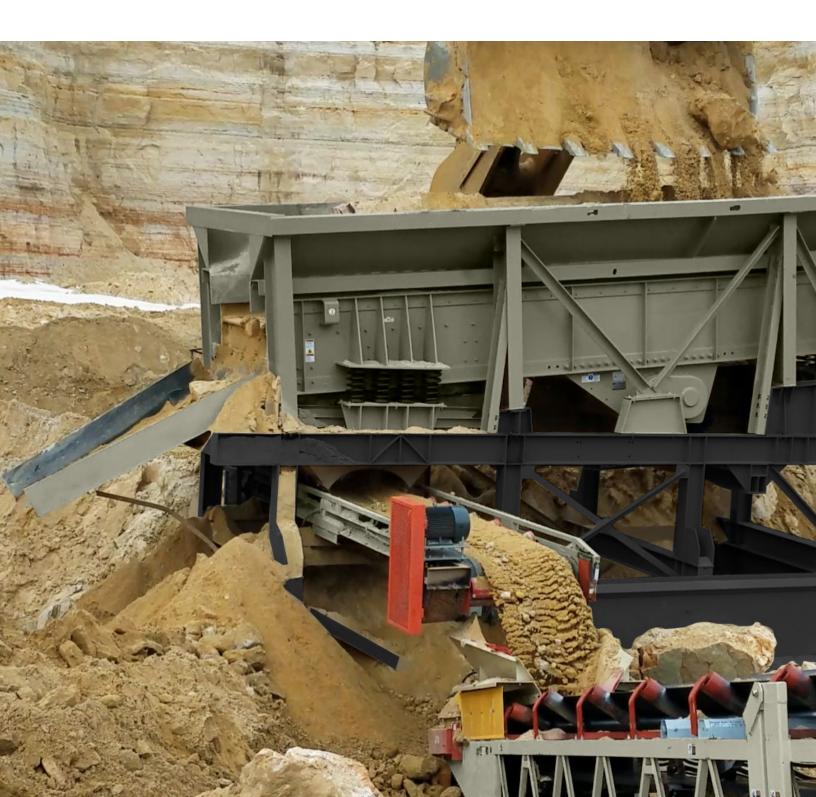
#### 4 Deep Section Grizzly Bars

Deep section grizzly bars allow up to 6" nominal spacing without interference from cross members. A variety of spacing options are available upon request.

Models	Number of Decks	Number of Shafts	Width		Length		Power Required		Bearing Size	
			Feet	Millimeters	Feet	Millimeters	HP	kW	Millimeters	
4102-26	2	1	4	1,220	10	3,050	25	19	130	
5122-32	2	1	5	1,520	12	3,660	30	22	160	
5162-26-2	2	2	5	1,520	16	4,880	25x2	19x2	130	
6122-32	2	1	6	1,830	12	3,660	40	30	160	
6162-26-2	2	2	6	1,830	16	4,880	30x2	22x2	130	
7162-32-2	2	2	7	2,130	16	4,880	30x2	22x2	160	

# VIBRATING GRIZZLY FEEDERS

Astec vibrating grizzly feeders are designed to absorb the impact of large stone. Grizzly feeders incorporate deep side plates and massive wide flange beam cross supports that include various models and configurations such as straight deck and step deck configurations. Standard duty offers lower profiles and is commonly used in portable applications with loader or excavator feed.





#### Positive Weights

Bolt-on positive weights are used to adjust the length of the stroke. The additional weight increases the stroke, which can increase G-forces, rate of travel and the ability to keep grizzly bars clean.

#### Wide Series Bearings

Wide-series, double-row, spherical roller bearings offer a greater load carrying capacity and increased bearing life.

#### **3** Oil Lubrication

Open-tube, flow-through oil lubrication provides consistent unit lubrication. Large oil volumes provide cool operating temperatures and longer service life.

#### 4 Timing Gears

Precision-cut gears maintain the desired timing of the shafts. Changing the timing alters the angle of the stroke, providing another tool for optimizing performance.

Model	Bearing Size	Size (Widt	th x Length)	V	/eight	Power
	mm	in x ft	mm x m	Pounds	Kilograms	HP
36 x 12	N/A	36 x 12	914 x 3.7	6,100	2,767	2 x 7.9hp Exciters
36 x 14	N/A	36 x 14	914 x 4.3	6,700	3,039	2 x 7.9hp Exciters
42 x 16	110	42 x 16	1,067 x 4.9	10,050	4,559	30
42 x 18	110	42 x 18	1,067 x 5.5	11,100	5,035	30
48 x 16	110	48 x 16	1,219 x 4.9	11,800	5,352	40
48 x 20	110	48 x 20	1,219 x 6.1	15,600	7,076	40
54 x 20	140	54 x 20	1372 x 6.1	17,250	7,824	50
60×20	140	60 x 20	1,524 x 6.1	18,250	8,278	50
		Heavy	Duty Vibrating	Grizzly Feed	lers	
48 x 20	140	48 x 20	1,219 x 6.1	17,250	7,824	50
54 x 20	140	54 x 20	1,372 x 6.1	25,500	11,567	60
60 x 20	140	60 x 20	1,524 x 6.1	23,750	10, <i>77</i> 3	60
60 x 24	140	60 x 24	1,524 x 7.3	27,500	12,474	60
60×30	160	60 x 30	1,524 x 9.1	43,350	19,663	125
66×30	160	66 x 30	1,676 x 9.1	46,000	20,865	125
72×26	160	72 x 26	1,829 x 7.9	41,250	18, <i>7</i> 11	125
72 x 34	160 (4-Shaft)	72 x 34	1,829 x 10.4	65,750	29,824	200

### **PAN FEEDERS**

Astec pan feeders are used to feed smaller material that has already been through a primary crusher and typically go under surge piles, surge bins or under crusher feed hoppers. Our pan feeders are mechanically-driven with a heavy-duty formed deck and are designed to easily replace competitive models. These feeders feature support springs with guards, bolt-in replaceable liners, re-greasable bearings and exposed exciters for easy access.





#### Feeder Construction

Astec pan feeders feature a heavy-duty formed deck, bolt-in replaceable liners and exposed exciters for easy maintenance access.

#### 2 Feeder Drive

The feeder drive features dual, mechanically-driven electric exciters and re-greasable bearings.

#### **3** Oil Lubrication

Open-tube, flow-through oil lubrication provides consistent lubrication. Large oil volumes provide cool operating temperatures and longer service.

#### **4** Timing Gears

Precision-cut gears maintain the desired timing of the shafts. Changing the timing alters the angle of the stroke, providing another tool for optimizing performance.

Model	Electric Motor	Max Current (460v)	Size (Wid	lth x Length)	W	eight	Capacity	
	HP	amps	in	mm	Pounds	Kilograms	TPH	MTPH
36 x 60	2 x 2.41	6	36×60	914 x 1,524	2,225	1,009	600	544
36×72	2 x 2.41	6	36 x 72	914 x 1,829	2,425	1,100	600	544
36 x 84	2 x 3.22	8.6	36 x 84	914 x 2,134	2,575	1,168	600	544
36 x 84 CD	2 x 3.22	8.6	36 x 84	915 x 2,134	1,200	600	600	544
42×60	2 x 3.22	8.6	42 x 60	1,067 x 1,524	2,375	1,077	<i>7</i> 50	680
42×72	2 x 3.22	8.6	42 x 72	1,067 x 1,829	2,525	1,145	<i>7</i> 50	680
42 × 84	2 x 3.22	8.6	42 x 84	1,067 x 2,134	2,675	1,213	<i>7</i> 50	680
42 x 84 CD	2 x 3.22	8.6	42 x 84	1,067 x 2,134	3,103	1,407	<i>7</i> 50	680
48 × 84	2 x 3.22	8.6	48 x 84	1,219 x 2,134	2,825	1,281	900	816
48 x 84 CD	2 x 4.02	8.6	48 x 84	1,219 x 2,134	3,410	1,547	900	816
48×96	2 x 4.02	9.8	48 x 96	1,219 x 2,438	2,975	1,349	900	816
48 x 96 CD	2 x 5.23	9.8	48 x 96	1,219 x 2,438	3,469	1,574	900	816
54 x 96	2 x 4.02	9.8	54 x 96	1,372 x 2,438	3,175	1,440	1000	907

### **APRON FEEDERS**

Astec apron feeders control the feed rate to prevent surge loads to primary crushers and other plant equipment. Our apron feeders are rugged, heavy-duty and designed to handle feed sizes of up to 60" (1,500mm). When feed material is wet, sticky or clay-like, the Astec apron feeder will give producers the results they demand.





#### Feeder Construction

Astec apron feeders feature a structural, steel-fabricated frame, heavy-duty head and tail shafts, cast steel flights and bolt-on, segmented drive sprockets made from wear-resistant alloy steel.

#### **2** Feeder Drive

The feeder is equipped with either an electromechanical or hydraulic drive for the convenience of the producer.

#### **3** Feeder Applications

The apron feeder is ideal for handling wet, sticky or clay-like material. The feeder's heavy-duty, rugged construction makes it the ideal unit to handle this challenging material.

Model	V	Vidth	Capacity			
	Inches	Millimeters	TPH	МТРН		
D3	35 - 70	900 - 1,800	up to 1,500	up to 1,361		
D4	35 - <i>7</i> 0	900 - 1,800	up to 1,500	up to 1,361		
D6	47 - 94	1,200 - 2,400	up to 2,000	up to 1,814		
D7	59 - 118	1,500 - 3,000	up to 2,500	up to 2,268		
D8	59 - 137	1,500 - 3,500	up to 5,000	up to 4,536		
D9	82 - 137	2,100 - 3,500	up to 5,000	up to 4,536		



### **NOTES**



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