VB-3650T

ERIEZ

Vibratory Conveyors & Screeners

Two Mass, Heavy Duty, Mechanical and Electromagnetic Drives

Eriez offers a number of vibratory conveyor and screener models designed with different amplitude, frequency and angle of deflection in order to move different materials at specific rates. Specifying the correct model is based on many factors including the material being processed, flow rate of the process, head load, nature of the environment, need to start and stop (cycle) the process and material product temperature.

FEATURES

- Models fit light-duty sanitary to heavy-duty aggregate applications
- Electromagnetic or mechanical drives with fiberglass or rubber springs
- Two-mass designs
- Endless options for screening, dust control, dewatering and more

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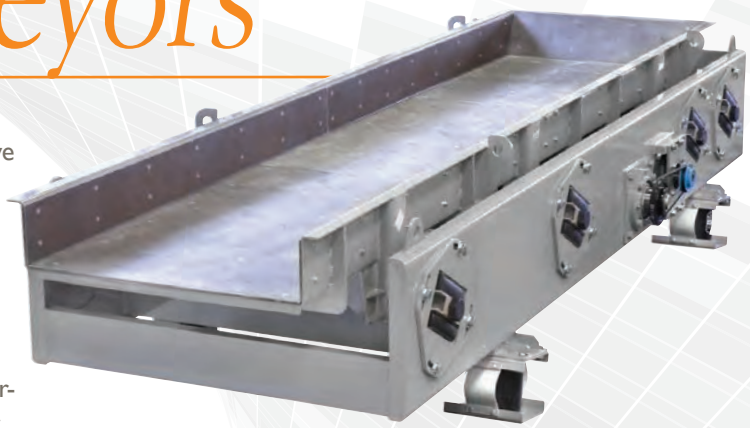
Vibratory Conveyors

All vibratory equipment share common components: a drive system to generate the vibration, a trough to carry the product and springs to give the vibration amplitude creating motion. Every system will require an AC or DC power source and must be mounted either from above or below in order to produce a consistent force.



DRIVE SYSTEMS

Mechanical Drives

Eriez offers mechanical conveyors that feature Eccentric Shaft or Motor-Vibrator drives to excite the conveyor base and the resulting vibratory motion of the trough.

Eccentric Shaft designs use a standard off-the-shelf motor that rotates an out-of-balance "eccentric" shaft. The eccentric shaft's centrifugal force creates vibration in the conveyor base. Similarly, two motor vibrators are incorporated to excite the conveyor base. The vibratory action of the base is amplified through the tuning spring system into the trough.

Eccentric Shaft Mechanical Drive

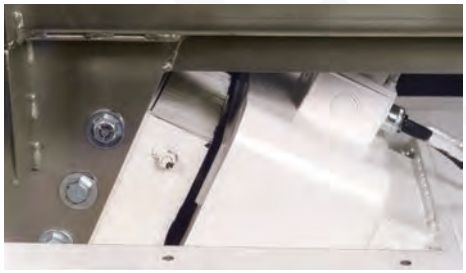
Electromagnetic Drives

Eriez Electromagnetic drive systems utilize an electromagnet to generate the force needed to create the vibratory action. The conveyor base is excited by the magnetic force and the vibration is amplified through the tuning spring system into the trough. Electromagnetic units are highly reliable as they have no rotating components or belts and no lubrication is ever required. Electromagnetic designs also provide excellent feed rate adjustability and can be cycled on/off frequently.

External Mechanical Eriez ERV Motor Vibrators

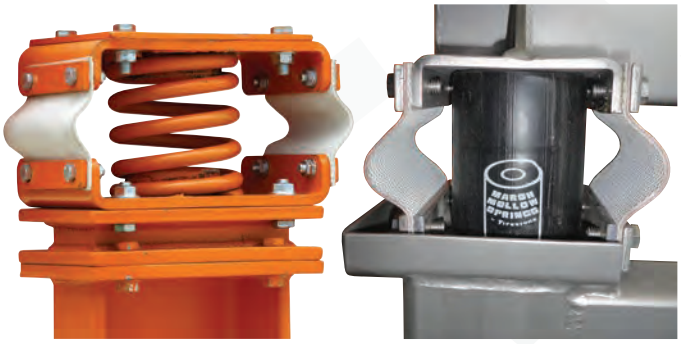
TUNING SPRING SYSTEMS

Tuning springs are utilized to pair the conveyor trough and base to make them a tuned system. The tuning springs define the natural frequency of the two-mass conveyor and the trough maximum deflection. Tuning springs are either fiberglass or steel leaf-springs or compounded rubber. Eriez feeders and conveyors are tuned based upon the feeding application and overall equipment design.



Electromagnetic Drive

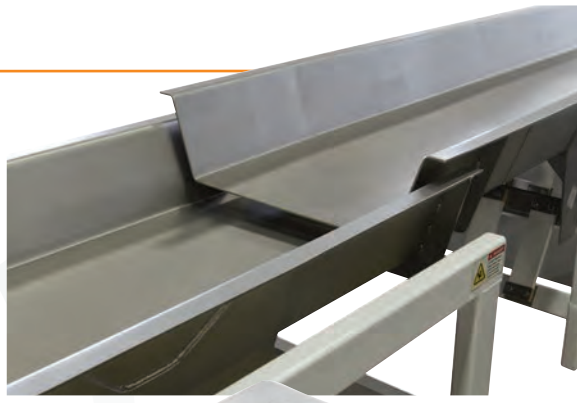
Fiberglass springs attach the base to the trough and enable tuning of the conveyor



Rubber or steel coil springs are utilized to isolate the vibration of the conveyor

TWO-MASS DESIGN

Eriez two-mass design conveyors incorporate a tuning spring system between the tray and base assembly. This design enables a relatively slight excitation of the base to be amplified and result in a much greater deflection of the trough. This allows the use of smaller motors or less magnetic force to achieve the trough deflection desired. As a result of the two-mass design, minimal vibration is transferred into support structures.



TROUGH DESIGNS

Trough selection depends on the material being moved, distance traveled and the equipment's application. Stainless steel troughs are used in food and pharmaceuticals, while mild steel is for general-purpose use. Troughs can be lined with abrasion resistant steel, stainless, polyethylene, epoxy, rubber, as well as other coatings. The shape, length and width of the trough are almost limitless. Every configuration of flat, curved, v-channel, tubular design is available.

Features	TM		TMR		HVC		VMC	
	in	mm	in	mm	in	mm	in	mm
Tray Thickness	1/8 - 1/4	3 - 6	1/8 - 3/16	3 - 4.8	1/8 - 1/4	3 - 6	1/8 - 3/16	3 - 4.8
Widths Available	6 - 48	152-1219	6 - 30	152 - 762	6 - 48	152-1219	12 - 48	305-1219
Maximum Length	35 ft	11 m	12 ft	3.7 m	30 ft	9 m	20 ft	6 m
Tray Amplitude	7/16	11	7/16	11	7/16	11	3/16	5
Liners Available	Yes		Yes		Yes		Yes	
Tray Frequency - CPM	950		900		950		1800	
Base Mounting	Yes		Yes		Yes		Yes	
Suspension Mounting	Yes		Yes		Yes		Yes	
Vibration Isolation	Yes		Yes		Yes		Yes	
Stainless Trays Available	Yes		Yes		Yes		Yes	
Sanitary Construction Available	Yes		Yes		Yes		Yes	
Explosion-Proof Motors Available	Yes		Yes		Yes		No	
Headload Conpensation	No		No		Available		Yes	
Duty Type	Medium		Medium		Medium to Heavy		Medium	
Screens Available	Yes		Yes		Yes		Yes	

High-Volume

MODEL HVC MECHANICAL CONVEYORS

Eriez' Model HVC Mechanical Conveyors are simple, rugged vibrating machines that move high volumes of bulk materials over long distances, reliably and economically.

PRINCIPLE OF OPERATION

The conveyor is a two-mass vibrating system, spring coupled, excited by a motor-driven eccentric shaft. Adjustable-angle rubber springs – each one of which can be removed and replaced in minutes if required – transmit the exciting force and can "fine tune" the motion of the trough to optimize the flow rate for a specific application.

The compact design of the Model HVC conveyor presents an extremely low profile; minimum headroom is required for installation. A standard three-phase, 230/460 volt TEFC motor. Explosion-proof motors are also available. The ability of the specially designed rubber springs to amplify the motor input results in low horsepower requirements.

FLOW RATE CONTROL

Accurate flow rate control is achieved by simply varying the motor speed. A variable frequency controller is optional. If it is not necessary to vary flow rates, no control is required.

TROUGH OPTIONS

A variety of trough sizes and types are available to match the specific applications. Included are mild steel and stainless steel troughs, abrasion-resistant steel, stainless steel, polyethylene, rubber or other material liners; plus enclosed and screening troughs. Conveyors up to 30ft (9.1m) in length are available, and lengths in excess of this can be provided by nesting two or more units.

Heavy Duty

Mechanical motor driven eccentric shaft High Volume (HV) conveyors are rugged, heavy-duty units designed to take punishment. They use a unique rubber spring that can be adjusted for the optimum drive angle. HV conveyors use optional replaceable AR liners in the trough and have outboard rubber springs for easy maintenance.

- Durable rubber springs
- Ideal for: Mining, aggregate, power generation, foundry and mineral processing

Capacity:

- 50 – 200,000 cu ft/hr
  1.4 – 5663 cu mt/hr
- 5,000 lbs – 100 tons/hr
  2272 kg – 91 mt/hr

Troughs:

- Widths 8 to 36 inches
  203 to 914 mm
- Lengths from 5 to 30 feet
  0.65 to 9.23 mtrs

Application Examples:

• Aggregates • Borax • Glass Cullet • Dry Clay
• Aluminum • Brick • Cast Iron Chips • Coal
• Foundry Sand • Gravel • Limestone • Concrete
• Ash • Coke • Gypsum • Cement • Asphalt
• Iron Ore • Bauxite • Cinders

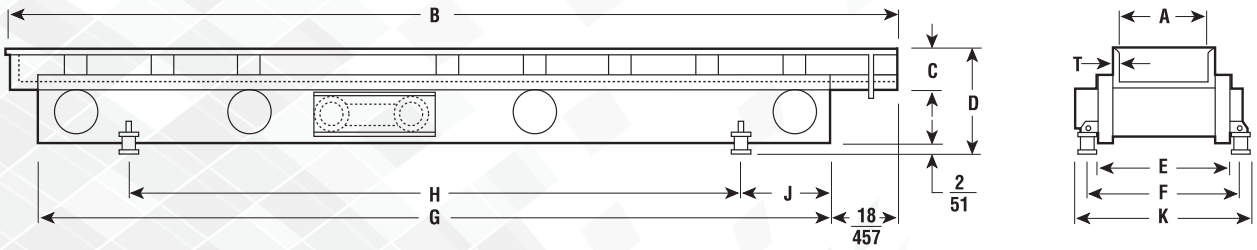
Conveyor Model Selection Guide

Model Number	Capacity*		Width	Additional Trough Sizes (Length)				
				10 ft (3m)	15 ft (4.6m)	20 ft (6.1m)	25 ft (7.6m)	30 ft (9.1m)
	Sand	Coal		Horsepower/Kilowatts Required				
HVC-8	50 tph	30 tph	8 in	.75 hp	1 hp	1.5 hp	2 hp	2 hp
	45 mtph	25 mpth	203 mm	.56 kw	.75 kw	1.1 kw	1.5 kw	1.5 kw
HVC-12	75 tph	45 tph	12 in	.75 hp	1 hp	1.5 hp	2 hp	2 hp
	70 mtph	40 mtph	305 mm	.56 kw	.75 kw	1.1 kw	1.5 kw	1.5 kw
HVC-18	125 tph	75 tph	18 in	1 hp	1.5 hp	2 hp	3 hp	3 hp
	115 mtph	70 mtph	457 mm	.75 kw	1.1 kw	1.5 kw	2.2 kw	2.2 kw
HVC-24	175 tph	105 tph	24 in	2 hp	3 hp	5 hp	5 hp	5 hp
	160 mtph	95 mtph	610 mm	1.5 kw	2.2 kw	3.7 kw	3.7 kw	3.7 kw
HVC-30	225 tph	135 tph	30 in	2 hp	5 hp	5 hp	7.5 hp	7.5 hp
	205 mtph	120 mtph	762 mm	1.5 kw	3.7 kw	3.7 kw	5.6 kw	5.6 kw
HVC-36	275 tph	165 tph	36 in	3 hp	5 hp	5 hp	7.5 hp	7.5 hp
	250 mtph	150 mtph	914 mm	2.2 kw	3.7 kw	3.7 kw	5.6 kw	5.6 kw

* Capacities are based on dry sand weighing 100 lb/cu ft (1600 kg/cu m) and coal weighing 50 lb/cu ft (800 kg/cu m) with the trough horizontal. Capacity for other materials may be weight or volume limited. Consult Eriez.
Note: Power subject to change depending on trough thickness, liners, etc. Trough lengths and widths other than those shown here are available.

ERIEZ

Model HVC



Specifications*

Model	A		B		C		D		E		F		G		H		J		K		T		Weight		Drive	
	in	mm	ft	m	in	mm	in	mm	in	mm	in	mm	ft	m	ft	m	in	mm	in	mm	in	mm	lb	kg	hp	kw
HVC-8	8	203	10	3	6	152	17-1/2	445	18	457	23	584	8	2.4	5	1.5	18	457	28	711	1/8	3	700	318	1	.75
			15	4.6	6	152	17-1/2	445	18	457	23	584	13	4	9	2.7	24	610	28	711	1/8	3	800	363	1	.75
			20	6.1	6	152	19-1/2	495	18	457	23	584	18	5.5	14	4.3	24	610	28	711	1/8	3	1000	454	1-1/2	1.12
			25	7.6	6	152	23	584	18	457	23	584	23	7	18	5.5	30	762	28	711	1/8	3	1300	590	2	1.49
			30	9.1	6	152	33	838	18	457	23	584	27	8.2	21	6.4	36	914	28	711	1/8	3	1500	680	2	1.49
HVC-12	12	305	10	3	6	152	17-1/2	445	22	559	27	686	8	2.4	5	1.5	18	457	32	813	1/8	3	700	318	1	.75
			15	4.6	6	152	17-1/2	445	22	559	27	686	13	4	9	2.7	24	610	32	813	1/8	3	900	408	1	.75
			20	6.1	6	152	19-1/2	495	22	559	27	686	18	5.5	14	4.3	24	610	32	813	1/8	3	1100	499	1-1/2	1.12
			25	7.6	6	152	23	584	22	559	27	686	23	7	18	5.5	30	762	32	813	1/8	3	1400	635	2	1.49
			30	9.1	6	152	33	838	22	559	27	686	27	8.2	21	6.4	36	914	32	813	1/8	3	1600	726	1-1/2	1.49
HVC-18	18	457	10	3	9	229	23	584	30-1/2	775	35-1/2	902	8	2.4	5	1.5	18	457	40-1/2	1029	3/16	5	1000	454	1-1/2	1.12
			15	4.6	9	229	23	584	30-1/2	775	35-1/2	902	13	4	9	2.7	24	610	40-1/2	1029	3/16	5	1300	590	2	1.49
			20	6.1	9	229	24	610	30-1/2	775	35-1/2	902	18	5.5	14	4.3	24	610	40-1/2	1029	3/16	5	1600	726	2	1.49
			25	7.6	9	229	24	610	30-1/2	775	35-1/2	902	23	7	18	5.5	30	762	41-1/2	1054	3/16	5	2200	998	3	2.24
			30	9.1	9	229	33	838	30-1/2	775	35-1/2	902	27	8.2	21	6.4	36	914	41-1/2	1054	3/16	5	2600	1179	3	2.24
HVC-24	24	610	10	3	9	229	24	610	36-1/2	927	41-1/2	1054	8	2.4	5	1.5	18	457	46-1/2	1181	3/16	5	1100	499	2	1.49
			15	4.6	9	229	24	610	36-1/2	927	41-1/2	1054	13	4	9	2.7	24	610	47-1/2	1207	3/16	5	1500	680	3	2.24
			20	6.1	9	229	25	635	36-1/2	927	41-1/2	1054	18	5.5	14	4.3	24	610	48	1219	3/16	5	2000	907	5	3.73
			25	7.6	9	229	25	635	36-1/2	927	41-1/2	1054	23	7	18	5.5	30	762	48	1219	3/16	5	2500	1134	5	3.73
			30	9.1	9	229	33	838	36-1/2	927	41-1/2	1054	27	8.2	21	6.4	36	914	48	1219	3/16	5	3100	1406	5	3.73
HVC-30	30	762	10	3	10	254	25	635	42-1/2	1080	47-1/2	1207	8	2.4	5	1.5	18	457	52-1/2	1334	3/16	5	1400	635	2	1.49
			15	4.6	10	254	25	635	42-1/2	1080	47-1/2	1207	13	4	9	2.7	24	610	53-1/2	1359	3/16	5	1900	862	3	2.24
			20	6.1	10	254	26	660	42-1/2	1080	47-1/2	1207	18	5.5	14	4.3	24	610	54	1372	3/16	5	2600	1179	5	3.73
			25	7.6	10	254	26	660	42-1/2	1080	47-1/2	1207	23	7	18	5.5	30	762	56	1422	3/16	5	3300	1497	7-1/2	5.59
			30	9.1	10	254	33	838	42-1/2	1080	47-1/2	1207	27	8.2	21	6.4	36	914	56	1422	3/16	5	3900	1769	7-1/2	5.59
HVC-36	36	914	10	3	10	254	25	635	51	1295	56	1422	8	2.4	5	1.5	18	457	62	1575	3/16	5	1500	680	3	2.24
			15	4.6	10	254	25	635	51	1295	56	1422	13	4	9	2.7	24	610	63	1600	3/16	5	2200	998	5	3.73
			20	6.1	10	254	26	660	51	1295	56	1422	18	5.5	14	4.3	24	610	63	1600	3/16	5	3000	1361	5	3.73
			25	7.6	10	254	26	660	51	1295	56	1422	23	7	18	5.5	30	762	65	1651	3/16	5	3700	1678	7-1/2	5.59
			30	9.1	10	254	33	838	51	1295	56	1422	27	8.2	21	6.4	36	914	65	1651	3/16	5	4400	1996	7-1/2	5.59

* Conveyor dimensions and horsepower may vary. Consult Eriez for specific details

Medium-Duty

MODEL TM/TMR MECHANICAL CONVEYORS

The Eriez Model TM Mechanical Conveyors are powerful vibrating machines designed for moving bulk materials over long distances. These units will convey large volumes of material with simple, dependable efficiency.

PRINCIPLE OF OPERATION

The Model TM conveyor is a spring-coupled, two-mass vibrating system using a motor-driven eccentric weighted shaft to provide the exciting force. Corrosion-resistant fiberglass springs transmit exciting force to the trough, and trough motion can be "fine tuned" for specific applications.

The low profile and compact design of the Model TM conveyor requires minimum headroom for installation.

Power is provided by a standard three-phase 230/460 volt TEFC 60 Hz or optional 50 Hz 380 volt motor. Explosion-proof motors are also available.

FLOW RATE CONTROL

Flow rate can be precisely controlled by a manually adjustable variable-sheave control or a variable-frequency control, both available as options. In applications where a single flow rate is used, a control is not required.

TROUGH OPTIONS

Specific conveyor application requirements are easily addressed with a wide variety of trough sizes and types. The selection includes mild steel and stainless steel troughs, abrasion-resistant steel, stainless steel, polyethylene, rubber or other material liners. Also available are enclosed, V-shaped and screening troughs. Standard conveyors are available up to 35 ft. (10.67 m) in length. Consult with factory representatives for longer lengths.

Two-Mass

Mechanical motor driven eccentric shaft

Two-Mass (TM & TMR) conveyors are low-horsepower, high-capacity units for the controlled transfer of bulk materials in rugged duty environments. Its tubular base and wide-open design make it ideal for food and pharmaceutical applications.

- 2 variable rate models for light and heavy duty
- Compact low profile design requires minimum headroom
- Flow rates up to 60 fpm (18 mpm)
- Easy maintenance and access to components

Capacity:

- 50 – 1,500 cu ft/hr • 5,000 – 150,000 lbs./hr
  1.42 – 42.5 cu mt/hr 2,272 – 68,039 kg/hr

Troughs:

- Widths 8 to 36 inches • Lengths 5 to 35 feet
  203 to 914 mm • 1.5 to 10.67 m
  custom size available

Typical Applications:

• Granular Products • Coffee Beans • Seafood
• Cereals • Raisins • Potato Chips • Candy
• Dried Meats • Pasta • Nuts • Pretzels • Chemicals
• Wood Products • Powders • Frozen Vegetables

Model TM/TMR

TM Conveyor Model Selection Guide

Model Number	Sand Capacity*	Width	Additional Trough Sizes (Length)				
			5 ft (1.5m)	10 ft (3m)	15 ft (4.57m)	20 ft (6.1m)	25 ft (7.62m)
			Horsepower/Kilowatts Required				
TM-8	50 tph	8"	3/4 hp	1 hp	1-1/2 hp	2 hp	2 hp
	45 mtph	203 mm	.56 kw	.75 kw	1.1 kw	1.5 kw	1.5 kw
TM-12	75 tph	12"	3/4 hp	1 hp	1-1/2 hp	2 hp	2 hp
	70 mtph	305 mm	.56 kw	.75 kw	1.1 kw	1.5 kw	1.5 kw
TM-18	125 tph	18"	1 hp	1-1/2 hp	2 hp	3 hp	3 hp
	115 mtph	457 mm	.75 kw	1.1 kw	1.5 kw	2.2 kw	2.2 kw
TM-24	175 tph	24"	2 hp	3 hp	5 hp	5 hp	5 hp
	160 mtph	610 mm	1.5 kw	2.2 kw	3.7 kw	3.7 kw	3.7 kw
TM-30	225 tph	30"	3 hp	5 hp	5 hp	7-1/2 hp	7-1/2 hp
	205 mtph	762 mm	1.5 kw	3.7 kw	3.7 kw	5.6 kw	5.6 kw
TM-36	275 tph	36"	3 hp	5 hp	5 hp	7-1/2 hp	7-1/2 hp
	250 mtph	914 mm	2.2 kw	3.7 kw	3.7 kw	5.6 kw	5.6 kw

limited. Consult Eriez.

Note: Horsepower subject to change depending on trough thickness, liners, etc. Trough lengths and widths other than those shown here are available. Dimensions subject to change without notice.

TMR Conveyor Model Selection Guide

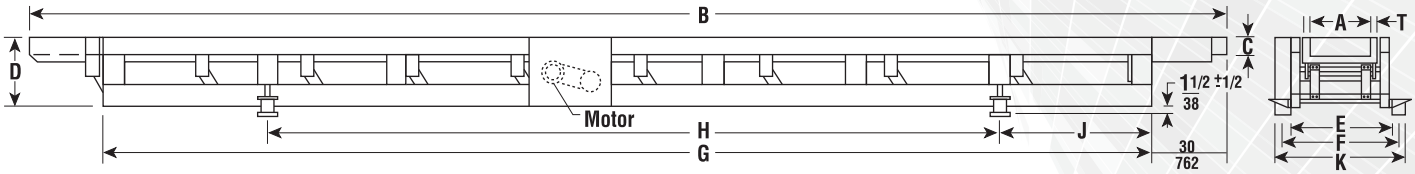
Model Number	Capacity*	Width	Feeder Tray Length				
			5 ft (1.5m)	8 ft (2.4m)	10 ft (3m)	12 ft (3.66m)	15 ft (4.57m)
			Horsepower/Kilowatts Required**				
TMR-8	50 tph	8"	1.2	1.2	1.2	1.2	1.6
	45 mtph	203 mm	.89 kw	.89 kw	.89 kw	.89 kw	1.2 kw
TMR-12	75 tph	12"	1.2	1.2	1.2	1.6	1.6
	70 mtph	305 mm	.89 kw	.89 kw	.89 kw	1.2 kw	1.2 kw
TMR-18	125 tph	18"	1.02	1.2	1.2	1.6	1.6
	115 mtph	457 mm	.89 kw	.89 kw	.89 kw	1.2 kw	1.2 kw
TMR-24	175 tph	24"	1.2	1.2	1.6	2.1	2.1
	160 mtph	610 mm	.89 kw	.89 kw	1.2 kw	1.6 kw	1.6 kw
TMR-30	225 tph	30"	1.6	1.6	1.6	2.1	2.96
	205 mtph	762 mm	1.2 kw	1.2 kw	1.2 kw	1.6 kw	2.2 kw
TMR-36	275 tph	36"	1.6	1.6	2.1	2.96	2.96
	250 mtph	914 mm	1.2 kw	1.2 kw	1.6 kw	2.2 kw	2.2 kw

** Horsepower subject to change depending upon tray thickness, liners, etc. Additional tough lengths and widths are available.

Model TM/TMR

TM Conveyor

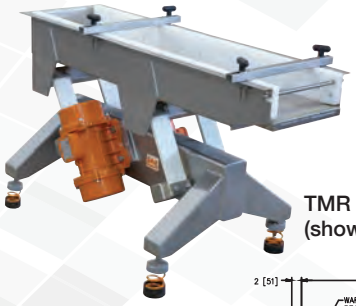
TM Conveyor
(shown with screen)



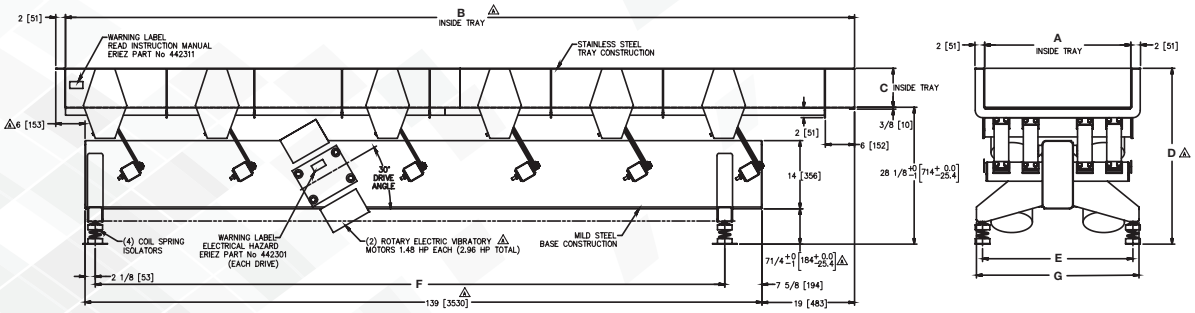
Specifications

Model	A		B		C		D		E		F		G		H		J		K		T		Weight		Drive	
	in	mm	ft	m	in	mm	in	mm	in	mm	in	mm	ft	m	ft	m	in	mm	in	mm	in	mm	lb	kg	hp	kw
TM-8	8	203	10	3	6	152	18	457	14	356	19	483	8	2.4	5	1.5	18	457	26	660	1/8	3	700	318	1	.75
			15	4.6	6	152	18	457	14	356	19	483	13	3.9	9	2.7	24	610	26	660	1/8	3	900	408	1	.75
			20	6.1	9	229	20	508	14	356	19	483	18	5.5	14	4.3	24	610	26	660	1/8	3	1100	499	1-1/2	1.1
			25	7.6	9	229	23	584	14	356	19	483	23	7.0	18	5.5	30	762	28	711	1/8	3	1500	680	2	1.5
			30	9.1	9	229	33	838	14	356	19	483	27	8.2	21	6.4	36	914	28	711	1/8	3	1700	771	2	1.5
TM-12	12	305	10	3	6	152	18	457	18	457	23	584	8	2.4	5	1.5	18	457	30	762	1/8	3	800	363	1	.75
			15	4.6	6	152	18	457	18	457	23	584	13	3.9	9	2.7	24	610	30	762	1/8	3	1000	454	1	.75
			20	6.1	9	229	20	508	18	457	23	584	18	5.5	14	4.3	24	610	30	762	1/8	3	1300	590	1-1/2	1.1
			25	7.6	9	229	23	584	18	457	23	584	23	7.0	18	5.5	30	762	32	813	1/8	3	1600	726	2	1.5
			30	9.1	9	229	33	838	18	457	23	584	27	8.2	21	6.4	36	914	32	813	1/8	3	1900	862	2	1.5
TM-18	18	457	10	3	6	152	18	457	24	610	29	734	8	2.4	5	1.5	18	457	36	914	1/8	3	1200	544	1-1/2	1.1
			15	4.6	6	152	18	457	24	610	29	734	13	3.9	9	2.7	24	610	36	914	3/16	5	1700	771	2	1.5
			20	6.1	9	229	20	508	29	734	34	864	18	5.5	14	4.3	24	610	41	1041	3/16	5	2000	907	3	2.2
			25	7.6	9	229	23	584	29	734	34	864	23	7.0	18	5.5	30	762	43	1092	3/16	5	2800	1270	3	2.2
			30	9.1	9	229	33	838	29	734	34	864	27	8.2	21	6.4	36	914	43	1092	3/16	5	3200	1451	5	3.7
TM-24	24	610	10	3	6	152	18	457	30	762	35	889	8	2.4	5	1.5	18	457	42	1067	1/8	3	1300	590	2	1.5
			15	4.6	6	152	18	457	30	762	35	889	13	3.9	9	2.7	24	610	42	1067	3/16	5	2000	907	3	2.2
			20	6.1	9	229	20	508	35	889	39	991	18	5.5	14	4.3	24	610	47	1194	3/16	5	2500	1134	5	3.7
			25	7.6	9	229	23	584	35	889	39	991	23	7.0	18	5.5	30	762	49	1245	3/16	5	3000	1361	5	3.7
			30	9.1	9	229	33	838	35	889	39	991	27	8.2	21	6.4	36	914	49	1245	1/4	6	3600	1632	5	3.7
TM-30	30	762	10	3	6	152	18	457	36	914	41	1041	8	2.4	5	1.5	18	457	48	1219	3/16	5	1900	862	3	2.2
			15	4.6	6	152	18	457	36	914	41	1041	13	3.9	9	2.7	24	610	48	1219	3/16	5	2500	1134	5	3.7
			20	6.1	9	229	20	508	41	1041	46	1168	18	5.5	14	4.3	24	610	53	1346	3/16	5	3200	1451	5	3.7
			25	7.6	9	229	23	584	41	1041	46	1168	23	7.0	18	5.5	30	762	55	1397	1/4	6	4000	1814	7-1/2	5.6
			30	9.1	9	229	33	838	41	1041	46	1168	27	8.2	21	6.4	36	914	55	1397	1/4	6	4700	2131	7-1/2	5.6
TM-36	36	914	10	3	6	152	18	457	42	1067	47	1194	8	2.4	5	1.5	18	457	54	1372	3/16	5	2500	1133	5	3.7
			15	4.6	6	152	18	457	42	1067	47	1194	13	3.9	9	2.7	24	610	54	1372	3/16	5	3300	1497	5	3.7
			20	6.1	9	229	20	508	47	1194	52	1321	18	5.5	14	4.3	24	610	59	1499	1/4	6	4100	1860	7-1/2	5.6
			25	7.6	9	229	23	584	47	1194	52	1321	23	7.0	18	5.5	30	762	61	1550	1/4	6	4900	2223	7-1/2	5.6
			30	9.1	9	229	33	838	47	1194	52	1321	27	8.2	21	6.4	36	914	61	1550	1/4	6	5500	2495	10	7.5

Model TM/TMR



TMR Conveyor
(shown with screen)



Specifications

Model	A		B		C		D		E		F		G		Weight	
	in	mm	ft	m	in	mm	in	mm	in	mm	in	mm	in	m	lb	kg
TMR-8	8	203	5	1.5	7	178	34.5	876	20	508	42	1067	12	305	530	241
			8	2.4	7	178	34.5	876	20	508	52	1321	12	305	605	275
			10	3.0	7	178	34.5	876	20	508	60	1524	12	305	650	295
			12	3.7	7	178	36	914	20	508	78	1981	12	305	730	331
			15	4.6	7	178	37.5	953	20	508	102	2591	12	305	920	417
TMR-12	12	305	5	1.5	7	178	34.5	876	20	508	42	1067	16	406	550	249
			8	2.4	7	178	34.5	876	20	508	52	1321	16	406	650	295
			10	3.0	7	178	34.5	876	20	508	60	1524	16	406	700	318
			12	3.7	7	178	37.5	953	20	508	78	1981	16	406	880	399
			15	4.6	7	178	37.5	953	20	508	102	2591	16	406	970	440
TMR-18	18	457	5	1.5	7	178	34.5	876	25	635	42	1067	22	559	575	261
			8	2.4	7	178	34.5	876	25	635	52	1321	22	559	695	315
			10	3.0	7	178	36.5	927	25	635	60	1524	22	559	740	336
			12	3.7	7	178	37.5	953	25	635	78	1981	22	559	930	422
			15	4.6	7	178	37.5	953	25	635	102	2591	22	559	1100	499
TMR-24	24	610	5	1.5	7	178	34.5	876	25	635	42	1067	28	711	600	272
			8	2.4	7	178	36	914	25	635	52	1321	28	711	630	286
			10	3.0	7	178	36	914	25	635	60	1524	28	711	750	340
			12	3.7	7	178	37.5	953	25	635	78	1981	28	711	950	431
			15	4.6	7	178	37.5	953	25	635	102	2591	28	711	1200	544
TMR-30	30	762	5	1.5	7	178	36	914	31	787	42	1067	34	864	620	281
			8	2.4	7	178	36	914	31	787	52	1321	34	864	850	386
			10	3.0	7	178	37.5	953	31	787	60	1524	34	864	1560	708
			12	3.7	7	178	37.5	953	31	787	78	1981	34	864	1600	726
			15	4.6	7	178	37.5	953	31	787	102	2591	34	864	1800	816
TMR-36	36	914	5	1.5	7	178	36	914	37	940	42	1067	40	1016	700	318
			8	2.4	7	178	36	914	37	940	52	1321	40	1016	900	408
			10	3.0	7	178	37.5	953	37	940	60	1524	40	1016	1300	590
			12	3.7	7	178	37.5	953	37	940	78	1981	40	1016	1700	771
			15	4.6	7	178	37.5	953	37	940	102	2591	40	1016	2100	953

Vibratory

MECHANICAL SCREENERS

HVC MECHANICAL SCREENERS & OPTIONS

For large scale, heavy-duty applications, Eriez builds screeners using the TM and HV drives covered under the "conveyor" heading. These rugged units incorporate wire mesh, perforated plate, grizzly and wedge wire screen types.

- Food to heavy-duty mining applications
- Scalping overs from good product
- Sizing products into 2 or 3 fractions
- Dedusting or removing unwanted fines
- Dewatering separates solids from liquids

Applications:

All screen rates are application dependent

• Powders • Plastic • Abrasives • Chemicals • Spices • Aggregates • Coal • Steel • Pellets

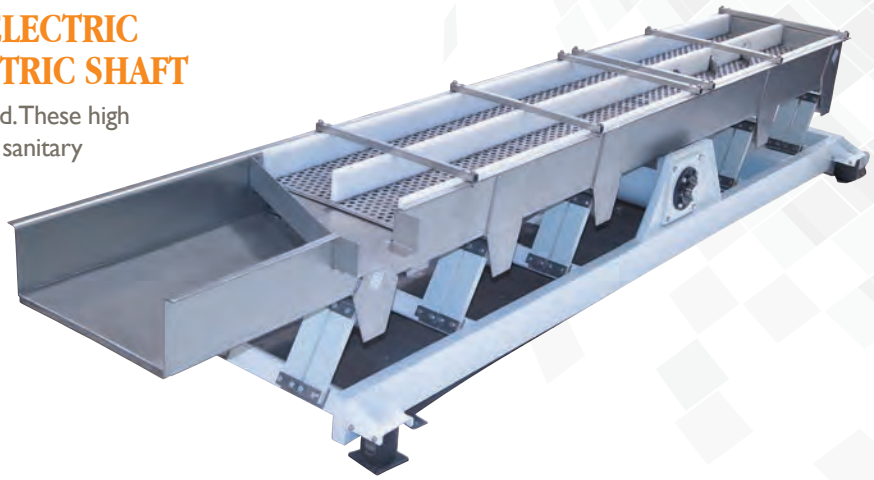
Troughs:

- Widths 24 to 48 inches 610 to 1,219 mm
- Lengths 60 to 120 inches 1,524 to 3,048 mm
- Custom sizes and special applications include open or enclosed units

AVAILABLE TROUGH FEATURES:

• Special Tray Sizes • Bias Discharge • Enclosed Trays • Tool-less Screen and Cover Removal • Base or Suspension Mounting • Tube Trays • Inspection Parts/ Windows • Sanitary Construction • Hazardous Environment Class II. Div. I. Grp F, G Acceptable

TMS/TMRS MECHANICAL ROTARY ELECTRIC MOTOR OR MOTOR DRIVEN ECCENTRIC SHAFT



Designed with light to medium duty applications in mind. These high amplitude machines offer excellent screening capability, sanitary design and are available with tool-less screen format.

- Food to light duty applications
- Scalping overs from good product
- Dedusting or removing unwanted fines
- Sizing products into 2 or 3 fractions

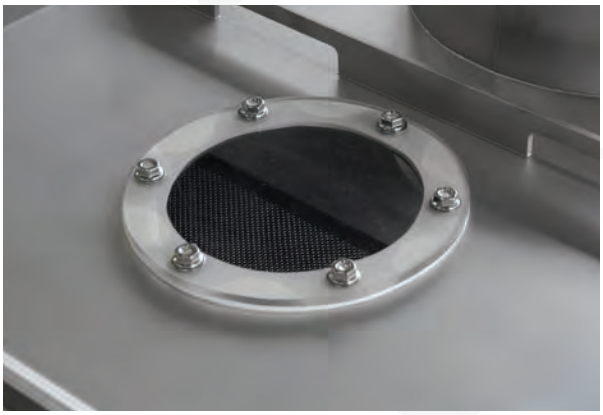
Applications:

All screen rates are application dependent

- Pet food • Food • Powders • Plastics

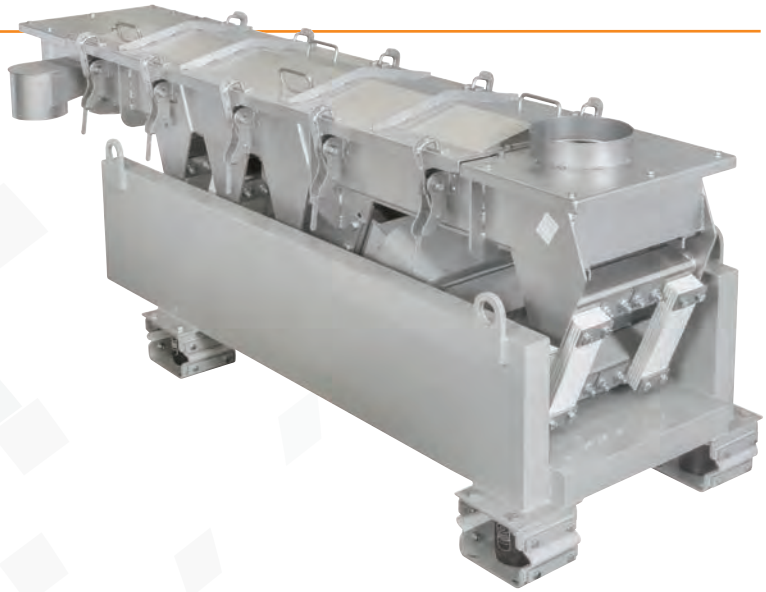
Troughs:

- Widths 12 to 36 inches 304 to 914 mm
- Lengths 48 to 300 inches 1,219 to 7,620 mm
- Customized for your application - enclosed trays available
- Two-mass isolated design



Electromagnetic
SCREENERS

ERIEZ



ELECTROMAGNETIC SCREENERS & OPTIONS

Eriez' screeners use standard electromagnetic drives and are well suited for restricted space locations using either overhead or base mounted drives. These linear screeners offer similar features as Eriez' electromagnetic feeders.

- From food handling to coin sorting
- Scalping overs from good product such as clay or cereals
- Sizing up to 3 screen decks or 4 separations
- Dedusting or removing unwanted fines from a product flow

Troughs:

- Widths 4 to 48 inches 102 to 1,219 mm
- Lengths 20 to 72 inches 508 to 1,829 mm

Applications:

All screen rates are application dependent

- Powder • Flour • Plastic • Abrasives • Chemicals
- Spices • Beans • Salt • Pellets

Screen mesh:

- 100 mesh to 2 inch space cloth

AVAILABLE TRAY FEATURES:

• Special Tray Sizes • Bias Discharge • Enclosed Trays • Tool-Less Screen and Cover Removal • Base or Suspension Mounting • Inspection Ports/Windows • Sanitary Construction • Hazardous Environment Class II. Div. I. Grp F, G Acceptable

Electromagnetic
MODEL VMC CONVEYOR

Eriez' VMC Series Electromagnetic Conveyor is a simple, two-mass conveyor combining Eriez years of experience as a world leader in magnetics with the latest in solid-state control technology. VMC Series electromagnetic conveyors come standard with a variable-rate control. They can also be provided with 4-20 mA signal following or closed-loop design for precise and efficient conveying of bulk materials.

PRINCIPLE OF OPERATION

Eriez VMC Series Electromagnetic Conveyor is a two-mass vibrating system, spring-coupled, powered by one or more unique electromagnetic drive circuits. Specially designed fiberglass springs amplify the trough stroke and are adjustable to provide easy fine tuning of conveyor motion. A variable voltage controller allows "watch-like" precision in the control of conveyor amplitude.

VMC Series conveyors are easily and accurately tuned to specific materials and applications for optimum performance.

A wide variety of trough sizes and types are available to match the conveyor to specific application requirements. Included are mild steel and stainless steel troughs. Liners constructed from abrasion-resistant steel, stainless steel, polyethylene, rubber or other materials are available.

OPTIONS

- **Side or bottom discharge gates**
- **Rigidized stainless steel trays for reduced product sticking**
- **Stainless steel bases**
- **White epoxy or Steel-it painted bases**
- **Over deflection monitor to protect equipment**
- **Quick-release covers**
- **Drop-in basket-type screens and perforated plates**

Electromagnetic VMC Models

VMC offers the performance of a mechanical conveyor with the reliability of an electromagnet unit...no belts or bearings. Units cycle on and off without stressing components or going through wild vibrations from resonance.

- 30Hz Pulsed AC electromagnetic drive
- Extremely efficient, accurate Two-Mass conveyors
- Available with covers, perforated decks and signal following controls

Capacity:

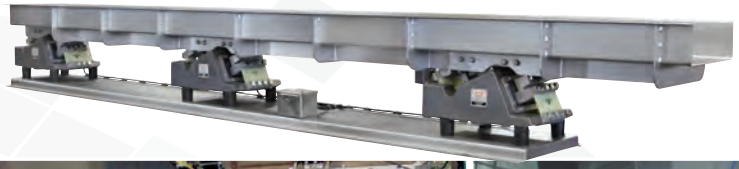
- 100 – 1,000 cu ft/hr
  2.83 – 28.32 cu mt/hr

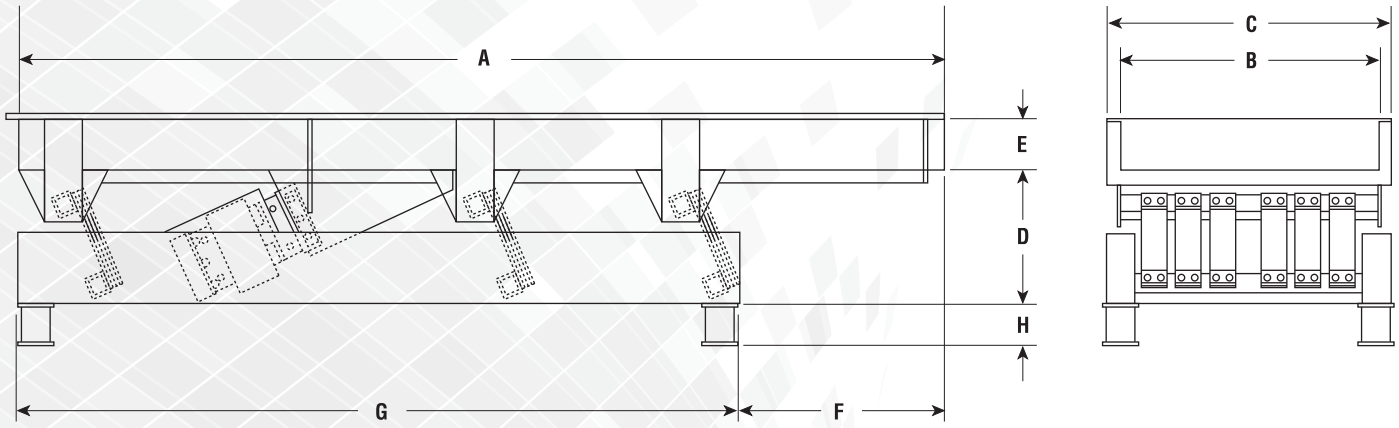
Troughs:

- Widths 18 to 60 inches
  457 to 1,524 mm
  Max 40 sq. ft (3.72 sq. m) of tray area
- Lengths 60" to 10 feet
  1,524 mm to 3,000 mm

Applications:

• Cereals • Fruit • Seafoods • Pretzels • Spices
• Vegetables • Pasta • Potato • Wood Products
• Chips• Powders • Candy





Specifications

Size		A		B		C		D		E		F		G		H		Voltage	Amps
in x ft	mm x m	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm		
18 x 5	457 x 1.5	60	1524	18	457	21	533	16	406	6	152	12	305	48	1219	5	127	240	12
18 x 10	457 x 3	120	3048	18	457	21	533	20	508	6	152	24	610	96	2438	5	127	240	12
18 x 15	457 x 4.5	180	4572	18	457	21	533	22.5	572	6	152	24	610	144	3658	5	127	240	24
18 x 20	457 x 6	240	6096	18	457	21	533	24	610	6	152	24	610	204	5182	5	127	240	24
24 x 5	610 x 1.5	60	1524	24	610	27	686	16	406	6	152	12	305	48	1219	5	127	240	12
24 x 10	610 x 3	120	3048	24	610	27	686	20	508	6	152	24	610	96	2438	5	127	240	12
24 x 15	610 x 4.5	180	4572	24	610	27	686	22.5	572	6	152	24	610	144	3658	5	127	240	24
24 x 20	610 x 6	240	6096	24	610	27	686	24	610	6	152	24	610	204	5182	5	127	240	24
30 x 5	762 x 1.5	60	1524	30	762	33	838	16	406	6	152	12	305	48	1219	5	127	240	12
30 x 10	762 x 3	120	3048	30	762	33	838	20	508	6	152	24	610	96	2438	5	127	240	24
30 x 15	762 x 4.5	180	4572	30	762	33	838	22.5	572	6	152	24	610	144	3658	5	127	240	24
36 x 5	914 x 1.5	60	1524	36	914	39	991	16	406	6	152	12	305	48	1219	5	127	240	12
36 x 10	914 x 3	120	3048	36	914	39	991	20	508	6	152	24	610	96	2438	5	127	240	24
36 x 15	914 x 4.5	180	4572	36	914	39	991	22.5	572	6	152	24	610	144	3658	5	127	240	24
42 x 5	1067 x 1.5	60	1524	42	1067	45	1143	16	406	6	152	12	305	48	1219	5	127	240	12
42 x 10	1067 x 3	120	3048	42	1067	45	1143	20	508	6	152	24	610	96	2438	5	127	240	24
48 x 5	1219 x 1.5	60	1524	48	1219	51	1295	16	406	6	152	12	305	48	1219	5	127	240	12
48 x 10	1219 x 3	120	3048	48	1219	51	1295	20	508	6	152	24	610	96	2438	5	127	240	24

Over-Deflection
MONITOR

Protect the integrity of your vibratory feeder by monitoring tray deflection.

FEATURES

- **Circuitry pre-set at factory to correspond with feeder amplitude**
- **Comparator can be integrated with safety or signaling circuits**
- **Sensor cable length available for "at site" and remote locations**
- **Nema 12 enclosure standard; Nema 4 enclosure available**
- **Adjustable time integration**

Eriez' Series SL Over-Deflection Monitor detects changes in tray deflection due to material accumulation on the tray surface. As material accumulates on the tray surface, it adds weight to the tray, affecting performance and possibly damaging the feeder or conveyor.

The Over-Deflection Monitor senses changes in deflection from a factory predetermined level and alerts, warns or shuts down the feeder or conveyor before damage to the unit can occur. The feeder or conveyor tray can then be cleaned to improve performance and reduce costly maintenance downtime.

The Over-Deflection Monitor employs a vibration transducer, which mounts to the tray, as well as a comparator amplifier, which monitors changes in the tray deflection.

The vibration transducer sends a signal continuously to the comparator amplifer. If an upset occurs and the tray becomes overloaded, the comparator amplifier senses this and trips a relay to shut down the feeder or conveyor.

The Over-Deflection Monitor can be used to monitor feeders or conveyors for broken drive belts or springs, under deflection (low feed), or over deflection (broken springs or over frequency).

The Over-Deflection Monitor is suitable for:

- Vibratory feeders and conveyors
- Vibratory screening equipment
- Applications when material loads very significally
- Applications where tacky material may adhere to the tray

ERIEZ

GLOBAL LEADER IN SEPARATION TECHNOLOGIES

HEADQUARTERS

2200 Asbury Road • Erie, PA 16506-1402 U.S.A.

1-814-835-6000 • eriez@eriez.com • www.eriez.com

AUSTRALIA
Epping, Victoria
+61 3 8401 7400

BRAZIL
Belo Horizonte, Minas Gerais
55 31 3281 9108

CANADA
Delta, British Columbia
+1 604-952-2300

CHILE
Las Condes, Santiago
56 2 29523400

CHINA
Qinhuangdao and Tianjin
86-22-8390-4608

GERMANY
Recklinghausen
+49 (0)160 94179313

INDIA
Athipet, Chennai
91-044-2652-5000

JAPAN
Urayasu, Chiba
+81-47-354-6381

MEXICO
Querétaro, Tlalnepantla
52 555 321 9800

PERÚ
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