

# Vibrating Incline Screens

A PEERLESS PRODUCT FAMILY



- ▲ Single Deck Scalp Screen
- ▲ Double Deck Scalp Screen
- ▲ Triple Deck Scalp Screen



Custom Solutions to Unique Challenges

# Vibrating Incline Screens

## LIVE-ACTION SCREENING

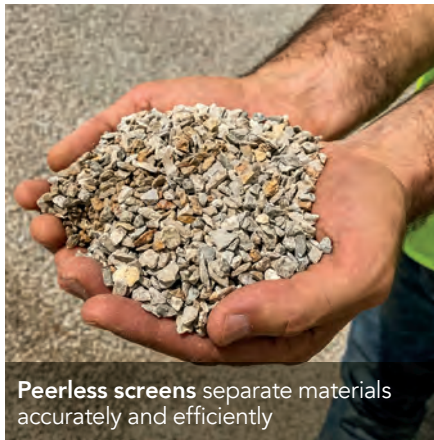
Peerless Engineering and Manufacturing has been building screens since 1957. Offered in single, double, and triple decks with standard widths and lengths, our vibrating incline screens are built with uncompromised precision by our dedicated team of professionals.

The vibrating incline screens are designed for clean separation of sand, gravel, recycled asphalt pavement, dirt, and crushed stone. With double roller bearings, they are engineered for extended life and easy replacement.

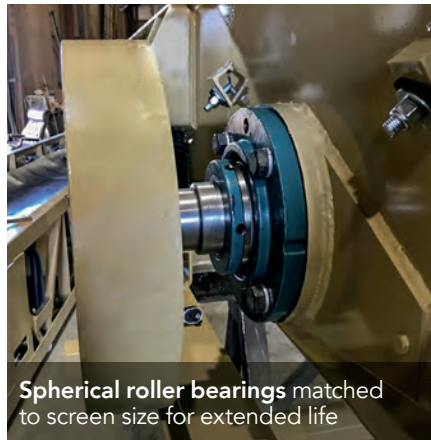
Live-action of the Peerless screens is induced by an eccentric weighted cast iron flywheel at both ends of the screen main shaft. Additional weight segments are furnished and easily applied in the field should additional screening action be needed.

### Screen materials

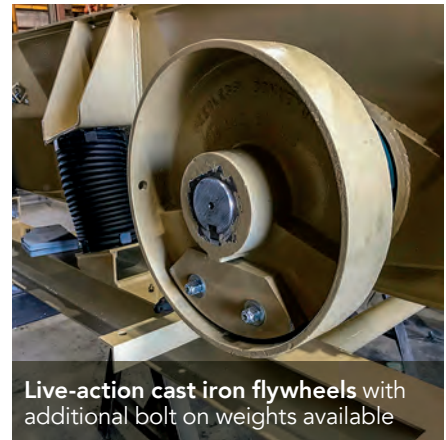
- Sand
- Gravel
- Recycled asphalt pavement
- Dirt
- Crushed stone



Peerless screens separate materials accurately and efficiently



Spherical roller bearings matched to screen size for extended life



Live-action cast iron flywheels with additional bolt on weights available

ACCURATE  
CUSTOMIZABLE  
HIGH-QUALITY  
RELIABLE  
SAFE



# THE RIGHT SCREEN FOR YOUR APPLICATION

The capacity of a screen is largely determined by the material being sized. Please carefully review the following charts to determine the appropriate screening size for your project.

## VSMA Factors for Calculating Screen Area

Formula: Screening Area =  $\frac{\text{Factor U (STPH Passing Specified Aperture)}}{A \times B \times C \times D \times E \times F \times G \times H \times J}$



Factor A		
Surface Sq. Opening	% Open Area	STPH Passing A Sq. Ft.
4"	75	7.69
3½"	77	7.03
3"	74	6.17
2¾"	74	5.85
2½"	72	5.52
2"	71	4.90
1¾"	68	4.51
1½"	69	4.20
1¼"	66	3.89
1"	64	3.56
¾"	63	3.38
¾"	61	3.08
⅝"	59	2.82
½"	54	2.47
⅜"	51	2.08
¼"	46	1.60
⅜"	45	1.27
⅛"	40	0.95
⅜"	45	0.76
⅛"	37	0.58
⅛"	41	0.39

Factor B							
Percent of Oversize in Feed to Deck							
% Oversize	5	10	15	20	25	30	35
Factor B	1.21	1.13	1.08	1.02	1.00	0.96	0.92
% Oversize	40	45	50	55	60	65	70
Factor B	0.88	0.84	0.79	0.75	0.70	0.66	0.62
% Oversize	75	80	85	90	95		
Factor B	0.58	0.53	0.50	0.46	0.33		

Factor C							
Percent of Halfsize in Feed to Deck							
% Halfsize	0	5	10	15	20	25	30
Factor C	0.40	0.45	0.50	0.55	0.60	0.70	0.80
% Halfsize	35	40	45	50	55	60	65
Factor C	0.90	1.00	1.10	1.20	1.30	1.40	1.55
% Halfsize	70	75	80	85	90		
Factor C	1.70	1.85	2.00	2.20	2.40		

Factor D			
Deck Location			
Deck	Top	Second	Third
Factor D	1.00	0.90	0.80

Factor E									
Wet Screening									
Opening	½"	¼"	⅛"	⅜"	¼"	⅜"	½"	¾"	1"
Factor E	1.00	1.25	2.00	2.50	2.00	1.75	1.40	1.30	1.25

Factor F										
Material Weight										
Lbs./cu. ft.	150	125	100	90	80	75	70	60	50	30
Factor F	1.50	1.25	1.00	0.90	0.80	0.75	0.70	0.60	0.50	0.30

Factor G
Screen Surface Open Area
Factor G = % Open Area of Surface Being Used % Open Area Indicated in Capacity

Factor H	
Shape of Surface Opening	
Square	1.00
Short Slot (3–4 times Width)	1.15
Long Slot (More than 4 times Width)	1.20

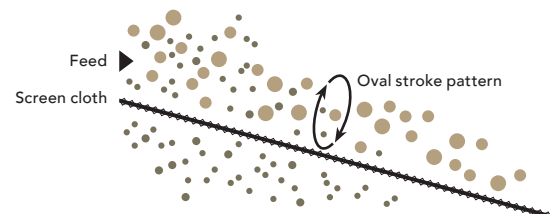
Factor J	
Efficiency	
95%	1.00
90%	1.15
85%	1.35
80%	1.50
75%	1.70
70%	1.90

### Basic Operating Conditions

- Feed to screening deck contains 25% oversize and 40% halfsize
- Feed is granular free-flowing material
- Material weighs 100 lbs. per cu. ft.
- Operating slow of screen: Inclined Screen 18°–20° with flow rotation  
Horizontal Screen 0°
- Objective Screening Efficiency—95%
- Furnished by VSMA

Once you've calculated your screening area, see our standard screen sizes on the following page.

Live-action oval stroke allows for higher productivity



## STANDARD SCREEN SIZES

Peerless offers a basic list of screen sizes, which we are able to modify based on customer-specific needs.

Standard Screen Sizes										
Screen Size		Single Deck			Double Deck			Triple Deck		
Width	Length	Model	Weight	HP	Model	Weight	HP	Model	Weight	HP
36"	6'	SD366	895	3	DD366	1510	5	TD366	1920	7.5
36"	8'	SD368	1250	3	DD368	2030	5	TD368	2730	10
48"	8'	SD488	1620	5	DD488	2565	7.5	TD488	3240	10
48"	10'	SD4810	1990	7.5	DD4810	3315	10	TD4810	4210	15
48"	12'	SD4812	2515	10	DD4812	3905	10			
60"	10'	SD6010	2200	10	DD6010	3880	15			
60"	12'	SD6012	2795	10	DD6012	4740	15			

Design and specifications subject to change without notice.

See *Scalp Screens* product specifications for more details.



### ABOUT PEERLESS

Peerless solves unique challenges for our customers by supplying material processing and handling equipment—including quarry, asphalt, aggregate, frac sand, and mining. Peerless designs a variety of stock and custom products, ensuring consistent delivery of engineered solutions. Experienced and innovative, the Peerless team is focused on quality and listening to customers' specific needs.

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