

Hebei Shengkai Metal Mesh Co., Ltd.

Perfect for Separating, Grading & Sorting Operations



Product Selection & Specification Guide

Woven Wire Mesh

Square Wire Mesh

About US

Located at Anping County, Hebei Province – Base of China Wire Mesh, Hebei Shengkai Metal Mesh Co., Ltd. enjoys a high reputation in mining, quarrying and aggregating industries since its establishment in 2014. With the most advanced production facilities and technologies, we specialize in the production and sales of highquality mining screen products and achieve fast, leap-frog development. We provide a wide range of superior mining screen products to meet all kinds of specific applications.

Backed by professional design engineers, technical personnel and sales engineers, we have been and will always provide our customers with premium products, strong technical support and best aftersales services. At Hightop, we do more than manufacture best mining screen products. We can also offer customized solutions upon request. Or you can just tell us what's your demands, our professional service staff will recommend products perfect for you with quick response and reasonable price. Our mining screen products are highly recognized by customers in the United States, Australia, South Africa and beyond for our great quality and excellent after-sales services.



Mining screen production workshop

Mining screen quality control

Mining screen inventory



Mining Screen for coal processing



Mining screen for gravel processing

Mining screen, also known as vibrating screen mesh, quarry screen and crusher screen, is one of the most important and versatile parts of screening machines in mining industry, which separates a mix of particles into two or more groups depending on size and is widely used in a variety of sizing, grading, scalping, dewatering, wet screening and washing applications.

In its simplest form, the mining screen is a surface having many apertures, or openings, usually with uniform dimensions. Particles presented to that surface will either pass through or be retained, according to whether the particles are smaller or larger than the governing dimensions of the aperture. The efficiency of screening is determined by the degree of perfection of separation of the material into size fractions above or below the aperture size.

There are numerous different types of mining screens available. Our products are fully customizable to fit most applications, including capacity requirements. We adopt high-strength stainless steel to provide high abrasion, corrosion and clogging resistance in the harshest conditions.

> products can be purchased Online at www.minesep.com

MATERIALS & PARAMETERS

Our main materials are carbon steel and stainless steel wires, and their parameters are listed as below.

Grade	Chemic	cal Compositio	n (%)
Glude	С	Si	Mn
45	0.42-0.50		0.50-0.80
50	0.47-0.55		
55	0.52-0.60		
60	0.57–0.65	0.52–0.60	
65	0.62–0.70		
70	0.67-0.75		
65Mn	0.62-0.70		0.90-1.20
72A	0.15-0.75	0.15-0.75	0.30-0.60

Technical Parameters of Carbon Steel Wire

Technical Parameters o	f Stainless Steel Wire
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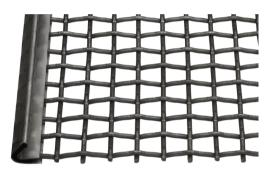
Grade	Chemical Composition (%)				
	С	Ni	Mn	Cr	
304	≤0.08	8.0-10.5	≤2.0	18.0-20.0	
321	≤0.08	9.0-12.0	≤2.0	17.0–19.0	
316	≤0.08	10.0–14.0	≤2.0	16.0–18.0	
2205	≤0.03	4.5-6.5	≤2.0	21.0-23.0	
2207	≤0.03	6–8	≤1.2	24.0-26.0	

+ BENEFITS

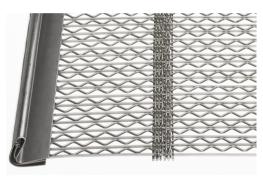
- High strength and large load capacity
- Capable of withstanding a high level of vibration
- Long service life
- High-efficiency separation and classification



+ CATEGORY



Woven Wire Mesh



Self-Cleaning Screen



Mining screen for dry screening



Mining screen for wet screening

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Woven Wire Mesh



Woven Wire Mesh

Woven Wire Mesh is one of the most widely used mining screens in the aggregate and mining industries for primary sieving and sorting. It is usually made of carbon steel and stainless steel and manufactured in different geometries with different weaving styles. Typically, the screen mesh has high mechanical strength, precise screening capability and large carrying capacity. In addition, it can withstand high abrasion, tension and impact.

- Both high carbon steel and stainless steel wires are available
- Square and slot wire meshes are available
- Flat top screens, double crimp screens and lock crimp screens are available
- Special discount for large orders and various promotion campaigns

HIGHTOP® products can be purchased Online at www.minesep.com

+ ADVANTAGES

- High mechanical strength, large carrying capability
- High abrasion and chemical corrosion resistance
- Excellent vibration and impact resistance
- Large screening area
- A long service life

+ CATEGORY

According to the different geometric patterns we offer, our woven wire mesh can be divided into two categories as shown below.



Square wire mesh



Slot wire mesh

Square Wire Mesh

Square Wire Mesh is one of the most commonly used mining screens in mining, mineral processing, quarrying and aggregating industries. Typically, it is made of wires of the same diameter that are crimped to form precise square openings and achieve maximum rigidity. Its high tensile strength, excellent vibration resistance and long service life make it a perfect choice for obtaining accurate screening results and services at best price.

- Both high carbon steel and stainless steel wires are available
- Flat top screens, double crimp screens and lock crimp screens are available
- Excellent wear resistance and long service life
- Special discount for large orders and a wide range of promotion campaigns





+ WEAVING TYPES

• Double crimp wire mesh

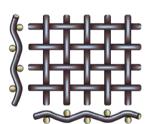
It is manufactured with pre-crimped wires to obtain precise screening apertures and achieve maximum rigidity. Generally, it works well in conditions where materials are not sticky or materials with a small tendency to peg or wedge.

• Flat Top Wire Mesh

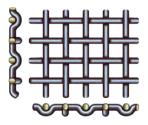
It is manufactured with wires crimped on one side only to create a flat surface, thus enhancing its durability and allowing bigger apertures with high precision. It is generally used for coarse mineral screening.

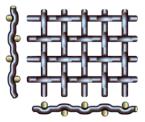
• Lock Crimp Wire Mesh

It is manufactured with wires that are pre-crimped at their point of intersection, so that the wires are locked securely in space. Typically, it is specifically employed for shifting out very coarse particles.



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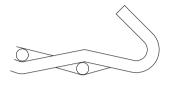




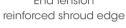
+ EDGE TYPES

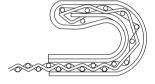


Plain hooked edge

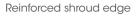


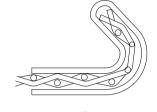
End tension





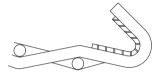
+ SPECIFICATION

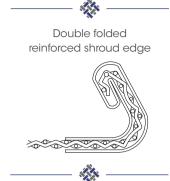




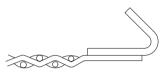


Inside reinforced formed edge





Welded bent plate edge



Width: up to 2 m or upon request. Length: 30 m or upon request.

Light Duty				Medium Duty			Heavy Duty		
Aperture	Wire Diameter	Weight	Open Area	Wire Diameter	Weight	Open Area	Wire Diameter	Weight	Open Area
mm	mm	kg/m²	%	mm	kg/m²	%	mm	kg/m²	
2.0	-	-	-	-	-	-	1.37	7.1	35
3.2	-	-	-	2.00	9.9	37	2.50	14.1	31
4.0	2.00	8.50	44	2.50	12.2	38	3.05	16.8	32
5.0	2.00	7.80	51	2.50	16.6	44	3.05	14.7	38
5.6	2.50	9.80	48	3.05	13.7	41	4.00	21.2	34
6.4	2.50	8.89	51	3.05	12.6	46	4.00	19.6	38
6.8	2.50	9.00	51	3.05	10.0	44	4.00	19.7	37
7.1	2.50	8.80	55	3.05	11.9	48	4.00	18.3	41
8.0	2.50	10.80	54	4.00	16.9	44	5.00	24.4	38
9.0	3.05	9.80	55	4.00	15.6	48	5.00	22.7	44
10.0	3.05	9.10	58	4.00	14.5	51	5.00	21.2	44
11.2	3.05	10.40	54	5.00	19.6	48	5.60	28.6	44
12.5	4.00	12.30	57	5.00	18.1	51	5.60	20.0	47
14.0	4.00	16.70	54	5.00	20.0	51	6.80	24.6	48
16.0	5.00	15.10	58	5.60	19.5	56	6.80	22.6	51
18.0	5.00	14.50	58	6.80	20.7	55	7.10	25.0	51
20.0	5.60	14.00	61	6.80	19.2	58	7.10	24.0	54
22.0	5.60	17.60	61	7.10	21.5	57	8.00	26.7	54
25.0	6.80	16.10	64	7.10	20.1	60	8.00	24.6	57
28.0	7.00	14.70	63	8.00	19.0	61	9.00	27.8	57
32.0	8.00	20.60	64	9.00	26.0	60	10.00	30.4	58
38.0	8.00	18.70	67	9.00	28.1	64	10.00	27.9	61
40.0	9.00	21.00	67	10.00	25.4	64	11.20	31.1	61
45.0	9.00	19.50	69	10.00	23.4	67	11.20	28.4	64
50.0	10.00	23.20	69	11.20	26.0	67	12.50	31.8	64
56.0	10.00	19.20	72	11.20	28.7	69	12.50	29.0	67
63.0	10.00	17.40	75	11.20	24.5	72	12.50	25.1	70
76.2	10.00	14.80	78	11.20	16.0	75	12.50	20.0	73
80.0	10.00	16.00	79	11.20	17.5	72	12.50	21.5	75
90.0	10.00	14.00	81	11.20	15.7	79	12.70	19.4	77
100.0	10.00	10.00	82	11.20	14.3	81	12.70	17.6	79

Other mesh sizes and types are available upon request.

Slot Wire Mesh

Slot Wire Mesh is one of the most commonly used mining screens in mining, mineral processing, quarrying and aggregating industries. Typically, it is made of wires of the same diameter that are crimped to form precise apertures. As such, slot wire mesh has a larger open area, a higher throughout and a better self-cleaning effect than square wire mesh.

- Both carbon steel and stainless steel wires are available
- Flat top screens and double crimp screens are available
- Larger open area and better self-cleaning effect
- Special discount for large orders and a wide range of promotion campaigns

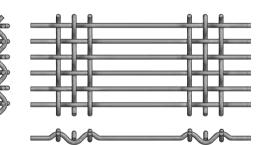




WEAVING TYPES

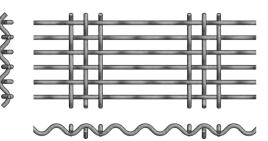
Slotted flat wire mesh

It adopts indistinctly crimped and flat undulated wires which tend to maintain a flat work surface. It employs thick diameter or double wires to achieve greater resistance to heavy materials.



• Slotted crimped wire mesh

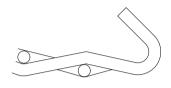
It has similar characteristics to the slotted flat wire mesh, but has crimped wires instead of straight wires, which gives it more rigidity and allows the material to turn and rotate on its surface.



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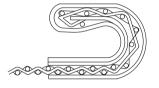
+ EDGE TYPES



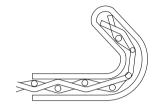




reinforced shroud edge

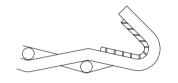


Reinforced shroud edge





Inside reinforced formed edge



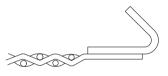


Double folded reinforced shroud edge





Welded bent plate edge



+ SPECIFICATION

Width: up to 2 m or upon request. Length: 30 m or upon request.

Aperture (mm)	Wire Diameter (mm)	Weight (kg/m²)	Open Area (%)
1.50 × 50.00	1.25	4.12	53
2.00 × 50.00	1.25	3.56	60
2.50 × 50.00	1.25	3.15	65
2.50 × 50.00	1.60	4.77	59
3.00 × 50.00	1.60	3.95	63
3.50 × 50.00	1.60	3.97	67
4.00 × 50.00	2.00	5.41	64
5.00 × 50.00	2.00	4.77	69
5.00× 60.00	2.50	6.81	64
6.00 × 50.00	2.00	4.29	72
6.00 × 60.00	2.80	7.50	65
7.00 × 60.00	3.15	8.45	65
8.00 x 60.00	3.15	7.85	68
9.00 x 60.00	3.15	7.33	70
10.00 x 60.00	3.15	6.89	72
10.00 x 60.00	4.00	10.55	67
12.00 x 60.00	3.15	6.17	75
12.00 x 60.00	4.00	9.50	70

Other mesh sizes and types are available upon request.

Self-Cleaning Screen



Self-Cleaning screen is a kind of mining screen manufactured with crimped or straight wires, which vibrate independently from one another, shaken by the vibration of the machine and by the weight of materials to be screened. Typically, it is perfect for conditions where materials tend to blinding, pegging or wedging due to their humidity, plasticity or shape. This kind of wire screen delivers higher production output and a longer lifespan.

- Both carbon steel wire and stainless steel wires are available
- Polyurethane cross bands and steel wire cross bands are available
- Various shapes and patterns are available
- Excellent self-cleaning effect
- Long wear life
- Special discount for large orders and various promotion campaigns

HIGHTOP® products can be purchased Online at www.minesep.com

+ CONNECTION

According to the different shapes we offer, our self-cleaning screen can be divided into three categories as shown below.

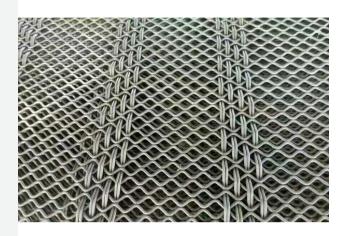


Square self-cleaning screen

Supported self-cleaning screen

Wave wire self-cleaning screen

Square self-cleaning screen

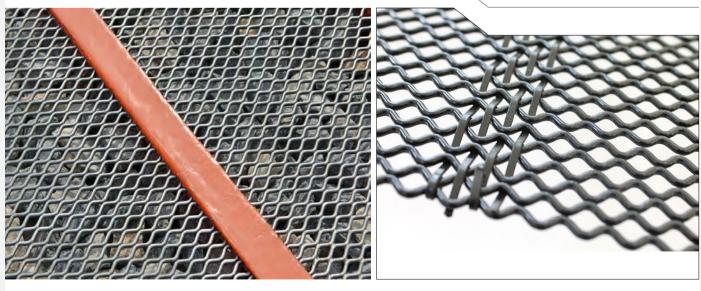


Square self-cleaning screen is our most popular selfcleaning screen. It has a good combination of screening capacity and precision. It can effectively prevent materials to be screened from clogging, blinding and pegging. In addition, its smooth screen surface helps increase the wear life of the screen significantly.

- Both carbon steel and stainless steel wires are available
- Both polyurethane cross bands and steel wire cross bands are available
- Providing precise and effective screening
- Preventing materials build-up, pegging and blinding
- Special discount for large orders and various promotion campaigns



BANDING TYPES

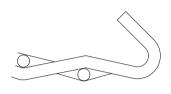


Square self-cleaning screen with polyurethane bands

Square self-cleaning screen with steel wire bands

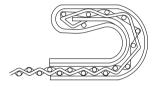
+ EDGE TYPES





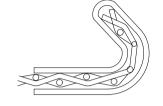


End tension reinforced shroud edge



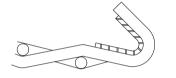


Reinforced shroud edge





Inside reinforced formed edge



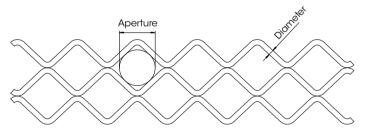


Welded bent plate edge

Double folded

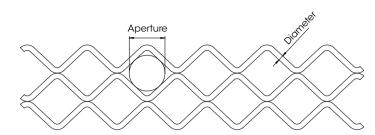
reinforced shroud edge







Aperture (mm)	Wire Diameter (mm)	Weight (kg/m²)	Open Area (%)
1.50	1.20-1.60	4.7-6.8	31–38
1.75	1.20-1.25	4.5-4.6	40
2.00	1.20-1.60	4.3-6.2	37–43
2.50	1.20-2.00	3.9-8.2	35–48
3.00	1.20-2.00	3.6-7.8	40-52
3.50	1.20-2.00	3.3-7.3	42–56
4.00	1.20-2.00	3.1-6.9	45–58
4.50	1.20-2.50	2.9-9.2	40-62
5.00	1.20-2.80	2.7-11.0	41-65
5.50	1.20-2.50	3.7-8.1	48-61
6.00	1.50-2.80	3.4-9.0	48-64



Aperture (mm)	Wire Diameter (mm)	Weight (kg/m²)	Open Area (%)
6.50	1.50–3.15	3.3-10.3	47-66
7.00	2.00-3.15	4.8-9.8	49-61
7.50	2.00-3.15	4.6-9.4	52-62
8.00	2.00-3.15	4.5-9.1	53-63
8.50	2.50	6.1	61
9.00	2.00-3.15	4.1-8.5	56–67
9.50	2.50-3.15	5.6-8.2	57-63
10.00	2.00-3.15	3.7-8.0	59-69
10.50	2.50-3.15	5.0-7.7	60–66
11.00	2.00-3.15	3.5-7.5	61-72
11.50	2.50-2.80	5.2-6.1	64–66
12.00	2.00-4.00	3.3-10.8	57-73
12.50	2.50-4.00	4.7-10.6	58-69
13.00	2.00-4.00	3.1-10.4	59-75
13.50	2.80	5.4	68
14.00	2.00-4.00	3.0-9.6	61-76
14.50	2.50-4.00	4.1-9.7	62-73
15.00	2.50-4.00	4.0-9.2	63-74
15.50	3.00-3.15	5.6–5.9	69-70
16.00	3.00-4.00	5.4-8.9	64-71
17.00	2.00-4.00	3.7-8.6	66–76
18.00	3.00-4.00	5.0-8.3	67-73
19.00	2.80-4.00	4.2-7.9	68–76
20.00	2.50-4.00	3.2-7.6	69–79
21.00	4.00	7.2	71
22.00	2.50-4.00	3.0-7.1	72-80
23.00	4.00	6.8	73
24.00	4.00	6.7	74
25.00	4.00-5.00	6.4-9.3	70–74
26.00	4.00-5.00	6.1-9.2	71-75
27.00	4.00	6.0	76
28.00	3.00-4.00	3.5-5.8	77-82
29.00	4.00	5.6	77
30.00	3.00-4.00	3.3-5.6	78-83
32.00	4.00	5.3	79
35.00	4.00-5.00	4.8-7.3	77-81
40.00	4.00-5.00	4.3-6.6	79-83
44.00	4.00	4.00	84

Supported square self-cleaning screen



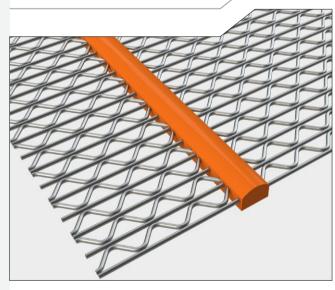
Supported Square Self-Cleaning Screen is

much like the square self-cleaning screen but its precision is increased with the addition of a straight wire in-between its crimped wires, which maintains the correct aperture size under heavy loads and high impact material screening. Its more precision classification prevents wedging of elongated particles.

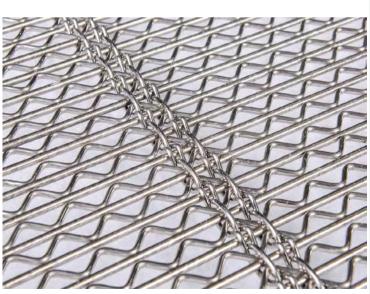
- Both carbon steel and stainless steel wires are available
- Both polyurethane cross bands and steel wire cross bands are available
- Perfect for working under heavy loads and high impacts
- Special discount for large orders and various promotion campaigns



+ BANDING TYPES



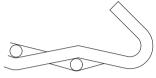
Square self-cleaning screen with polyurethane bands



Square self-cleaning screen with steel wire bands

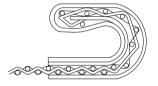
+ EDGE TYPES



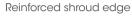


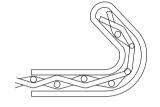


End tension reinforced shroud edge



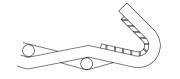








Inside reinforced formed edge

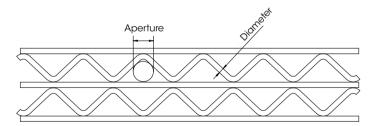




Welded bent plate edge

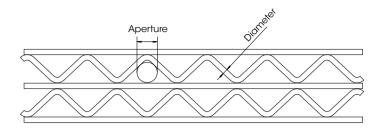
Double folded

reinforced shroud edge



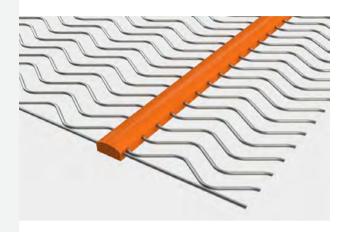
+ SPECIFICATION

Aperture (mm)	Wire Diameter (mm)	Weight (kg/m²)	Open Area (%)
1.50	1.20-1.25	4.8-5.5	29–37
1.75	1.20-1.25	4.5-5.3	40
2.00	1.20-1.60	4.3-6.3	36-43
2.50	1.20-2.00	3.8-8.0	37–49
3.00	1.20-2.00	3.5-7.6	38–54
3.50	1.20-1.60	3.4–5.4	47–56
4.00	1.20-2.50	3.0-9.2	42-60
4.50	1.50-2.50	4.0-7.5	46–58
5.00	1.50-2.80	3.9-9.1	45-59
5.50	1.50-2.50	3.0-6.7	52–65
6.00	1.50–3.15	3.0-10.7	45-66



Aperture (mm)	Wire Diameter (mm)	Weight (kg/m²)	Open Area (%)
6.50	1.50–3.15	3.3-10.3	47-66
7.00	2.00-3.15	4.8-9.8	49-61
7.50	2.00-3.15	4.6-9.4	52-62
8.00	2.00-3.15	4.5-9.1	53-63
8.50	2.50	6.1	61
9.00	2.00-3.15	4.1-8.5	56-67
9.50	2.50-3.15	5.6-8.2	57-63
10.00	2.00-3.15	3.7-8.0	59-69
10.50	2.50-3.15	5.0-7.7	60–66
11.00	2.00-3.15	3.5-7.5	61-72
11.50	2.50-2.80	5.2-6.1	64–66
12.00	2.00-4.00	3.3-10.8	57-73
12.50	2.50-4.00	4.7-10.6	58–69
13.00	2.00-4.00	3.1-10.4	59-75
13.50	2.80	5.4	68
14.00	2.00-4.00	3.0-9.6	61-76
14.50	2.50-4.00	4.1-9.7	62-73
15.00	2.50-4.00	4.0-9.2	63-74
15.50	3.00-3.15	5.6-5.9	69-70
16.00	3.00-4.00	5.4-8.9	64-71
17.00	2.00-4.00	3.7-8.6	66–76
18.00	3.00-4.00	5.0-8.3	67-73
19.00	2.80-4.00	4.2-7.9	68–76
20.00	2.50-4.00	3.2-7.6	69–79
21.00	4.00	7.2	71
22.00	2.50-4.00	3.0-7.1	72-80
23.00	4.00	6.8	73
24.00	4.00	6.7	74
25.00	4.00-5.00	6.4-9.3	70-74
26.00	4.00-5.00	6.1-9.2	71-75
27.00	4.00	6.0	76
28.00	3.00-4.00	3.5-5.8	77-82
29.00	4.00	5.6	77
30.00	3.00-4.00	3.3-5.6	78-83

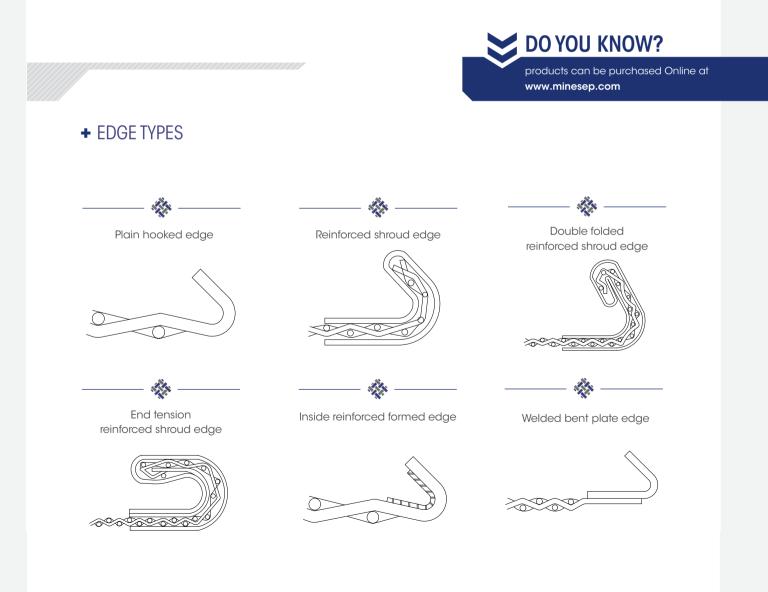
Wave wire self-cleaning screen

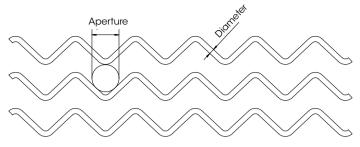


Wave Wire Self-Cleaning Screen is made with crimped wires placed parallel to each other. This delivers a very large screening area but lower precision. It is highly recommended for screening fines. It is typically used in small aperture sizes and in end tension decks.

- Both carbon steel and stainless steel wires are available
- Polyurethane cross band connection
- Used in small aperture sizes and in end tension decks

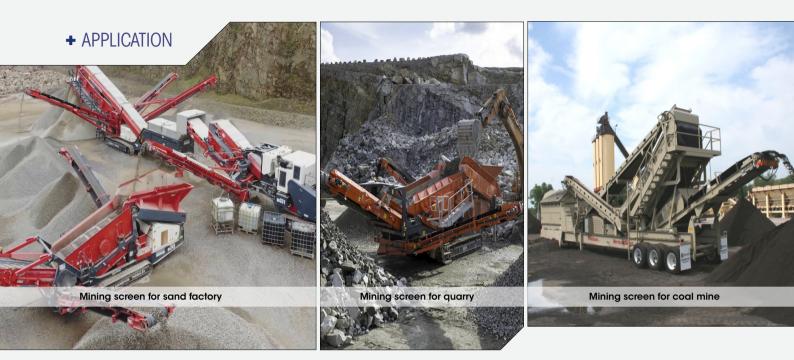
• Special discount for large orders and various promotion campaigns



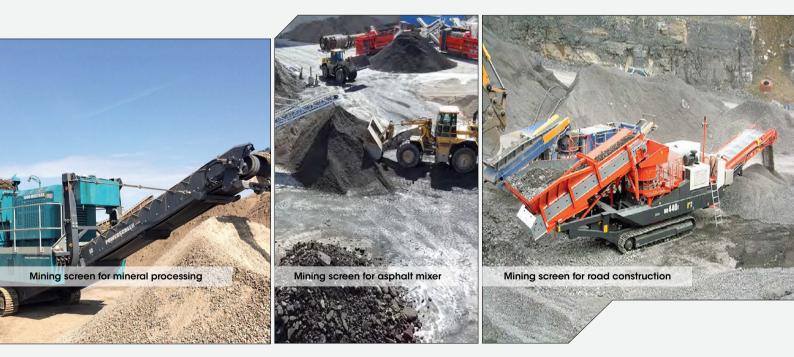


SPECIFICATION

Aperture (mm)	Wire Diameter (mm)	Weight (kg/m²)	Open Area (%)
1.50	1.20-1.25	3.8	50
1.75	1.20–1.25	3.5	55
2.00	1.20-1.60	3.3-4.8	51–57
2.50	1.20-2.00	3.1-5.9	53-60
3.00	1.20-2.00	2.8-5.4	57-64
3.50	1.20-2.00	2.5-5.4	57-67
4.00	1.20-2.00	2.3-4.8	62-70
4.50	1.20-2.00	1.9-4.5	64-75
5.00	1.50-2.80	2.7-8.2	56-71
5.50	2.00-2.50	4.1-6.2	61–67
6.00	1.50-2.80	2.5-7.1	60-73
6.50	2.00-2.50	3.7-5.6	64-70
7.00	2.00-3.15	3.4-6.4	67–72
7.50	2.00-3.00	2.2-6.9	62–63
8.00	2.00-3.15	3.1-6.1	69-74
8.50	2.00-2.50	2.8-4.3	73–77
9.00	2.00-3.15	2.7-6.0	69–79
10.00	2.00-3.15	2.5-5.2	73-80
11.00	2.80-3.15	1.9-4.9	75-85
12.00	2.50-4.00	2.0-7.2	71-84
12.50	2.50-4.00	3.1-7.2	71-80
13.00	2.00-3.00	3.3-4.3	71-74
14.00	2.50-4.00	2.9-6.7	73-82
15.00	2.50-4.00	3.1-6.4	74-80
15.50	3.00	3.8	80
16.00	3.00-4.00	3.9-6.4	75
17.00	3.00-4.00	3.8-6.2	75-80
18.00	3.00-4.00	3.7-5.6	78-80
19.00	3.00-4.00	3.4-5.5	78-82
20.00	3.00-4.00	2.2-5.2	79-86
22.00	3.00-4.00	3.0-5.0	80-84
24.00	4.00	4.8	81
25.00	3.00-4.00	2.8-4.7	81-85
27.00	4.00	4.2	83
28.00	4.00	4.1	83
30.00	3.00-4.00	2.2-3.8	85-87
35.00	4.00-5.00	3.4-5.2	83-86
40.00	4.00	2.7	89
45.00	4.00	2.5	90



Our mining screens are mainly used in mining, mineral processing, quarrying and aggregating industries. Typically, they are mounted on crushers and trommels in quarries and mines as well as on asphalt mixers in road construction for grading, separating and sorting ores, sands, rocks, gravels and other materials.



Custom Mining Screen Solutions To Meet Your Specific Screening Demands

We offer mining screens with a complete range of openings, wire diameters, metal and weave types enabling us to provide our customers with the correct product for all mining, aggregate, asphalt mixing and road construction applications. For applications demanding maximum productivity and service, please contact Hightop for high accuracy, long wear life and high anti-impact mining screens.

If you want to learn more about our custom Mining Screen solutions,

please visit: www.minesep.com



For more detailed information, videos, technical data and drawings, please visit at our website: www.minesep.com



