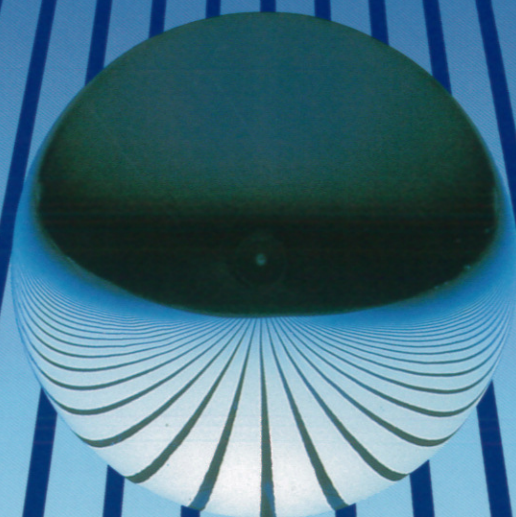


WEDGE WIRE SCREEN

WELDED, LOOPED AND POLYURETHAN TYPES



TOYO SCREEN

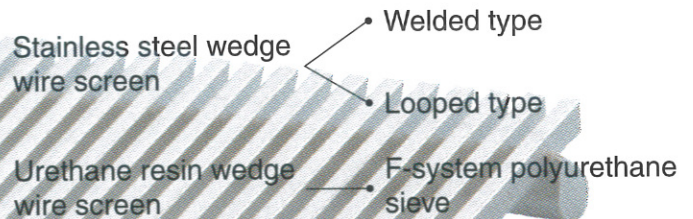
What Is A Wedge Wire Screen?

The wedge wire screen is a multi-purpose screen with the following features;

- i . Slits which are formed to fit each use by arranging wedge-shaped profile wires in parallel at equal intervals,
- ii . Reduced possibility of clogging, and
- iii . Rugged and precision-made construction.

The screen is applicable for comprehensive uses such as classification, dewatering, concentration, filtration, etc. in all the industries.

The wedge wire screen is classified as follows;



Classification of the Wedge Wire Screen

■ Welded type wedge wire screen

This is a screen with slits which are formed by pressure-welding cold-formed wires to support rods.

The screen is flexible in workability, and can easily be formed into various shapes. Furthermore, this type is of lighter weight as compared with the looped type.

■ Looped type wedge wire screen

This is a screen with slits which are secured by threading the loops cold-formed by a press out of raw circular wires with rods. Therefore, this type is suitable for uses of heavy load. Furthermore, this type is highly evaluated for its slit-width precision, especially for fine slits such as $50\mu\text{m}$.

■ Polyurethane sieve

The F-system polyurethane sieve, which is a product independently developed by us, is a slit screen formed by precision injection molding of thermoplastic polyurethane resin. This type is superior especially in corrosion resistance and antifriction property.

TOYO SCREEN is the only Japanese company which produces and sells all those three kinds of the screen.

Features of the Wedge Wire Screen

1. Less blinding and high dewatering efficiency

The screen's blinding or clogging is reduced and therefore its dewatering efficiency becomes high, since its contact area with solids passing through is small because of the wedge-shaped profile of wires, and the slits widening toward the bottom allow the solids pass through it smoothly. Furthermore, the screen's backwashing efficiency is high with the result that its maintenance is easy.

2. High strength and rugged construction

As compared with conventional woven wire cloths, this screen can form finer slits with thicker wires.

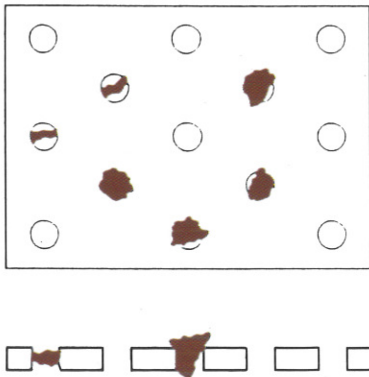
3. Broad flexibility in design

The screen is so flexible in workability that it can be formed into various shapes such as flat panels, cylinders, cones, etc.

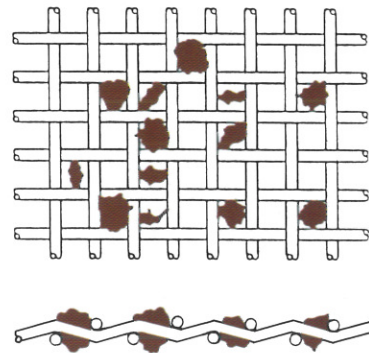
4. Flat surface

The screen's flat surface insures the smooth flow of processing materials, catalysts, etc.

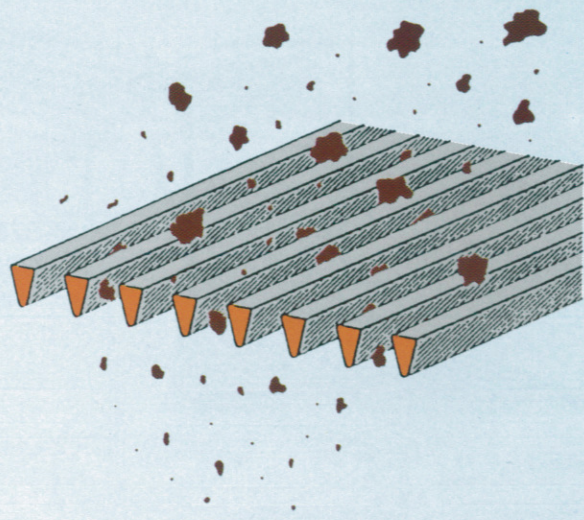
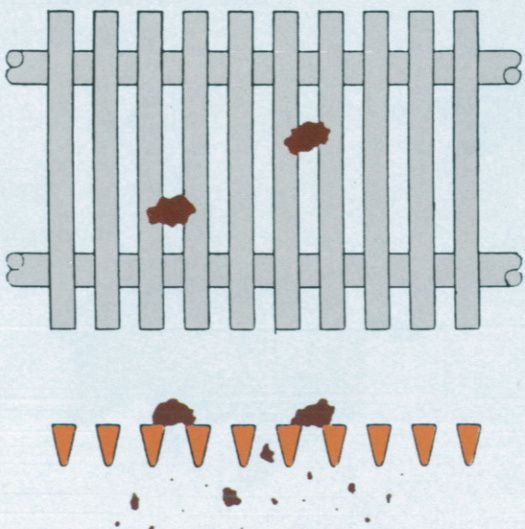
■ Perforated Metal Screen



■ Woven Wire Cloth



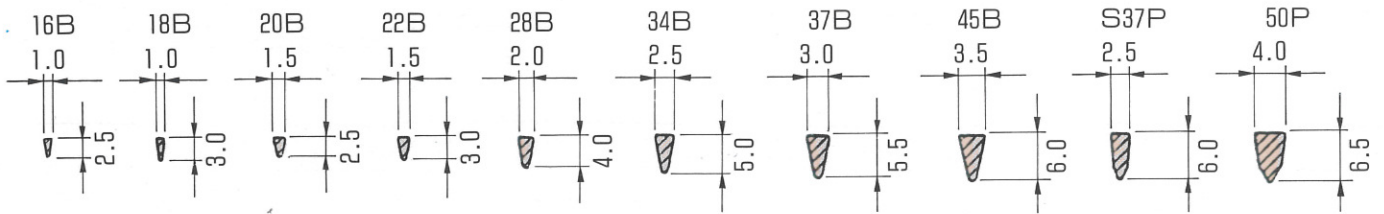
■ Wedge Wire Screen



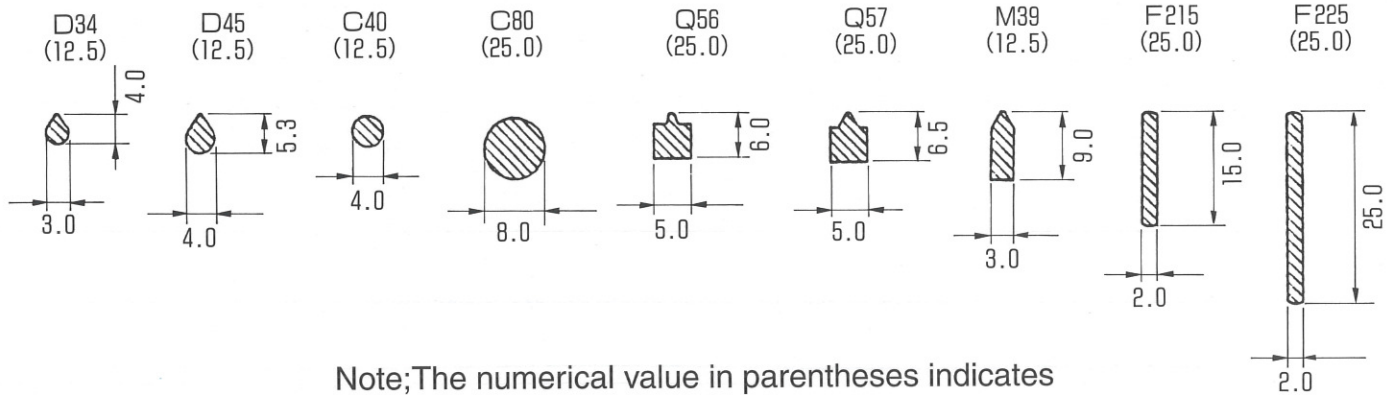


Welded Wedge Wire Screen

Variety of Wedge Wires



Variety of Support Rods



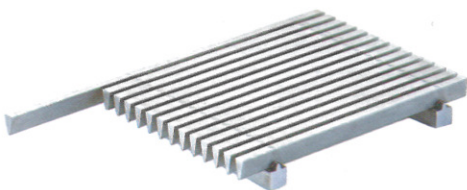
Note; The numerical value in parentheses indicates the shortest pitch of support rods.

Wedge Wire Screens

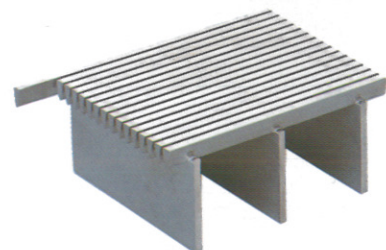
(Combination samples of wedge wires and support rods)



Type 37B 1.0mm
Type C80 50pitch



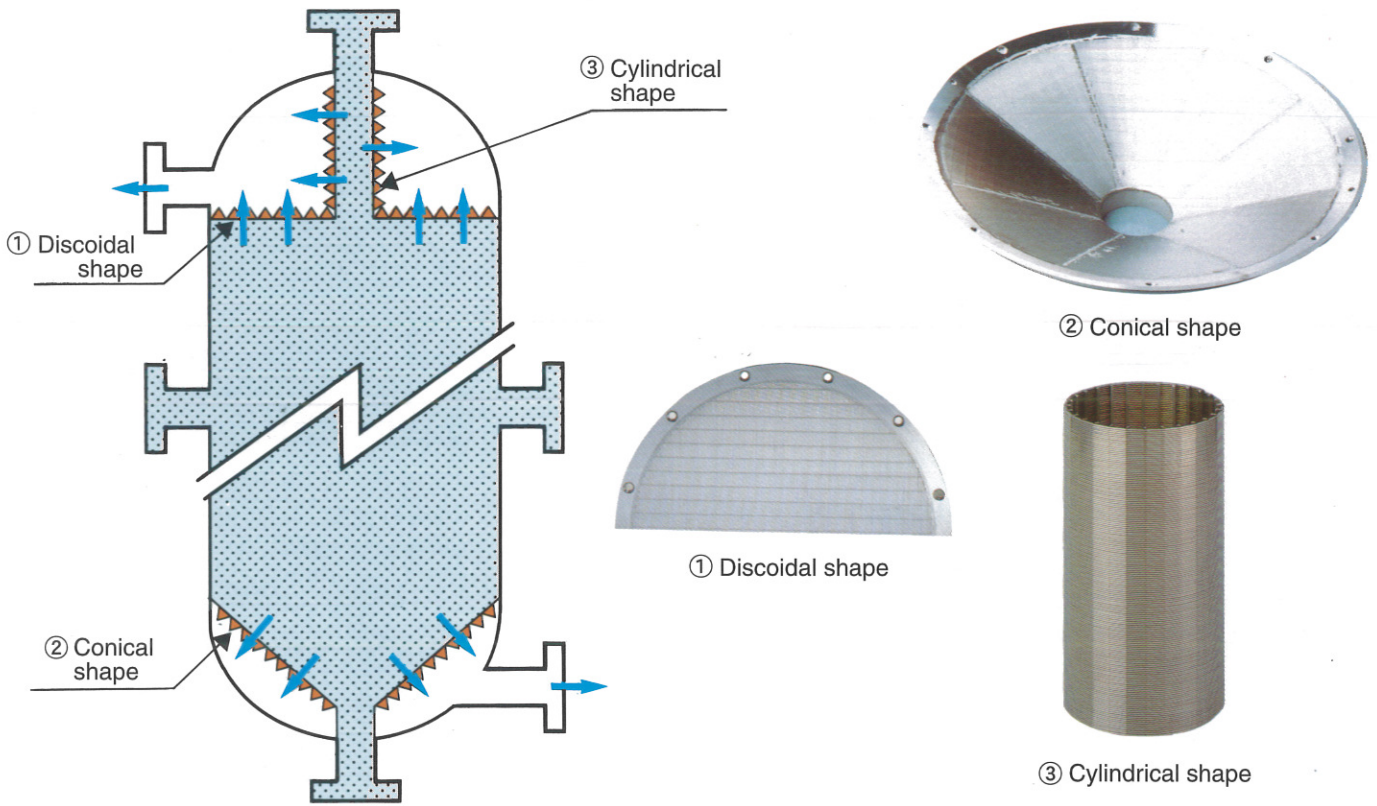
Type 34B 0.7mm
Type Q56 50pitch



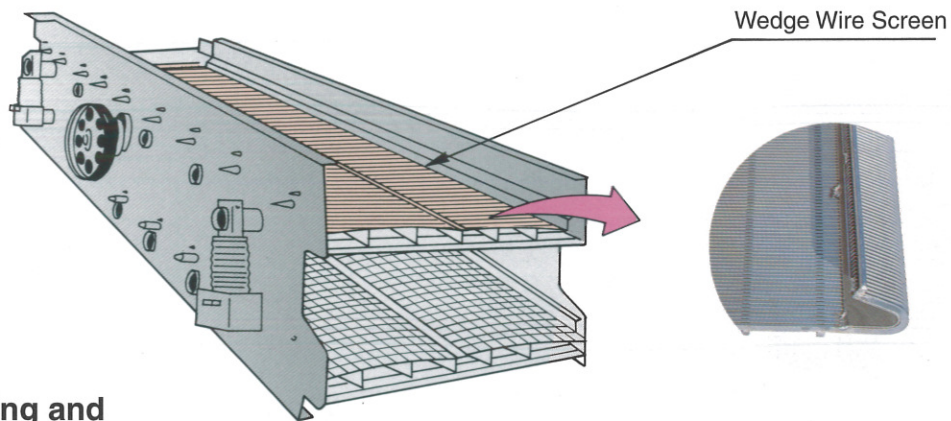
Type 28B 0.7mm
Type F225 25pitch

USE

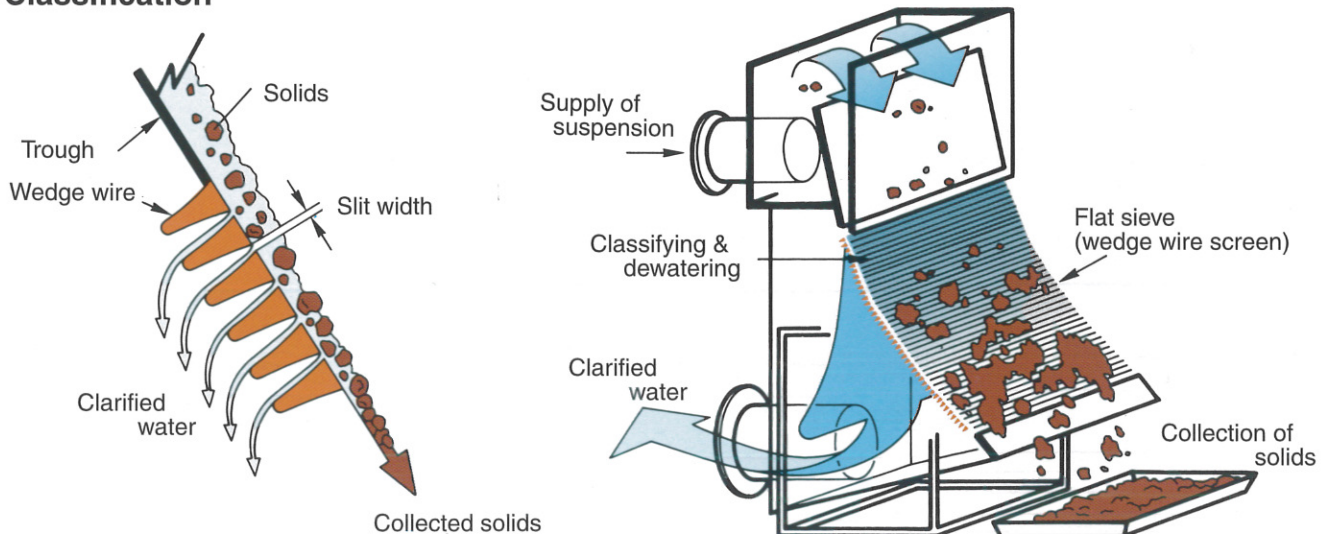
This screen can be used for a variety of uses such as application to water catching and draining pipes, supporting of active carbon, ion exchange resin pieces, catalysts, filter mediums, etc., dewatering, and classification.



■ For Vibrating Screens

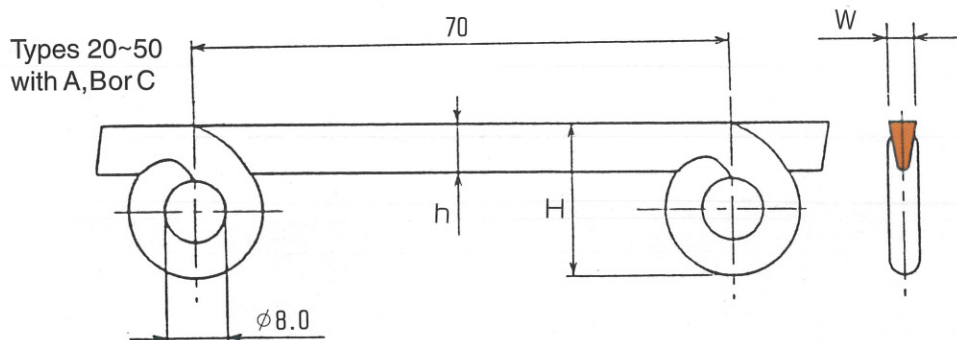
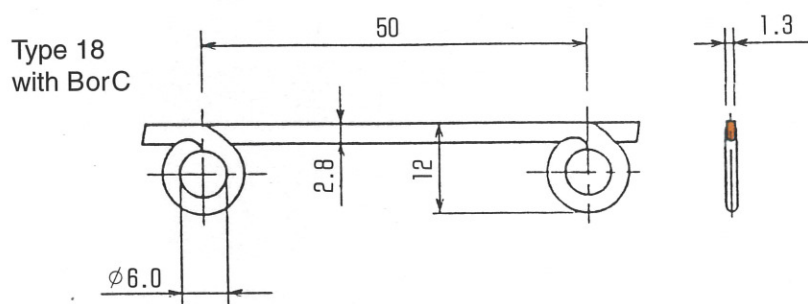
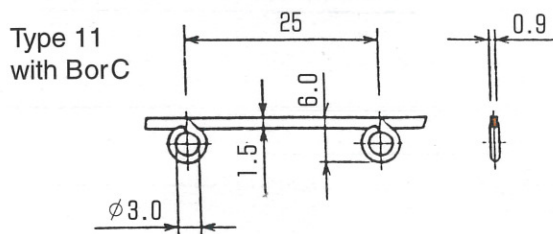


■ For Dewatering and Classification



Looped Wedge Wire Screen

Variety of Wedge Wires

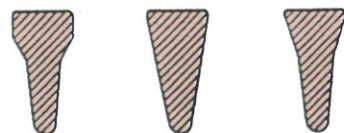


Wedge Wire's profiles

Type A
(Used for highly abrasive materials)

Type B
(Standard)

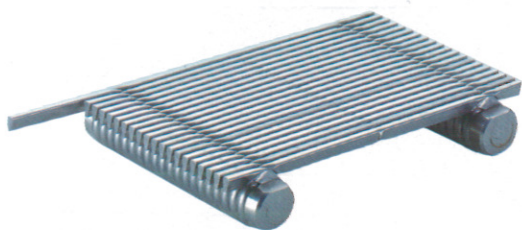
Type C
(Efficient for dewatering use)



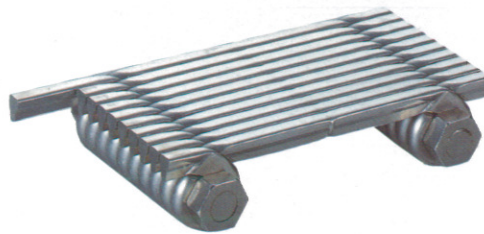
■ Dimensions of Looped Wedge Wires

(Unit: mm)

Combination	Top Face width(W)	Wire Height(h)	Loop Height(H)
11 B,C	0.9	1.5	6.0
18 B,C	1.3	2.8	12.0
22 B,C	1.6	3.2	14.5
24 B,C	1.8	3.5	15.0
28 A,B,C	2.1	4.0	16.5
34 A,B,C	2.5	5.0	18.0
37 A,C	3.0	5.5	18.5
42 A,C	3.2	6.0	19.5
45 A,C	3.5	6.5	20.5
50 A,C	4.0	7.5	21.5



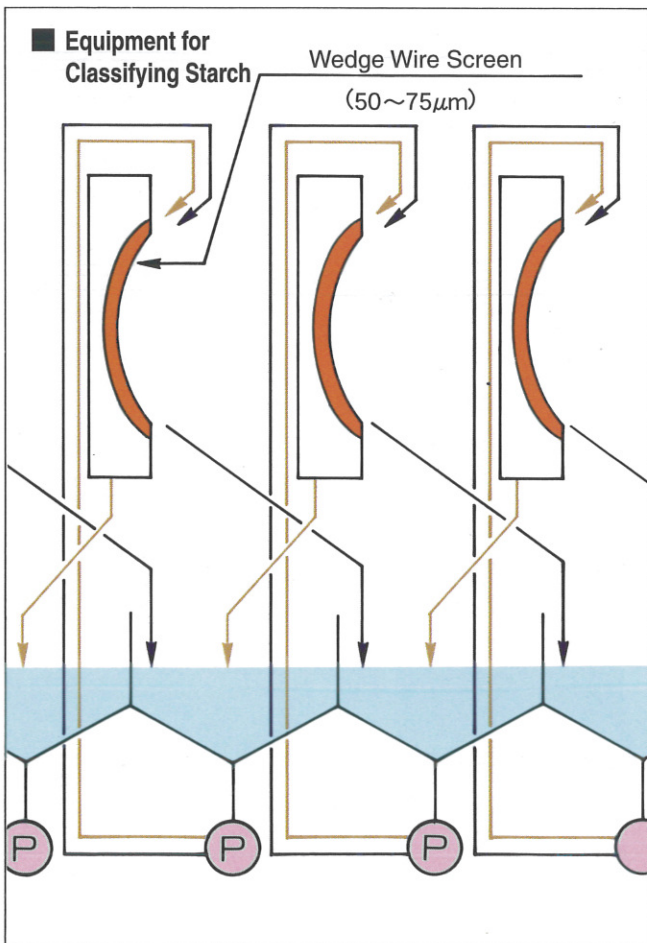
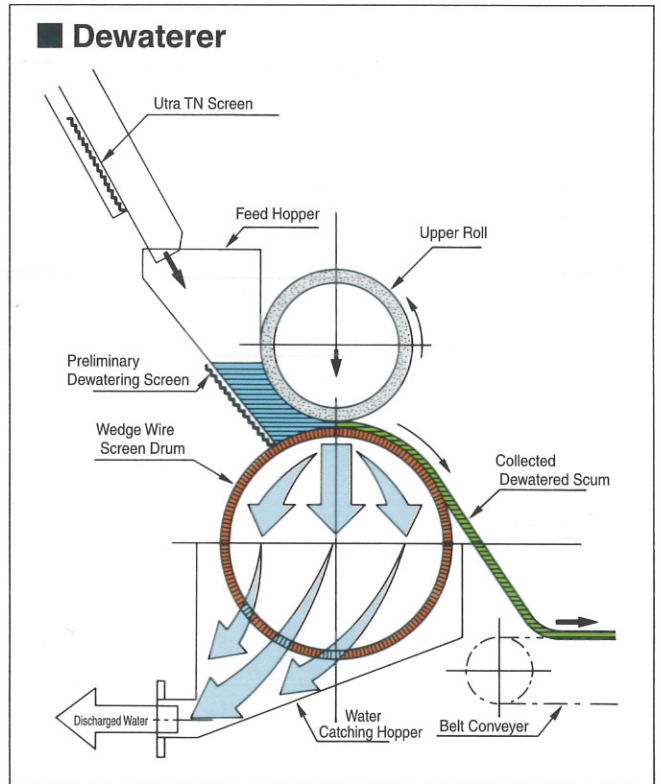
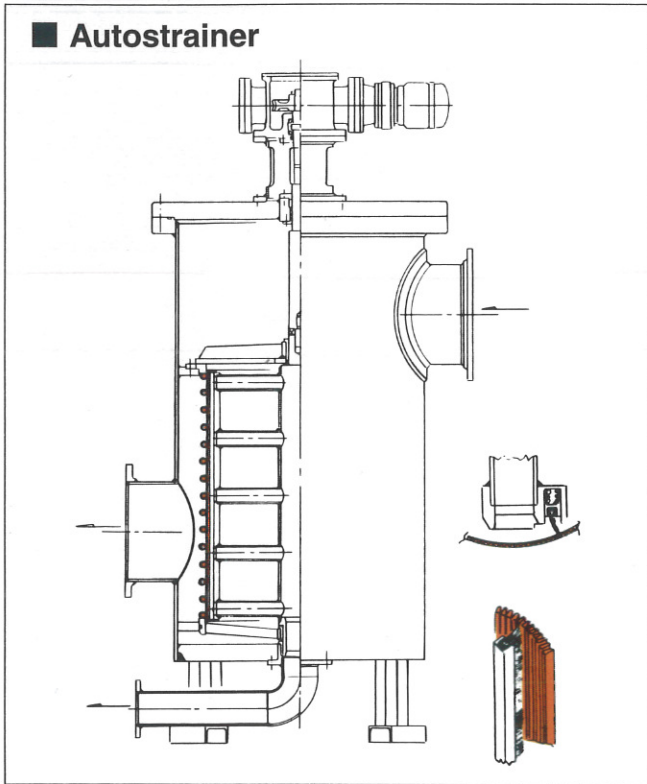
Type 28BS Slit 0.5mm



Type 50AS Slit 0.7mm

USE

This screen can be used for applications which require screen materials to be specially high-strength; e.g., in autostrainers with automatic raking system, and press dewaterers, and for fine and high-precision classification of starch.

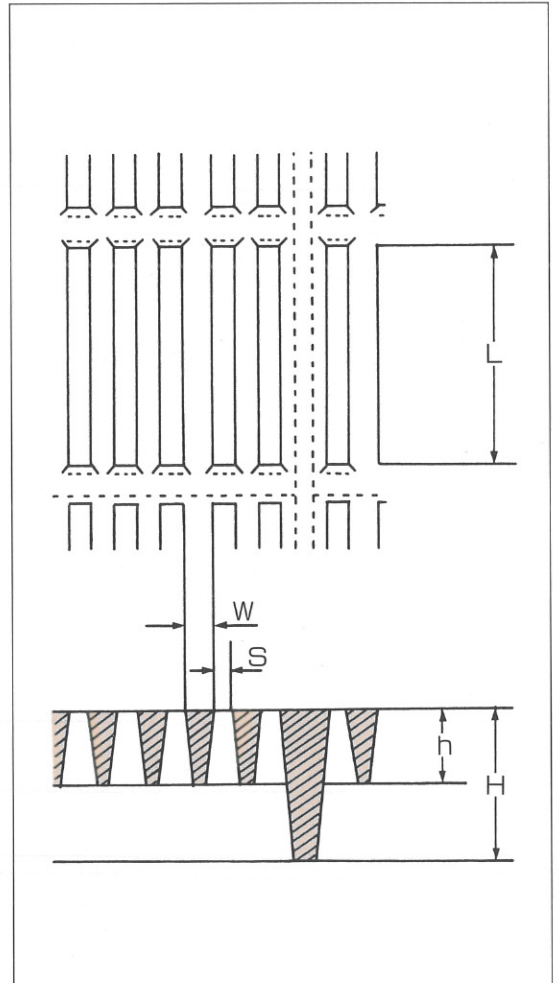




F-System Polyurethane Sieve

(Unit: mm)

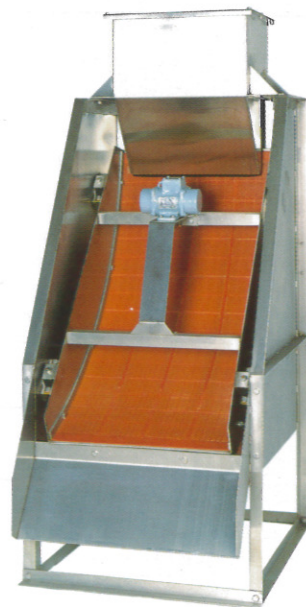
TYPE	S	L	W	h	H	Opening Rate(%)
T10L-0.2	0.2	10	1.5	4	20	9.5
T10L-0.3	0.3	10	1.7	4	20	12.9
T10L-0.4	0.4	15	1.8	4	20	15.6
T10L-0.5	0.5	15	1.9	4	20	17.9
T10L-0.6	0.6	15	1.9	4	20	20.6
T10L-0.7	0.7	15	2.0	4	20	22.6
T10L-0.8	0.8	15	2.1	5	20	23.3
T10L-1.0	1.0	15	2.2	6	20	26.8
T10M-0.5	0.5	15	3.1	9	20	12.0
T10M-0.6	0.6	15	3.1	9	20	13.9
T10M-0.7	0.7	15	3.2	9	20	15.3
T10M-0.8	0.8	15	3.1	9	20	17.6
T10M-0.9	0.9	15	3.1	9	20	19.8
T20M-1.0	1.0	31	3.1	9	20	21.2
T20M-1.2	1.2	31	3.2	10	20	23.7
T20M-1.3	1.3	31	3.1	10	20	25.6
T20M-1.4	1.4	31	3.1	10	20	26.6
T20M-1.5	1.5	31	3.2	10	20	27.8
T20M-1.6	1.6	31	3.1	10	20	29.5
T20M-2.0	2.0	31	3.5	11	20	31.5
T20M-3.0	3.0	31	3.5	12	20	40.0
T20M- 0	0	0	—	5	20	0



※ In case of slits exceeding 3mm, please select to use G-System polyurethane sieve for existing vibrating screens.



Element 150×150×20(mm)

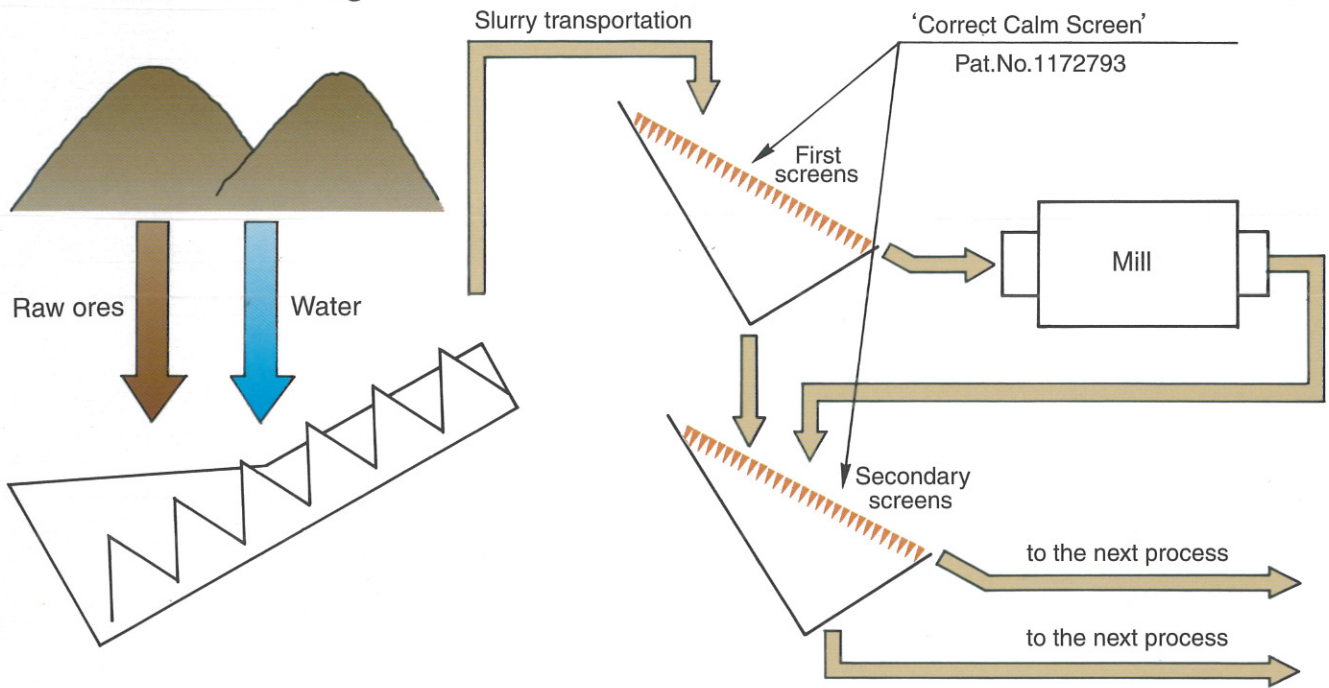


'Urethane Curved Screen'
Pat.No.1169919

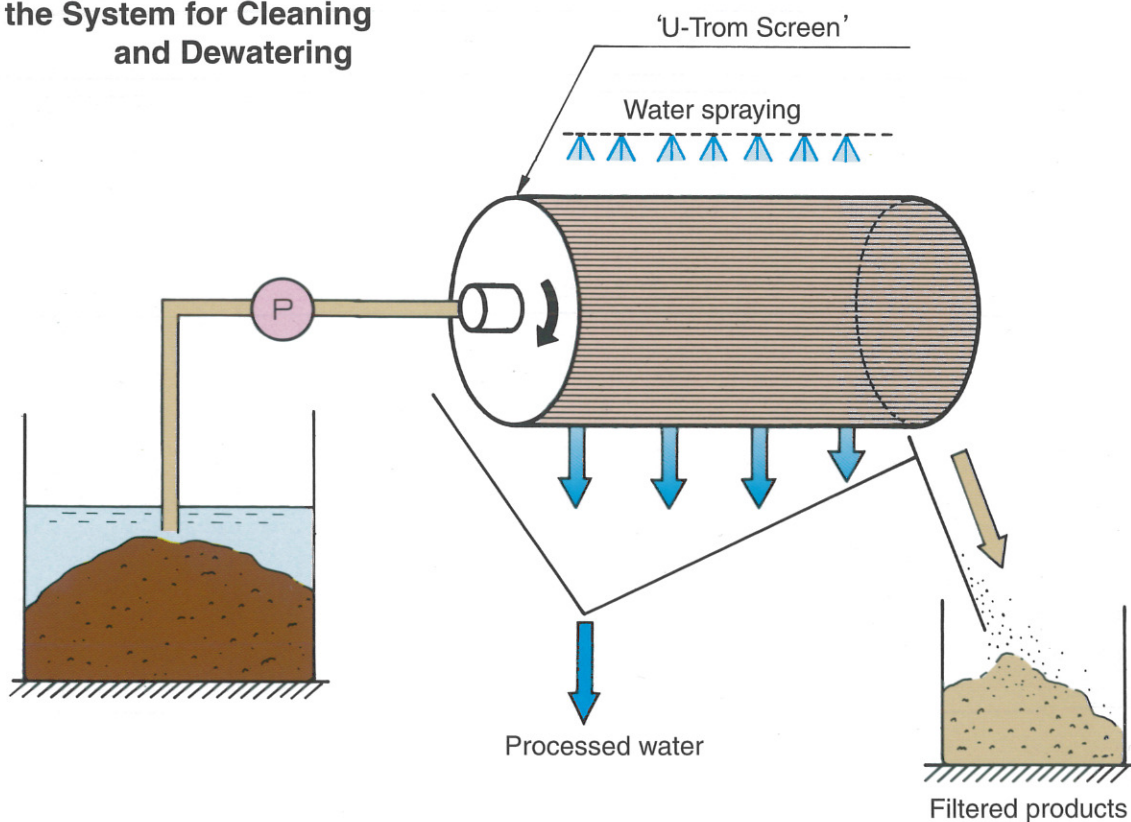
USE

This screen can be comprehensively used especially in a field where screen materials are required to be friction resistant; e.g., for purposes such as the classification, dewatering, and demiring of sand, silica sand, crushed sand and other miscellaneous ores, the desalting and washing of sea sand, and the cleaning and dewatering of filter mediums for recycled use.

■ For the System for Classifying and Dewatering Sand



■ For the System for Cleaning and Dewatering



Opening Rate and Unit Weight of Welded Wedge Wire Screen

Slit Width		Wire Spec. Combination	Opening Rate (%)	Unit Weight (kgs/m ²)
mm	mesh			
0.1	150	18 B	8.5	19.8
		22 B	5.9	18.9
0.15	100	18 B	12.3	19.1
		22 B	8.5	18.4
0.25	60	18 B	18.8	17.9
		22 B	13.4	17.6
		28 B	10.4	23.0
		34 B	8.5	27.9
0.5	32	22 B	23.5	15.9
		28 B	18.8	21.1
		34 B	15.7	25.9
		37 B	13.4	27.9
		45 B	11.8	30.4
0.75	22	22 B	31.3	14.5
		28 B	25.6	19.5
1.0	16	28 B	31.3	18.2
		34 B	26.9	22.7
		37 B	23.5	24.9
		45 B	20.9	27.4
		50 P	18.8	32.5
1.5	12	34 B	35.3	20.4
		37 B	31.3	22.5
		45 B	28.2	25.1
		50 P	25.6	29.9
2.0	9	37 B	37.6	20.7
		45 B	34.2	23.2
		50 P	31.3	27.7
3.0	6	45 B	43.4	20.2
		50 P	40.3	24.3
4.0	5	45 B	50.1	18.0
		50 P	47.0	21.8

★The above unit weight is calculated on the basis of support rod M39 and pitch 50mm.
Combination with any desired slit is available, even if such is not on the above table.

Opening Rate and Unit Weight of Looped Wedge Wire Screen

Slit Width		Wire Spec. Combination	Opening Rate (%)	Unit Weight (kgs/m ²)
mm	mesh			
0.05	270	11	5.1	15.3
0.075	200	11	7.5	14.9
0.1	150	11	9.5	14.6
		18	6.8	30.0
		22	5.6	33.3
		28	4.3	38.8
0.15	100	11	13.6	14.0
		18	9.9	29.0
		22	8.2	32.5
		28	6.2	38.1
0.25	60	18	15.4	27.2
		22	12.9	30.9
		28	10.1	36.7
0.5	32	24	20.5	28.5
		28	18.1	33.7
		34	15.7	42.1
		37	13.4	43.0
0.75	22	28 A	24.8	32.4
		34 A	21.8	39.3
		37 A	18.9	41.5
		45 A	16.7	52.2
		50 A	15.2	54.7
1.0	16	28 A	30.2	31.0
		34 A	26.8	38.6
		37 A	23.5	39.7
		45 A	20.9	50.9
		50 A	19.1	52.2
1.5	12	34 A	34.8	35.8
		37 A	30.9	37.2
		50 A	25.9	50.1
2.0	9	34 A	42.0	33.8
		42 A	35.6	41.4
		50 A	31.5	49.3
3.0	6	42 A	43.5	37.3
		50 A	39.6	42.0

★ Any desired slit which is not indicated on the above table is available.

For Other Data and Information, Please Feel Free to Contact us for Request.

Production Items

- Wedge Wire Screen
- Ultra TN Screen
- Woven Wire Cloth
- Perforated Metal Screen
- Rubber Sheet Screen
- TS Polyurethane Screen
- TS Separator(Sludge Dewaterer)
- TS Drum Type Press Dewaterer

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Chuo-ku, Tokyo, 104-0031 Japan
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