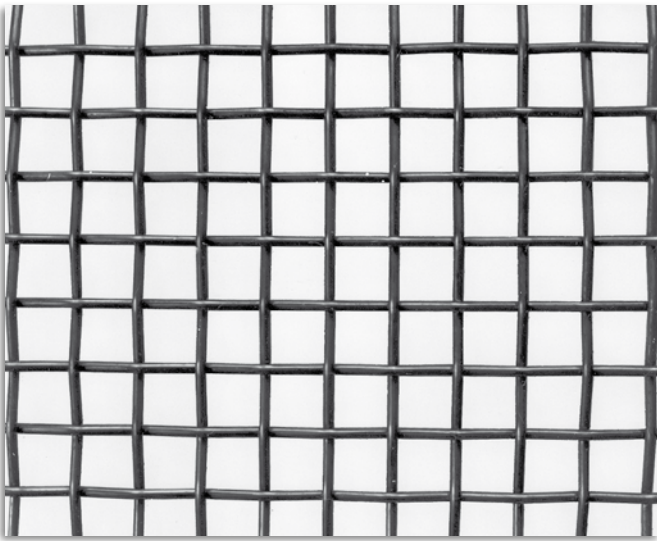


# Sieves.

**REKORD / ONDULA  
TRIA® / SERPENTI  
HARP SCREENS**

 **STEINHAUS**

# REKORD - Woven Wire Mesh Screens



## REKORD - Screens with square mesh openings

Standard screen panel, reliable in use for precise separation, also for oblong and "fish shaped" products. Solid mesh structure, even when badly worn.

REKORD screens are woven wire cloth with square meshes in plain weave as per DIN 4185-1 for the separation of screening products into required cut sizes on screening machines with or without tensioning devices, in screening drums and on other screening equipment. Standard width: 1000 / 1250 / 1600 / 2000 mm.

### Technical Data:

mesh opening		standard execution			medium execution			heavy execution			very heavy execution		
		wire Ø	relative open screen area	weight	wire Ø	relative open screen area	weight	wire Ø	relative open screen area	weight	wire Ø	relative open screen area	weight
(µm)	(mm)	(mm)	α <sub>o</sub> %	(kg/m <sup>2</sup> )	(mm)	α <sub>o</sub> %	(kg/m <sup>2</sup> )	(mm)	α <sub>o</sub> %	(kg/m <sup>2</sup> )	(mm)	α <sub>o</sub> %	(kg/m <sup>2</sup> )
250	0,25	0,14	41	0,64									
315	0,315	0,16	45	0,69									
400	0,4	0,18	48	0,71									
500	0,5	0,22	48	0,85									
630	0,63	0,28	48	1,1									
710	0,71	0,32	48	1,26									
800	0,8	0,32	51	1,16									
1000	1,0	0,5	44	2,12	0,63	38	3,09						
	1,25	0,63	44	2,68	0,8	37	3,92						
	1,6	0,8	45	3,37	1,0	38	4,89						
	1,8	1,0	41	4,54	1,12	38	5,46						
	2,0	1,12	38	6,1	1,25	41	5,11	1,4	35	7,38			
	2,24	0,9	51	3,38	1,12	44	4,47	1,4	38	7,94			
	2,5	1,0	51	3,63	1,25	45	5,28	1,6	37	7,93			
	2,8	1,12	51	4,06	1,6	41	7,39	1,8	37	8,95			
	3,15	1,12	54	3,73	1,6	44	6,84	1,8	41	8,31			
	3,55	1,25	55	4,13	1,6	48	6,31	2,0	41	9,15			
	4,0	1,25	58	3,77	1,6	51	5,91	2,0	45	8,47			
	4,5	1,4	58	4,22	2,0	48	7,81	2,2	45	9,15			
	5,0	1,4	61	3,89	2,0	51	7,26	2,2	48	8,54			
	5,6	1,4	64	3,56	2,0	54	6,68	2,2	51	7,98			
	6,3	1,6	64	4,12	2,0	58	6,12	2,5	51	9,02	2,8	48	10,94
	7,1	1,8	64	4,62	2,2	58	6,61	2,5	55	8,27	2,8	51	10,06
	8,0	1,8	67	4,20	2,5	58	7,56	2,8	55	9,22	3,2	51	11,61
	9,0	1,8	70	3,81	2,5	64	6,9	2,8	58	8,54	3,2	54	10,66
	10,0	2,0	70	4,23	2,5	64	6,35	3,2	57	9,85	4,0	51	14,51
	11,2	2,2	70	4,59	3,2	61	9,03	3,6	57	11,12	4,0	54	13,37
	12,5	2,2	72	4,18	3,2	63	8,28	3,6	60	10,22	4,0	57	12,32
	14,0	2,2	75	3,78	2,8	70	5,93	3,6	63	9,35	4,0	51	11,29
	15,0	2,5	73	4,7	3,2	68	7,6	4,0	62	11,00	5,0	56	16,9
	16,0	2,5	75	4,29	3,2	70	6,75	3,6	67	8,4	4,0	64	10,16
	18,0	3,2	72	6,13	4,0	67	9,24	5,0	61	13,8			
	20,0	3,2	74	5,61	4,0	70	8,47	5,0	64	12,7			
	22,4	3,2	77	5,08	4,0	72	7,7	5,0	67	11,59			
	25,0	4,0	74	7,00	5,0	70	10,53	6,3	64	16,1			
	28,0	4,0	77	6,35	5,0	72	6,92	6,3	67	14,7			
	32,0	5,0	75	8,58	6,3	70	16,1						
	36,0	5,0	77	7,74	6,3	73	11,92						
	40,0	5,0	79	7,08	6,3	74	9,98						
	45,0				6,3	77	9,83						
	50,0				6,3	79	8,95						

This chart gives an overview about mesh openings and wire diameters. Other executions on request.



## REKORD-REKTAN - Screens with rectangular mesh openings

Screen panel for products with a low proportion of oblong and "fish-shaped" products or if a larger percentage of oversize material is acceptable in the underflow product. Better open screen area, higher capacity, better ejection of near-mesh-grain size.

REKORD-REKTAN screens are woven wire cloth with rectangular mesh openings in plain weave as per DIN 4185-1, similar to our REKORD screens. The length to width ratio is 3:1, with crosswires usually thicker than those running longitudinally. This results in a solid mesh structure and a large open screen area. The aperture length should be in the direction of material flow and the tensioning should be in the same direction, too. Standard width: 1000 / 1250 / 1600 / 2000 mm.

### Material / Quality:

#### REKORD and REKORD-REKTAN

Spring steel as per EN 10270-1; stainless spring steel as per EN 10270-3 (pre-standard) and wrought copper alloys available on request.

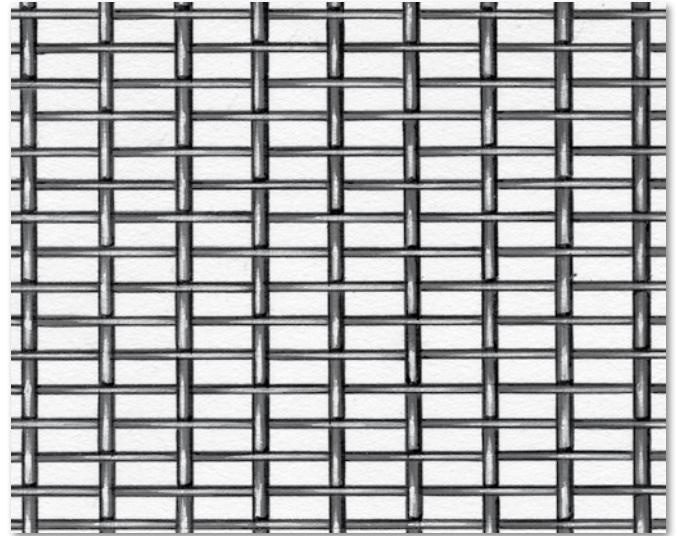
#### ONDULA-REKTAN

Spring steel as per EN 10270-1; chrome-nickel steel as per EN 10088-3.

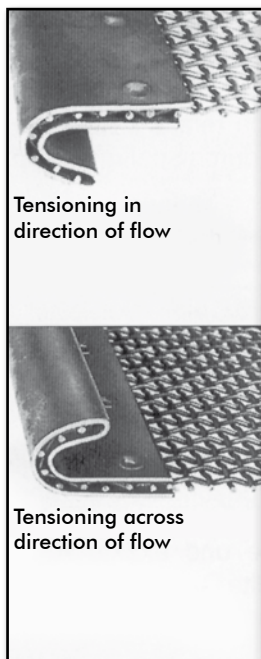
#### ONDULA and ONDULA-THIN WIRE

Spring steel as per EN 10270-1.

### Tensioning hooks for screens on sieves with tensioning device; dimensions and abbreviations

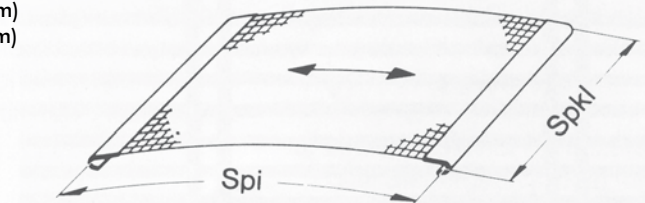
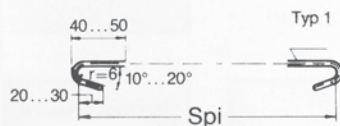


mesh opening		wire Ø		relative open screen area a <sub>o</sub> %	weight (kg/m <sup>2</sup> )
(mm)		along (mm)	across (mm)		
0,25	x 0,75	0,14	0,125	58	0,45
0,315	x 0,95	0,16	0,14	63	0,5
0,4	x 1,2	0,18	0,16	63	0,5
0,5	x 1,5	0,22	0,20	63	0,6
0,63	x 1,9	0,28	0,25	63	0,8
0,8	x 2,4	0,32	0,28	57	1,5
1,0	x 3,0	0,5	0,63	56	1,9
1,25	x 3,75	0,63	0,8	56	2,4
1,6	x 4,8	0,8	1,0	57	2,9
1,8	x 5,4	0,9	1,1	57	3,3
2,0	x 6,0	0,9	1,4	57	3,6
2,24	x 6,7	0,9	1,4	60	3,3
2,5	x 7,5	1,0	1,6	60	3,4
2,8	x 8,4	1,12	1,8	60	4,2
3,15	x 9,5	1,12	1,8	60	3,8
3,55	x 10,7	1,25	2,0	63	4,2
4,0	x 12,0	1,25	2,0	66	3,9
4,5	x 13,5	1,4	2,2	66	4,3
5,0	x 15,0	1,4	2,2	68	3,9
5,6	x 16,8	1,4	2,2	70	3,6
6,3	x 18,9	1,6	2,5	70	4,1
7,1	x 21,3	1,8	2,8	70	4,6
8,0	x 24,0	1,8	2,8	75	4,2
9,0	x 27,0	1,8	2,8	75	3,8
10,0	x 30,0	2,0	3,2	75	4,2



#### lengthwise tensioning hook type 1

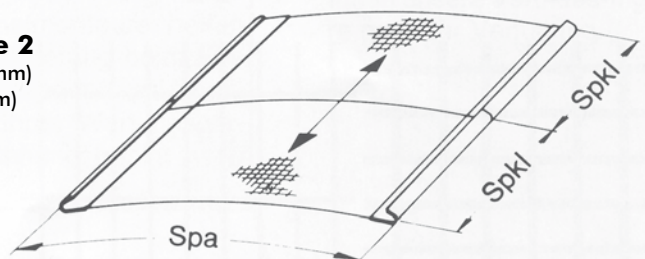
**Spi** = inside hook tensioning length (mm)  
**Spkl** = length along tensioning hook (mm)



Special designs on request.

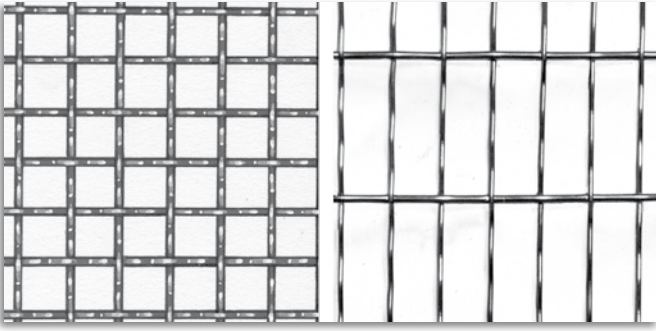
#### crosswise tensioning hook type 2

**Spa** = outside hook tensioning length (mm)  
**Spkl** = length along tensioning hook (mm)



Tensioning frames for sieves without tensioning devices can be supplied in any required design and size.

# ONDULA - Woven Wire Mesh Screens



## ONDULA-THIN WIRE - Screens with square and rectangular mesh openings

For difficult to screen and sticky products. Large open screen area especially for rectangular holes, low resistency to passing with high throughput and precise separation. Thin vertically crimped wires reduce blinding risks and cut clayey particles.

mesh opening (mm)	standard execution			heavy execution		
	wire Ø (mm)	relative open screen area a <sub>o</sub> %	weight (kg/m <sup>2</sup> )	wire Ø (mm)	relative open screen area a <sub>o</sub> %	weight (kg/m <sup>2</sup> )
3,15	0,63	69,5	1,5			
4,0	0,8	69,3	1,8			
5,0	0,9	71,8	1,9			
6,3	1,0	74,5	1,9	1,25	69,6	2,8
7,1	1,0	76,8	1,7	1,25	72,3	2,5
8,0	1,12	77,2	1,9	1,4	72,4	2,8
9,0	1,25	77,1	2,1	1,6	72,1	3,3
10,0	1,25	79,0	1,9	1,6	74,3	3,0
11,2	1,4	78,9	2,1	1,8	74,2	3,4
12,5	1,4	80,8	1,9	1,8	76,4	3,1
14,0	1,6	80,5	2,2	2,0	76,6	3,4
16,0	1,6	82,6	2,0	2,0	79,0	3,0
18,0	1,8	82,6	2,2	2,2	79,4	3,3
20,0	1,8	84,1	2,1	2,2	81,1	3,0
22,4	2,0	84,3	2,2	2,5	80,9	3,4
25,0	2,0	85,7	2,0	2,5	82,6	3,1
28,0	2,5	84,3	2,8	3,15	80,8	4,3
31,5	2,5	85,8	2,5	3,15	82,6	3,9

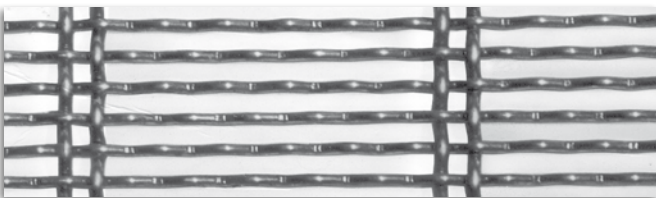
## ONDULA-THIN WIRE - Screens with square mesh openings

ONDULA-THIN WIRE screens are made of woven wire mesh with extra thin wires. A large open screen area combined with thin wire diameters, which increase the passing probability, increase throughput and capacity, however on the account of operational life time. The solid mesh structure is due to the vertically crimped wires.

mesh opening (mm)	wire Ø		relative open screen area a <sub>o</sub> %	weight (kg/m <sup>2</sup> )
	along (mm)	across (mm)		
2,0 x 6,3	0,63	0,9	71	1,6
2,5 x 8,0	0,63	1,0	72	1,7
3,15 x 10,0	0,71	1,12	74	1,7
4,0 x 12,5	1,0	1,25	76	1,9
5,0 x 16,0	1,0	1,4	78	2,0
6,3 x 20,0	1,0	1,6	80	1,8
7,1 x 22,4	1,0	1,8	81	1,6
8,0 x 25,0	1,12	2,0	81	1,8
9,0 x 28,0	1,25	2,0	82	2,0
10,0 x 31,5	1,25	2,0	84	1,8

## ONDULA-THIN WIRE - Screens with rectangular mesh openings

ONDULA-THIN WIRE screens with longitudinal mesh openings show the same characteristics but the open screen area is even larger resulting in further increased throughput.



## ONDULA-REKTAN - Screens with slotted mesh openings

ONDULA-REKTAN screens with slotted mesh openings are nearly harp screens already. The length to width ratio of the mesh opening is several times bigger than for REKORD-REKTAN and reduces – with at the the same time larger open screen area – the blinding risk by near mesh grain size. Tensioning hooks should only be fitted parallel to the double cross wires.

slot width x slot length (mm)	standard execution				heavy execution			
	along (mm)	across (mm)	relative open screen area a <sub>o</sub> %	weight (kg/m <sup>2</sup> )	along (mm)	across (mm)	relative open screen area a <sub>o</sub> %	weight (kg/m <sup>2</sup> )
1 x 14	0,71	0,9	54,9	2,7	0,9	1,1	48,8	4,1
1,25 x 16	0,8	1,0	57,4	3,0	1,0	1,25	51,5	4,3
1,6 x 18	0,9	1,1	60,3	3,1	1,1	1,4	55,0	4,5
2 x 20	1,0	1,25	62,7	3,4	1,4	1,8	54,0	5,9
2,5 x 25	1,1	1,4	65,8	3,4	1,6	2,0	56,5	6,3
3,15 x 31,5	1,4	1,8	66,7	4,4	1,8	2,2	59,5	6,5
4 x 36	1,6	2,0	67,7	4,7	2,0	2,5	62,3	6,8
5 x 40	1,8	2,2	69,7	4,9	2,2	2,8	64,9	6,9
6,3 x 45	2,0	2,5	71,9	5,2	2,5	3,15	66,9	7,8
8 x 56	2,2	2,8	74,7	5,1	2,8	3,15	70,1	7,4
10 x 63	2,5	3,15	76,2	5,6	3,15	3,6	71,9	8,2
12,5 x 71	2,8	3,15	78,2	5,5	3,6	4,0	73,5	8,6
16 x 80	3,15	3,6	80,0	6,0	3,6	4,5	77,3	7,8

### ATTENTION!

Tensioning length for screens made of crimped wires: Elongation reserves – because of the crimping of the longitudinal wires – allow an even screen tensioning, but with an overall elongation of the screen itself. Therefore ONDULA-thin wire screens are supplied with an abt. 1 % shorter tensioning length and ONDULA-REKTAN screens are abt. 0.5 % shorter.

# HARP - Woven Type Wire Mesh

For the separation of humid and sticky agglomerates with mainly round and cubic corn on screening machines and other devices.

Possible applications: naturally humid sand, limestone, clay marl, magnesite, dolomite, olivine, fireclay, phosphate, fertilizers, mineral salt, plastic granulates and the like.

## HARP screens

must be imperatively tensioned in the direction of the longitudinal wires. Only then they will show their good applicational characteristics like good self cleaning and cut size preciseness. For difficult products like sand with a high clay contents HARP screens with thin wires are recommended. Because of their cutting effect the pegging of small particles to wires is reduced. HARP screens with thick wires and / or crossbindings made of wear resistant polyurethane improve the operational lifetime and so the cost efficiency. If oblong oversize material in the throughput is acceptable, the use of HARP screens is possible, too. HARP screens, with their big open screen area, improve the screening machine's capacity considerably.

## HARP screens

are woven type wire mesh screens with slot-like openings. For their proper installation on the screening machine a tensioning device is needed. For screening machines with plain sieve decks we supply changeable tensioning frames. HARP screens are produced in 3 different types:

## HARP-WS screens

with vertically undulated wires and cross bindings in any pitch as per necessities of the substructure of the screening machine as per adjoining drawing.

## HARP-G screens

with plain longitudinal wires with cross bindings in equal fixed pitches as per data sheet. HARP-G screens are especially suitable for hygroscopic products with high pegging tendency like fertilizer. The plain wires – preferably of stainless steel – can be cleaned easily.

## HARP-G-PLAST screens

with plain longitudinal wires and flexible polyurethane cross bindings for highly abrasive screening products and if these cross bindings should prevent a "cake-building" effect. The cross binding pitch – as for the HARP-WS screen – should be in line with the substructure distance in the screening machine. A horizontally crimped wire, placed in intervals, is for the necessary fixing of the cross binding.



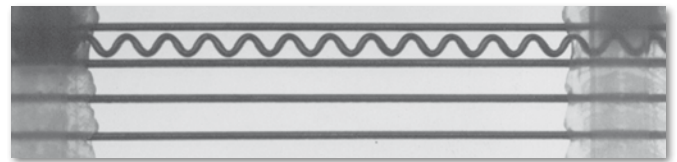
## HARP-WS screen

Throughgoing vertically undulated wires with 3 x 1 cross wires for each cross binding.



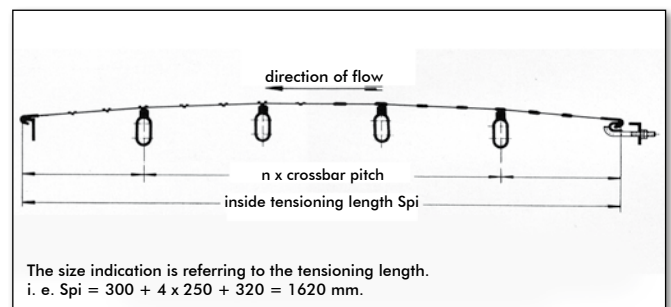
## HARP-G screen

Plain wires with one vertical undulation as tensioning reserve and 3 x 2 cross wires per cross binding.



## HARP-G-PLAST screen

Plain wires with a flexible cross binding made of polyurethane.



## The Anti-Clogging Effect

With HARP screens the self cleaning is achieved by the product's beating on the screen surface and the natural oscillation as well as the cutting effect of the screen wires. The ideal would be a 10 % "beating corn" in the product feed of max. 5 x the cut size. Screen wires in chrome nickel steel with a permanent smooth surface and flexible polyurethane cross bindings support this anti-clogging-effect. For products difficult to screen without "beating corn" a beating ball device is recommended.

**Materials:** Spring steel as per EN 10270-1,  
chrome nickel steel as per EN 10088-3.

Special qualities on request.



# HARP - Woven Type Wire Mesh



**HARP-WS screen**

**vertically undulated wires  
cross bindings made of 3 x 1 wires**

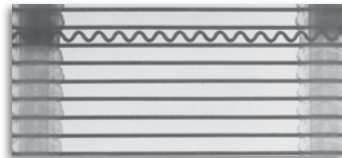


**HARP-G screen**

**plain wires  
cross bindings made of 3 x 2 wires**

execution	slot width	wire diameter	pitch of cross binding	relative open screen area	weight (kg/m <sup>2</sup> )
	(mm)	(mm)	(mm)	a <sub>o</sub> %	
standard	1,0	0,8	abt. 65	53,5	2,8
	1,25	0,9	abt. 80	56,2	2,9
	1,6	1,0	abt. 80	59,2	3,0
	2,0	1,25	abt. 100	59,2	3,6
	2,5	1,25	abt. 100	64,2	3,2
	3,15	1,25	abt. 100	68,9	2,9
	3,6	1,25	abt. 100	71,4	2,6
	4,0	1,4	abt. 100	70,9	3,1
	4,5	1,4	abt. 100	73,1	2,9
	5,0	1,4	abt. 100	74,8	2,7
	5,6	1,4	abt. 100	76,6	2,4
	6,3	1,6	abt. 100	75,9	3,0
	7,1	1,6	abt. 100	77,7	2,8
	8,0	1,8	abt. 120	78,0	3,1
	9,0	1,8	abt. 120	79,6	2,9
	10,0	2,0	abt. 150	80,0	3,2
11,2	2,0	abt. 150	81,5	2,9	
12,5	2,2	abt. 150	81,3	3,6	
16,0	2,5	abt. 150	82,2	4,2	
heavy impact	1,0	1,1	abt. 90	45,9	4,3
	1,25	1,25	abt. 90	47,9	4,7
	1,6	1,4	abt. 100	51,1	4,9
	2,0	1,6	abt. 125	53,4	5,3
	2,5	1,8	abt. 125	55,6	5,7
	3,15	2,0	abt. 150	58,7	5,9
	4,0	2,2	abt. 150	61,7	7,0
	5,0	2,5	abt. 150	63,3	6,6
	6,3	2,8	abt. 150	65,4	7,0
	8,0	3,15	abt. 150	67,2	7,5
	10,0	3,15	abt. 150	71,3	6,4
	12,5	4,0	abt. 150	69,7	8,7
16,0	4,0	abt. 150	73,6	7,6	

execution	slot width	wire diameter	pitch of cross binding	relative open screen area	weight (kg/m <sup>2</sup> )
	(mm)	(mm)	(mm)	a <sub>o</sub> %	
standard	1,0	1,25	abt. 60	40,7	4,8
	1,25	1,4	abt. 60	43,2	6,0
	1,6	1,4	abt. 60	48,9	5,0
	2,0	1,6	abt. 70	50,8	5,5
	2,5	1,8	abt. 70	53,2	6,0
	3,15	2,0	abt. 100	56,2	6,5
	4,0	2,2	abt. 100	59,4	6,5
	5,0	2,5	abt. 100	61,3	7,0
heavy impact	1,0	1,4	abt. 60	38,2	5,5
	1,25	1,8	abt. 60	37,6	9,0
	1,6	1,8	abt. 60	43,1	8,0
	2,0	2,0	abt. 70	45,7	8,0
	2,5	2,2	abt. 70	48,6	8,5
	3,15	2,5	abt. 100	51,3	10,5
	4,0	2,8	abt. 100	54,1	11,5
5,0	3,2	abt. 100	56,1	11,0	



**HARP-G PLAST screen**

**plain wires  
cross bindings made of polyurethane**

## ATTENTION!

### Screen sizes for HARP-WS screens

The undulation of the longitudinal wires leads into a certain lengthening of the screen panel when tensioned.

HARP-WS screens are therefore supplied with a 0,5 % shorter tensioning length (Spa or Spi).

The details and illustrations in this product information are non-binding and only represent an approximate description. The properties are not guaranteed.

Designs other than those shown here are available on request.  
Subject to change serving technical progress without notice.

execution	slot width	wire diameter	pitch of cross binding	relative open screen area	weight (kg/m <sup>2</sup> )
	(mm)	(mm)	(mm)	a <sub>o</sub> %	
standard	2,5	1,25	abt. 200	63,0	3,2
	3,15	1,25	abt. 200	67,7	2,8
	3,5	1,4	abt. 200	67,5	3,1
	3,8	1,6	abt. 200	66,5	3,5
	4,0	1,4	abt. 200	70,0	2,8
	4,1	2,0	abt. 200	63,5	4,6
	4,7	2,0	abt. 200	66,3	4,3
	4,8	1,6	abt. 200	70,9	3,1
	4,9	2,0	abt. 200	67,1	4,2
	5,0	1,4	abt. 200	73,8	2,5
	5,8	1,8	abt. 200	72,1	3,2
	6,0	1,6	abt. 200	74,6	2,7
	6,0	2,2	abt. 200	69,1	4,2
	6,3	1,25	abt. 200	78,9	1,9
	7,3	2,0	abt. 200	74,2	3,3
	7,6	1,25	abt. 200	81,2	1,7
	8,4	1,6	abt. 200	79,4	2,2
	9,2	1,6	abt. 200	80,5	2,1
	9,7	2,0	abt. 200	79,0	2,7
	11,1	1,6	abt. 200	82,6	2,0
	11,8	2,0	abt. 200	80,8	2,5
	13,4	1,8	abt. 200	83,3	2,0
	14,2	2,2	abt. 200	81,8	2,5
	16,6	2,0	abt. 200	84,3	2,0
	17,5	2,5	abt. 200	82,7	2,6
	20,0	2,2	abt. 200	85,1	2,1

# TRIA® - TRIAPLAST® - SERPENTI - Anti-Clogging-Screen

## Description:

TRIA- and SERPENTI screens – thanks to their design – have excellent self cleaning characteristics caused by relative movement between the straight and crimped wires. This movement is caused by coarse material, acting as “beating corn” passing the screen mesh. Therefore approx. 10 % of the material feed should be min. 5 times bigger than the opening size. With stainless steel, the smoother wire surface improves the self cleaning effect even further.

Contrary to harp screens with slot-like openings, with TRIA and SERPENTI good screening results are achieved even with longitudinally shaped material due to the horizontally crimped wires.

SERPENTI screens have nearly square openings whereas TRIA screens have triangular ones.

TRIAPLAST with elastic cross bindings of polyurethane improves the self cleaning again. The good wear resistance of the polyurethane extends the operational lifetime. These polyurethane cross bindings are suitable for material temperatures of up to 80 °C.

TRIA- and SERPENTI-Sieves with cross bindings of either steel or polyurethane are to be used on screening machines with tensioning facilities only.

## Technical Data:

### Dimensions

All openings as per DIN 323, Row 10 and 20. Wire diameters as per DIN ISO 4782. Mesh opening and wire diameters are stamped on the upper part of the tensioning clip.

### Hole type of TRIA-screens

The bending angle of the crimped wire defines the hole type and is either 60° or 90°. Screens with a 60° bending angle achieve nearly the same cut size accuracy as square openings.

### Materials:

<b>Wires</b>	Spring steel as per EN 10270-1, chrome nickel steel as per EN 10088-3
<b>Cross connection</b>	Spring steel as per EN 10270-1, chrome nickel steel as per EN 10088-3  Polyurethane
<b>Tensioning hooks</b>	ordinary steel (galvanisation possible) chrome nickel steel as per EN 10088-3



### TRIA®-Harp screens

Screens of alternately straight and horizontally crimped round wires, with interwoven cross weaves of  $3 \times 3 = 9$  wires each.



### TRIAPLAST®-Harp screens

Screens of alternately straight and horizontally crimped round wires, with cross bindings of highly wear resistant polyurethane.



### SERPENTI-Harp screens

Screens of horizontally crimped round wires, with interwoven cross weaves of  $3 \times 2 = 6$  wires each.

### Cross bindings for TRIA Harp screens

As mentioned above each cross binding is consisting of  $3 \times 3 = 9$  round wires with the exception for holes 2,0 and 2,5 mm.

Because of the narrow crimping of the screen wires there is not enough space and so each cross binding consists of  $5 \times 2 = 10$  wires.

### Elongation of SERPENTI-Harp screens

The ondulation of the wires cause a certain elongation when the sieves are tensioned. SERPENTI screens are therefore supplied 0,5 % shorter than the nominal tensioning length.

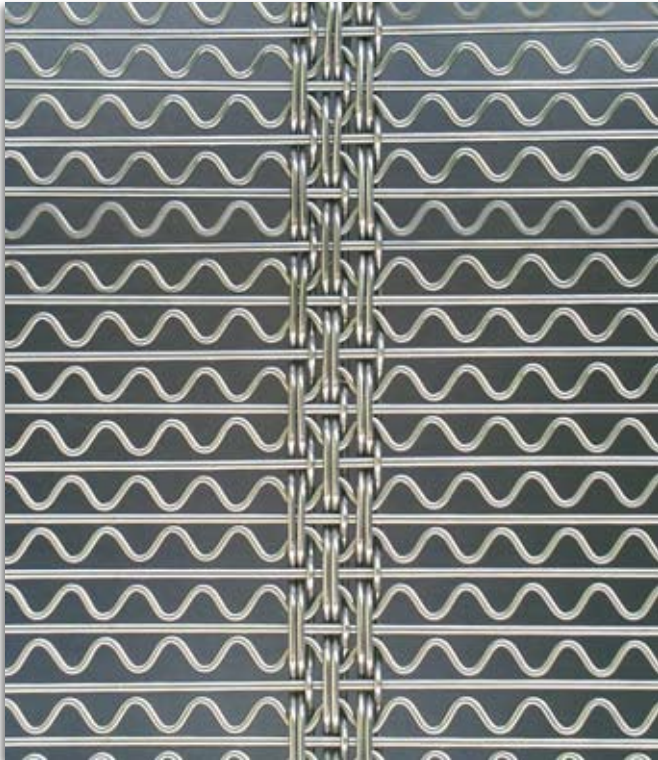
### Applications:

Because of their excellent self-cleaning characteristics these types of screens are successfully used in:

- sand and gravel industry,
- ore preparation plants,
- mining industry

for the separation of ore, pellets, sinter, coal, coke, crushed hard stone, sand & gravel, limestone, cement clinker etc.

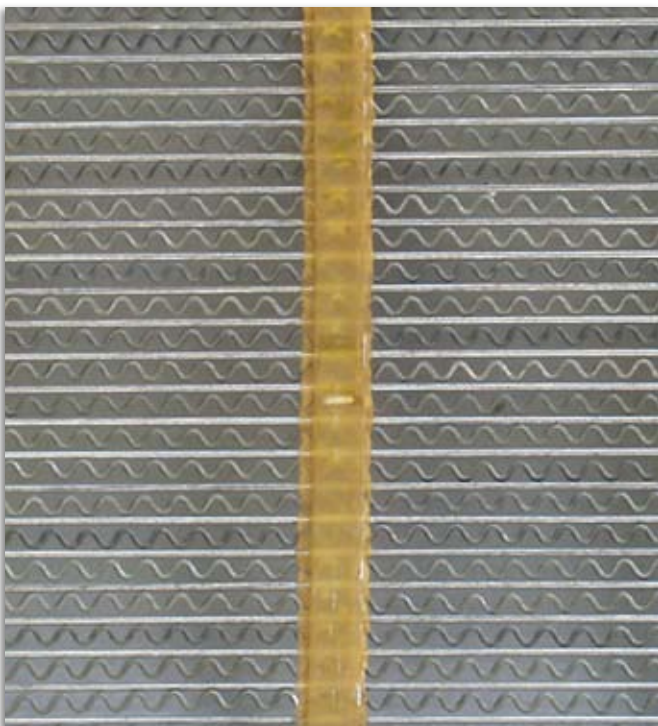
# TRIA® -HARP - Anti-Clogging-Screen



- 1) Special openings on demand.
- 2) Pitch „t“ is the distance from centre to centre of the cross bindings.

aperture <sup>1)</sup> w (mm)	wire		pitch <sup>2)</sup> t max. (mm)	relative open screen area a <sub>o</sub> %	weight abt. (kg/m <sup>2</sup> )
	straight Ø (mm)	crimped Ø (mm)			
<b>execution I</b>					
2,0	1,6	1,25	120	40	5,8
2,5	1,6	1,25	120	46	5,4
3,15	1,8	1,4	130	49	5,6
4,0	2,0	1,6	140	52	6,0
5,0	2,2	1,8	150	55	6,7
6,3	2,5	2,0	150	56	7,9
7,1	2,5	2,0	160	60	7,1
8,0	2,5	2,2	170	62	7,5
9,0	2,5	2,2	170	64	7,2
10,0	2,8	2,5	185	65	8,1
11,2	3,2	2,8	195	65	9,0
12,5	3,6	3,2	220	66	11,0
14,0	3,6	3,2	220	66	9,3
16,0	4,0	3,6	250	67	10,3
18,0	4,0	3,6	250	69	9,9
<b>execution II</b>					
2,0	2,0	1,6	150	34	7,9
2,5	2,0	1,6	150	38	7,4
3,15	2,2	1,8	160	42	7,7
4,0	2,5	2,0	170	46	8,5
5,0	2,5	2,2	180	50	8,3
6,3	2,8	2,2	180	55	8,4
7,1	2,8	2,5	190	56	8,5
8,0	3,2	2,8	200	54	10,2
9,0	3,2	2,8	200	59	9,5
10,0	3,6	3,2	215	58	11,4
11,2	3,6	3,2	225	61	10,2
12,5	4,0	3,6	250	61	12,7
14,0	4,0	3,6	250	63	11,5
<b>execution III</b>					
5,0	3,2	2,8	180	49	13,5
5,6	3,2	2,8	180	50	13,0
6,3	3,2	2,8	180	52	12,4
8,0	3,6	3,2	200	54	13,5

# TRIAPLAST® -HARP - Anti-Clogging-Screen

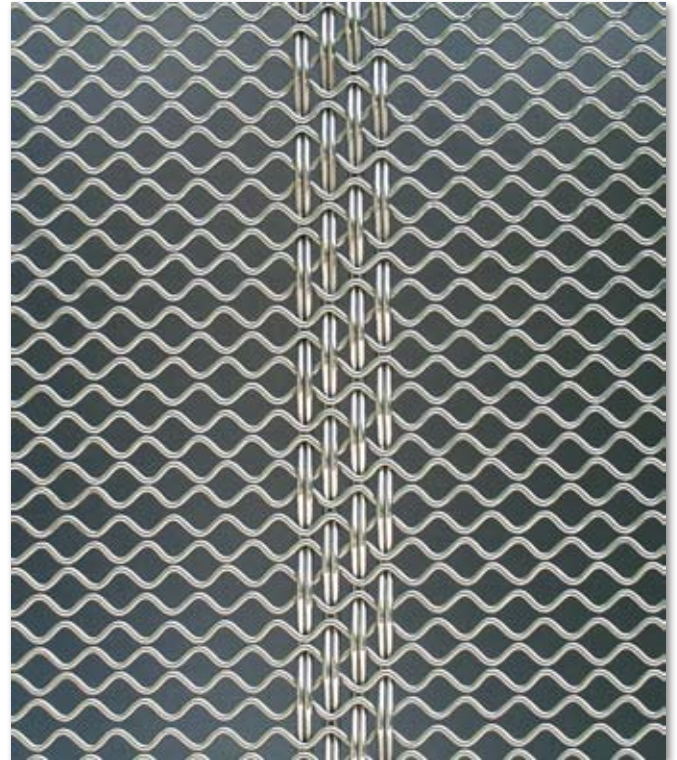


aperture <sup>1)</sup> w (mm)	wire		pitch <sup>2)</sup> t max. (mm)	relative open screen area a <sub>o</sub> %	weight abt. (kg/m <sup>2</sup> )
	straight Ø (mm)	crimped Ø (mm)			
<b>execution I</b>					
2,0	1,6	1,25	120	40	5,8
2,5	1,6	1,25	120	46	5,4
3,15	1,8	1,4	130	49	5,6
4,0	2,0	1,6	140	52	6,0
5,0	2,2	1,8	150	55	6,7
6,3	2,5	2,0	150	56	7,9
7,1	2,5	2,0	160	60	7,1
8,0	2,5	2,2	170	62	7,5
<b>execution II</b>					
2,0	2,0	1,6	150	34	7,9
2,5	2,0	1,6	150	38	7,4
3,15	2,2	1,8	160	42	7,7
4,0	2,5	2,0	170	46	8,5
5,0	2,5	2,2	180	50	8,3
6,3	2,8	2,2	180	55	8,4
7,1	2,8	2,5	190	56	8,5
8,0	3,2	2,8	200	54	10,2
9,0	3,2	2,8	200	59	9,5
10,0	3,6	3,2	215	58	11,4
11,2	3,6	3,2	225	61	10,2
12,5	4,0	3,6	250	61	12,7
<b>execution III</b>					
5,0	3,2	2,8	180	49	13,5
5,6	3,2	2,8	180	50	13,0
6,3	3,2	2,8	180	52	12,4
8,0	3,6	3,2	200	54	13,5



# SERPENTI -HARP - Anti-Clogging-Screen

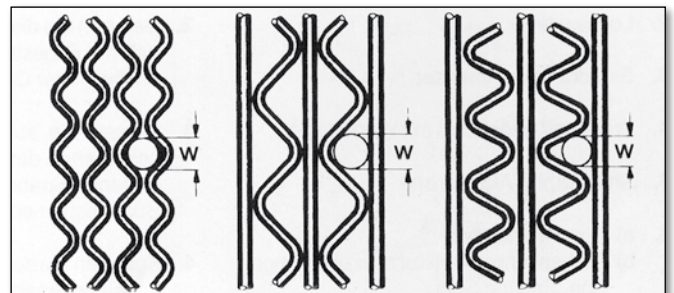
aperture <sup>1)</sup> (mm)	wire Ø (mm)	pitch <sup>2)</sup> t max. (mm)	relative open screen area a <sub>o</sub> %	weight abt. (kg/m <sup>2</sup> )
<b>execution I</b>				
2,0	0,9	80	44	4,0
2,5	1,0	100	48	4,4
3,15	1,25	150	48	4,4
4,0	1,4	170	51	4,5
5,0	1,6	200	54	4,6
6,3	1,8	200	57	5,0
7,1	2,0	200	57	5,3
8,0	2,0	230	61	5,0
9,0	2,2	230	61	5,3
10,0	2,2	230	64	5,0
11,2	2,5	270	64	5,8
12,5	2,5	270	66	5,3
14,0	2,8	270	66	6,0
16,0	2,8	270	68	5,6
18,0	3,2	300	68	5,8
20,0	3,2	300	68	6,6
22,4	3,6	300	70	6,3
25,0	3,6	330	73	6,0
<b>execution II</b>				
2,5	1,25	120	41	5,7
3,15	1,4	170	41	6,3
4,0	1,8	170	44	7,3
5,0	2,0	200	44	7,5
6,3	2,2	200	48	7,6
7,1	2,5	230	52	8,0
8,0	2,5	230	54	7,5
9,0	2,8	230	54	8,8
10,0	2,8	230	58	8,3
11,2	2,8	230	61	8,0
12,5	3,2	270	61	8,0
14,0	3,2	270	63	8,0
16,0	3,6	270	64	8,3
18,0	3,6	300	66	8,0
20,0	4,0	300	66	9,0
22,4	4,0	330	68	8,5
25,0	4,5	330	68	9,3



- 1) Special openings on demand.
- 2) Pitch „t“ is the distance from centre to centre of the cross bindings.

## SERPENTIPLAST

Similar to TRIAPLAST our SERPENTI Harp Screens can also be delivered with cross bindings made of polyurethane instead of round wires.



### Defining the mesh opening „w“

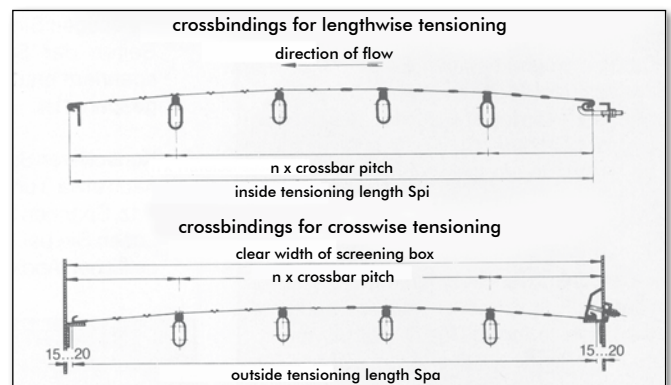
The mesh opening corresponds to the diameter of a circle which touches all sides of the screen opening.

## Fixing arrangements

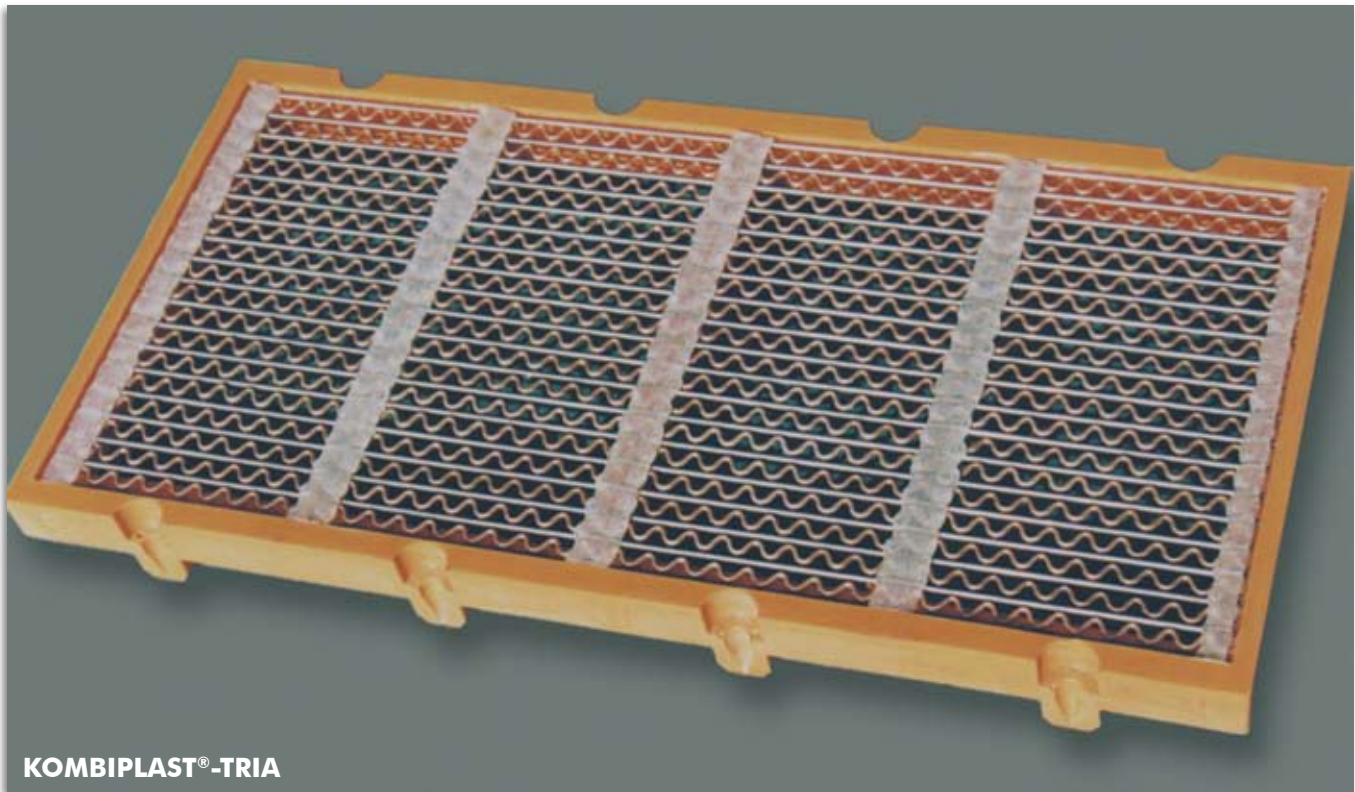
### Pitches of cross bindings for tensioned screens

The cross binding pitches of TRIA and SERPENTI screens have to coincide with the support bars of the sieve box. This will ensure correct oscillation of the screen wires between the cross bindings and result in an anti-clogging effect. Premature wear of the wires, due to contact with the support bars, is also avoided.

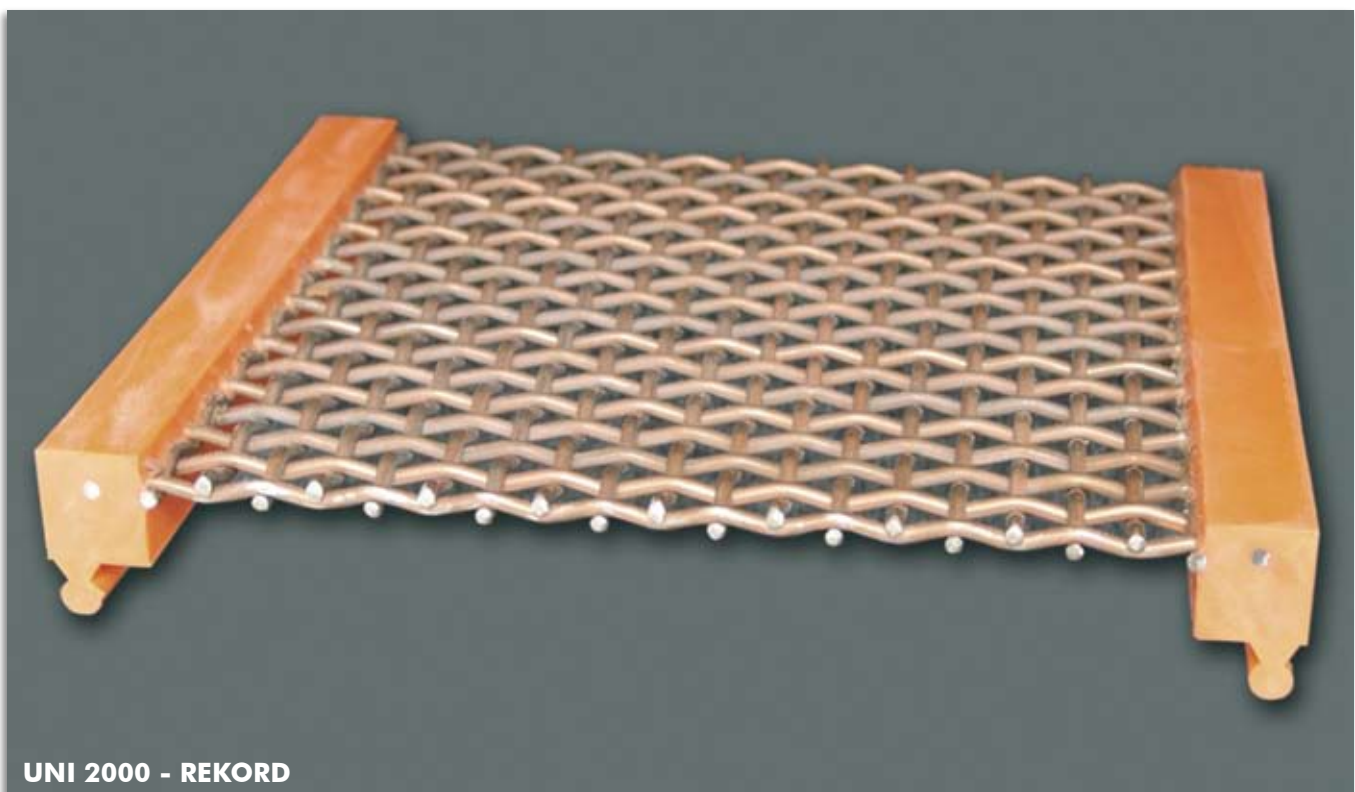
TRIA and SERPENTI screens can only be tensioned along the straight and crimped wires.



## Woven and Woven Type Wire Mesh System Screen Modules combining Steel with Polyurethane



Hybrid system screen modules are an ideal combination of highly wear resistant and noise reducing polyurethane with steel screen inserts of various types. This is showing the great variety of our modern system screen modules.





## Necessary Details for Inquiries and Orders

## Installation

## Maintenance Instructions

### Please inform your maintenance staff!

### Please inform your maintenance staff!

- |  |   |  |
|--|---|--|
| <ol style="list-style-type: none"><li>1. type of screen</li><li>2. hole width &amp; length resp. slot width for harp screens</li><li>3. wire diameter</li><li>4. for tensioned screens dimensions with abbreviations given on page 3</li><li>5. for plain screens length &amp; width</li><li>6. for slot &amp; rectangular openings: hole direction</li><li>7. length of slot or rectangular openings</li><li>8. for Harp WS, Harp G-PLAST, TRIA, TRIAPLAST &amp; SERPENTI additionally the pitch of substructure supports</li><li>9. Material quality if possible with Code no.</li><li>10. Quantity per item</li></ol> | <ol style="list-style-type: none"><li>1. Before installation the screen supports must be thoroughly cleaned from any adhering material and dirt.</li><li>2. The raised support bars must be protected with wear resistant rubber or polyurethane.</li><li>3. Use side tensioning rails only, which must fit securely into the tensioning clips of the sieve panel.</li><li>4. The sieve must be tensioned in such a way that it lies firmly on all supports and cannot lift or "flap" with the machine vibrations.</li><li>5. Over-tensioning of the sieves is to be avoided.</li><li>6. For lengthwise tensioned sieves longitudinal wedges should only be fitted after the sieve is properly tensioned.</li><li>7. Newly installed sieves should be retensioned after about 3 hours and again after 10 hours for proper positioning. Re-tension, if necessary (loosen the longitudinal wedges for lengthwise tensioned screens for this).</li></ol> | <ol style="list-style-type: none"><li>1. Premature breakage of wires is often caused by incorrect tensioning or not sufficiently increased supports. This "flapping" must be avoided by regular checks and – if necessary – re-tensioning.</li><li>2. The sieves should be checked daily for signs of possible wear.</li><li>3. Small sectional wear should be covered with a piece of wire mesh.</li><li>4. Spring steel must not be welded by all means.</li><li>5. Sectional wear can be avoided or reduced by re-positioning of the sieves.</li><li>6. A completely worn sieve should be replaced before breakage, thus avoiding costly down-time.</li><li>7. With damp, sticky screening material the sieve should be cleaned regularly (with a brush). This improves the screening results. Care must be taken, however, not to damage or distort the sieve.</li><li>8. Should you feel that either screening results or sieve life are not satisfactory, please contact us and our sales engineers.</li></ol> |
|--|---|--|

Please ask for our engineering advise already during the planning of the project. Our representative will help you in solving your technical problems. Our experienced personnel is also available to assist you with the installation of sieves and to instruct your maintenance staff.





### **Screen Panels**

Screen panels made of steel and polyurethane, system screen segments, wire cloth, perforated plates



### **Slotted Screen Panels**

Slotted screen panels made of wear resistant, alloyed, corrosion resistant steel grades, with and without reinforcement, in welded and looped execution.



### **Wire Mesh Conveyor Belts**

Wire conveyor belts, woven and braided, belt tracking device



### **Filter Media**

Filter cloth, hoses, bags made of textile fibres, form filters and filter fabrics made of metals and synthetics, high precision filter tubes

