

Free Running Link Belts.

Group 100 - 4000

 **STEINHAUS**

Wire Link Belts, Group 100 and 200

Wire link belts are made of densely braided spiral wires with straight or crimped crossrods. The spirals, alternately wound in opposite senses, create a frictional symmetry ensuring straight running. Belts of group 100 are of flat wire spirals whereas those of group 200 are of round wires.

As main advantages such densely braided belts allow high operational tensioning forces as well as low contact pressures when sliding on supports. This reduces the wear, thus increasing the life time and allows the transport of items with heavy individual weights.

The density can be improved further by inserting corrugated / U-shaped sheets or strips of wood. Wire link belts are either free-running, partially or fully guided.



Picture 1: Group 100 with flat wire spirals and welded edges

Available executions, Group 100				
belt type	spiral wire w x h	crossrod diameter	crossrod pitch	belt weight
	(mm)	(mm)	(mm)	(kg/sqm)
106	1,2 x 0,7	1,4	6,0	9,7
115	2,0 x 1,0	2,5	15,0	12,4
125	2,0 x 1,0	3,2	25,0	11,1
125	2,0 x 1,0	3,6	25,0	11,6
129	3,0 x 1,5	4,0	29,0	21,0
138	4,0 x 2,0	5,0	38,0	26,3
141	5,0 x 2,5	6,3	41,0	29,8
145	6,0 x 3,0	7,1	45,0	33,8



Picture 2: Group 200 with round wire spirals and looped edges

Available executions, Group 200				
belt type	spiral wire diameter	crossrod diameter	crossrod pitch	belt weight
	(mm)	(mm)	(mm)	(kg/sqm)
208	0,8	1,6	8,0	9,6
208	0,8	1,6	8,0	9,6
210	0,8	1,6	10,0	7,0
210	0,9	1,8	10,0	8,8
210	1,0	2,0	10,0	11,8
210	1,25	2,0	10,0	12,2
212	0,9	1,8	12,0	12,9
212	1,25	2,2	12,0	13,2
214	3,4	5,0	14,0	46,3
214,5	1,6	2,5	14,5	15,8
214,5	2,0	2,8	14,5	21,8
214,5	2,78	3,1	14,5	28,1
215	1,12	2,2	15,0	10,4
215	3,4	4,2	15,0	42,4
215	3,4	6,0	15,0	53,5
216,5	1,25	2,5	16,5	10,4
216,5	1,4	2,8	16,5	11,7
217	1,0	2,0	17,0	12,3
218,5	1,6	3,2	18,5	15,9
219	1,6	2,5	19,0	13,1
220,5	1,25	2,5	20,5	11,1
220,5	1,6	2,8	20,5	14,2
225	1,6	2,5	25,0	12,5
225	1,6	3,2	25,0	15,6
225	1,6	5,0	25,0	23,3
225	2,0	5,0	25,0	23,6
227,5	2,0	4,0	27,5	21,2
230	2,0	4,0	30,0	21,0
230	2,0	5,0	30,0	27,0
231	2,5	6,3	31,0	32,4
231	3,2	6,3	31,0	40,3
232	2,5	5,0	32,0	22,5
232	2,8	5,0	32,0	27,9
233	2,0	4,0	33,0	19,6
233	2,8	6,3	33,0	40,0
233	3,2	5,0	33,0	32,7
235	1,6	3,2	35,0	13,2
235	2,5	5,0	35,0	25,4
235	2,5	7,1	35,0	38,2
235	2,8	5,6	35,0	29,0
235	3,2	7,1	35,0	42,5
235	5,0	7,1	35,0	53,4
236	2,5	4,0	36,0	26,5
237	2,8	5,0	37,0	24,1
239	3,2	6,3	39,0	32,8
239	4,0	7,1	39,0	38,4
239	4,0	8,0	39,0	41,3
240	2,0	4,0	40,0	21,2
240	3,2	6,3	40,0	32,0
240	3,6	7,1	40,0	37,3
240	4,0	6,3	40,0	38,6
241	3,6	6,3	41,0	36,2
244	4,0	8,0	44,0	39,5
244	4,5	8,0	44,0	44,6
245	4,0	7,1	45,0	41,8
250,8	2,5	8,0	50,8	37,1
250,8	3,2	8,0	50,8	39,8
250,8	4,0	8,0	50,8	43,8
250,8	4,5	8,0	50,8	46,2
251	5,0	8,0	51,0	49,5
252	5,0	7,1	52,0	42,6

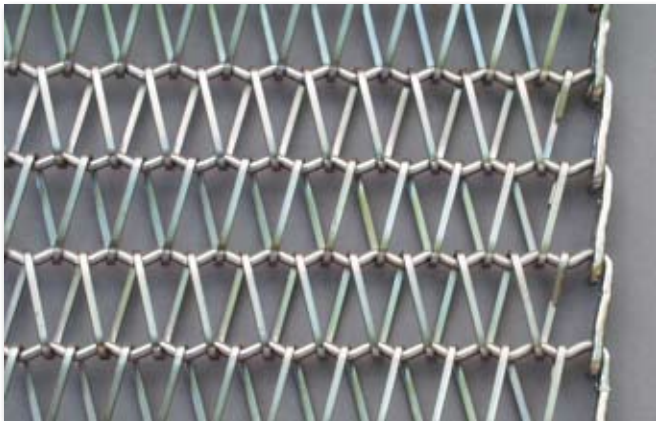
Braided Link Belts, Group 300 and 400

Braided link belts are made of widely braided spiral wires with straight or crimped crossrods.

Here, too the spirals, alternately wound in opposite senses, create a frictional symmetry ensuring straight running.

The crimped crossrods prevent a belt narrowing under tensioning. Belts of group 200 are of flat wire spirals and those of group 300 are made of round wires.

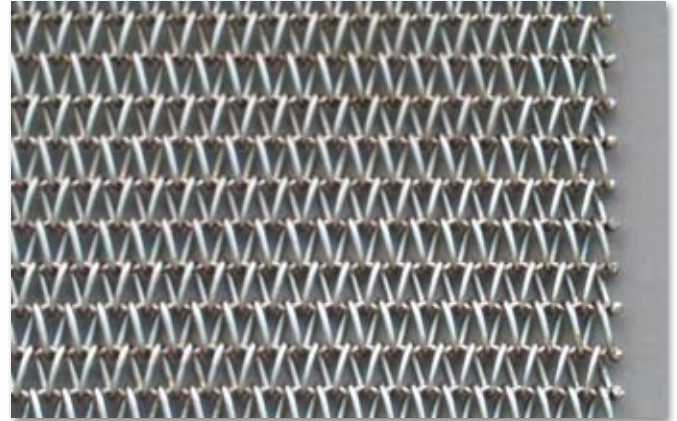
The type of wide braiding for this belt is good for applications where a high porosity for liquids and gases is required.



Picture 3: Group 300 with flat wire spirals and looped edges

Available executions, Group 300					
belt type	spiral wire w x h (mm)	crossrod diameter (mm)	spiral pitch (mm)	crossrod pitch (mm)	belt weight (kg/sqm)
303	1,0 x 0,7	1,25	3,0	4,0	8,3
304,2	1,0 x 0,7	1,25	4,2	4,4	7,3
305,2	1,2 x 0,7	1,4	5,2	6,0	5,8
305,2	2,0 x 1,0	2,0	5,2	17,0	16,0
306,35	1,2 x 0,7	1,6	6,35	8,6	4,9
308,5	2,5 x 1,2	2,5	8,5	16,0	9,0
308,5	2,5 x 1,2	2,8	8,5	12,0	11,8
308,5	2,0 x 1,0	2,0	8,5	12,0	7,2
308,5	2,5 x 1,2	2,5	8,5	12,0	11,8
311	3,0 x 1,5	4,0	11,0	22,0	14,0
311	2,0 x 1,0	3,2	11,0	20,0	6,8
311,5	3,0 x 1,5	4,0	11,5	12,0	15,8
311,5	4,0 x 2,0	4,0	11,5	19,0	19,4
313	3,0 x 1,5	4,0	13,0	26,0	14,3
313	5,0 x 2,5	4,0	13,0	26,0	16,4
314,5	2,0 x 1,0	1,6	14,5	25,0	3,2
314,5	2,0 x 1,0	3,2	14,5	25,0	4,6
314,5	2,5 x 1,2	3,2	14,5	25,0	5,8
315	4,0 x 2,0	5,0	15,0	29,0	15,8
315	5,0 x 2,5	6,3	15,0	15,0	36,4
318	2,0 x 1,0	2,5	18,0	30,0	4,0
320	5,0 x 2,5	6,3	20,0	32,0	11,4
325	2,5 x 1,2	3,2	25,5	35,0	3,0
333,3	2,5 x 1,2	3,2	33,3	35,0	3,6

Flat wire spirals result in a bigger contact area between the product and the belt and are recommended, if round wire spirals would leave unwanted imprints on it.



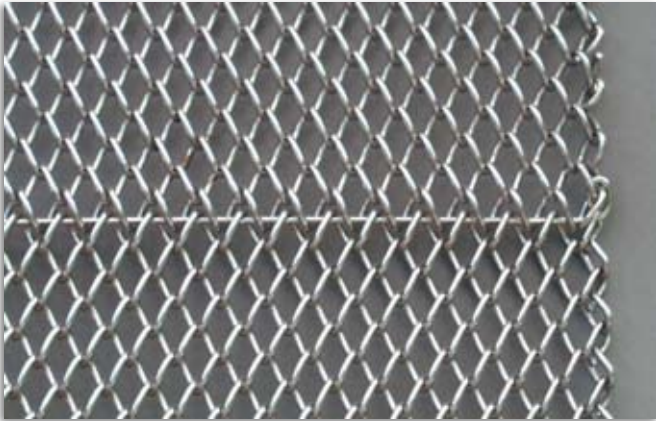
Picture 4: Group 400 with round wire spirals and welded edges

Available executions, Group 400					
belt type	spiral wire diameter (mm)	crossrod diameter (mm)	spiral pitch (mm)	crossrod pitch (mm)	belt weight (kg/sqm)
402	0,71	0,8	2,0	3,4	7,0
403	0,8	1,2	3,0	4,0	6,0
404,2	0,8	1,2	4,2	4,4	5,2
404,2	1,0	1,2	4,2	5,5	6,9
404,5	1,6	1,6	4,5	6,5	15,8
405,2	1,2	1,4	5,2	5,8	7,8
406	0,9	1,6	6,0	8,6	4,7
406	1,25	1,6	6,0	8,6	6,2
406	1,6	1,6	6,0	8,6	9,6
406	1,6	1,6	6,0	6,0	12,8
406,5	1,2	1,6	6,5	10,5	7,3
407,5	1,2	2,0	7,5	21,0	4,5
408	1,8	1,8	8,0	10,0	8,2
408	1,2	1,6	8,0	10,5	4,9
408,5	1,6	1,6	8,5	10,0	7,5
408,5	2,8	3,2	8,5	16,0	14,8
411	1,6	3,2	11,0	20,0	7,0
411	2,8	2,8	11,0	18,0	10,0
412	3,8	4,0	12,0	18,0	14,7
413	3,2	4,0	13,0	24,0	13,3
415	2,0	3,2	15,0	35,0	5,8
415	3,6	5,0	15,0	35,0	20,2
415	1,0	2,0	15,0	18,0	7,4
415	2,0	4,0	15,0	38,0	11,8
418	1,6	2,5	18,0	30,0	4,3
420	3,2	4,5	20,0	33,0	15,8
420	4,5	6,3	20,0	33,0	24,4
423	3,2	5,0	23,0	34,0	18,6
425	5,0	7,1	25,0	40,0	28,2
425	6,3	8,0	25,0	47,0	24,8
430	3,6	5,6	30,0	45,0	16,2
430	5,0	7,1	30,0	45,0	26,4
435	4,0	6,3	35,0	43,0	24,4
435	5,0	6,3	35,0	50,0	16,2
435	5,6	7,1	35,0	50,0	22,4
450	6,3	8,0	50,0	80,0	19,5

Braided Wire Belts, Group 500 and 550

Braided wire belts are made of interwoven round wires without crossrods. The type of spiral is flat-oval for group 500 and round for group 550. The spirals, also alternately wound in opposite senses, create a frictional symmetry ensuring straight running. A belt with all the spirals wound in one direction might only be used, if no tensioning forces must be absorbed, i.e. as a filler mesh for crossrod belts just to get a certain mesh density.

The special advantages of these belts are not only the low purchase costs but especially the low weight and high porosity for liquids and gases (even more than it is the case for group 300 and 400).



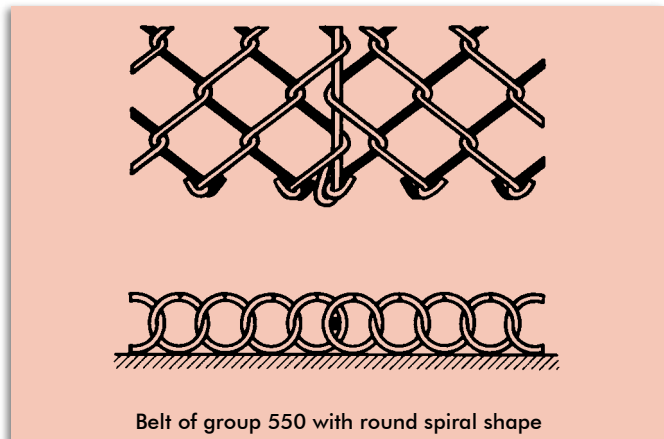
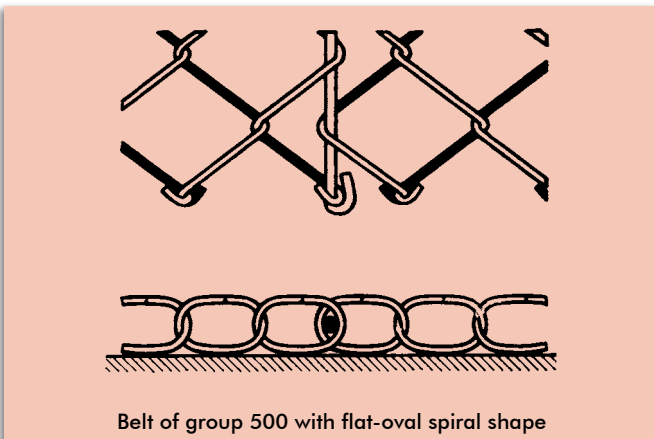
Picture 5: Group 500 with flat-oval spirals



Picture 6: Group 550 with round spirals

Available executions, Group 500			
belt type	mesh opening	spiral wire dia. from - to	belt weight from - to
	(mm)	(mm)	(kg/sqm)
503	3,0	0,8 - 1,2	4,0 - 7,0
504	4,0	0,8 - 1,6	4,0 - 9,0
504,5	4,5	0,8 - 1,6	4,0 - 8,5
505	5,0	1,0 - 1,6	5,0 - 8,0
506	6,0	1,0 - 2,0	6,0 - 11,0
508	8,0	1,25 - 2,0	6,5 - 10,0
510	10,0	1,4 - 2,5	3,0 - 12,0
512	12,0	1,6 - 2,5	3,5 - 11,0
515	15,0	1,6 - 3,2	3,0 - 13,0
520	20,0	2,0 - 4,0	6,0 - 26,0
525	25,0	2,5 - 5,0	4,0 - 21,0
530	30,0	2,8 - 5,0	4,5 - 19,0
540	40,0	2,8 - 5,0	3,5 - 16,0

Available executions, Group 550			
belt type	mesh opening	spiral wire dia. from - to	belt weight from to
	(mm)	(mm)	(kg/sqm)
551,5	1,5	0,71 - 0,8	6,3 - 6,6
551,75	1,75	0,8 - 1,0	5,9 - 6,8
552	2,0	0,8 - 1,0	5,2 - 6,2
552,5	2,5	0,8 - 1,25	5,9 - 9,8
553	3,0	0,63 - 1,25	3,8 - 9,2
553,5	3,5	0,63 - 1,25	3,2 - 8,8
554	4,0	0,8 - 1,25	3,8 - 8,2
555	5,0	0,8 - 1,4	3,5 - 8,2



Double Spiral Belt, Group 1100

Double spiral belts consist of double inserted spirals of group 500 with additional crossrods.

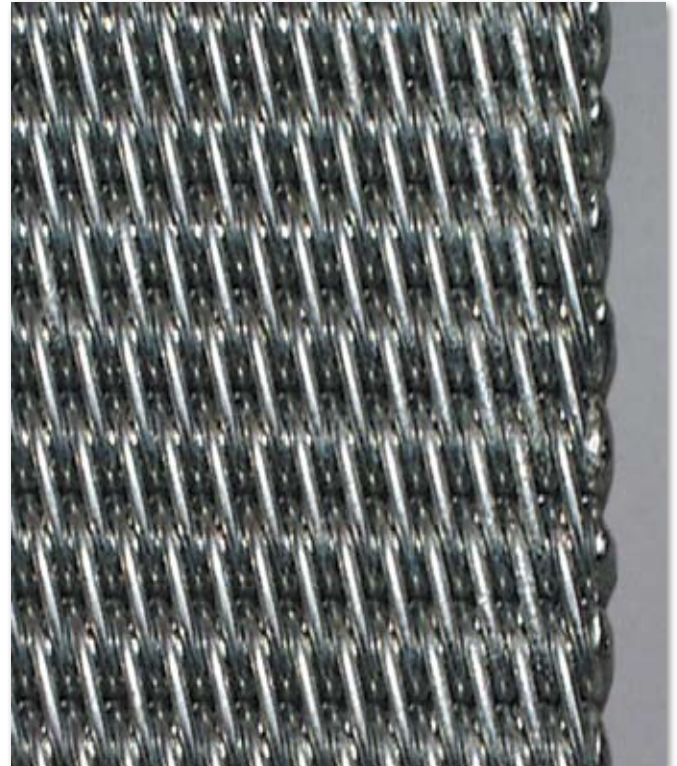
Double spiral belts are supplied with one-sided braiding pattern and welded edges only. Having a very dense working surface, they are ideal for fine granular products or dough.

Available executions, Group 1100					
belt type	spiral wire diameter (mm)	crossrod diameter (mm)	spiral pitch (mm)	crossrod pitch (mm)	belt weight (kg/sqm)
1102,3	0,8	1,2	2,3	3,5	12,5
1102,5	0,8	1,0	2,5	3,3	12,7
1102,5	1,0	1,0	2,5	3,3	13,8
1102,5	1,0	1,4	2,5	3,3	14,2
1104	1,6	1,4	4,0	5,0	14,2
1104	1,6	1,8	4,0	5,0	15,7
1108,5	2,5	2,8	8,5	13,0	18,5
1111	3,5	3,5	11,0	20,0	29,0
1111	4,5	4,2	11,0	20,0	45,4

Belt Identification

Example:

Belt type 1104 is a belt of group 1100 with a spiral pitch of 4 mm.



Picture 7: Double spiral belt with welded edges

Single Spiral Belt, Group 1300

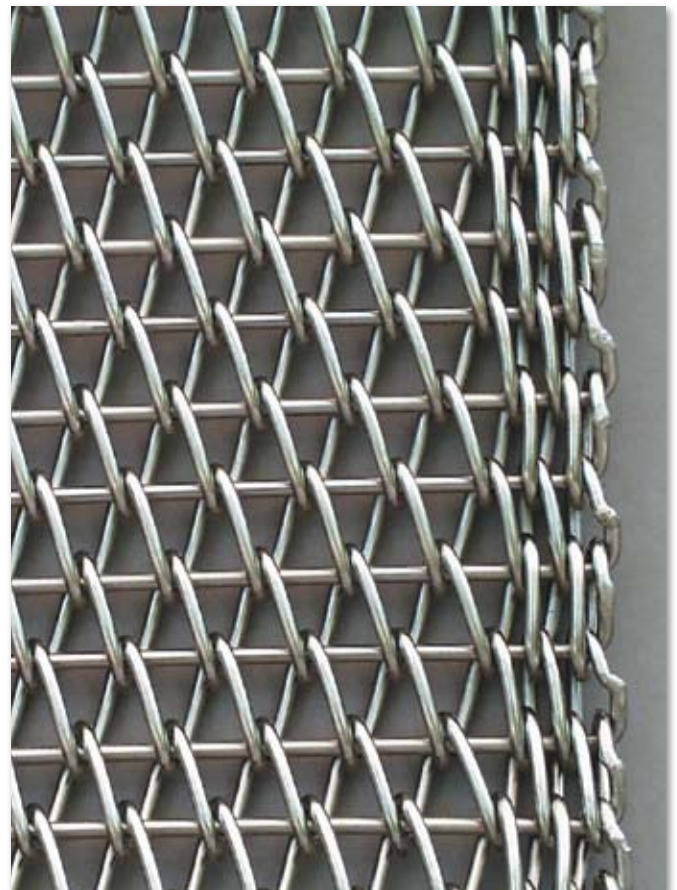
Single spiral belts are made of round wire spirals similar to group 400 braided like in group 500 and with additional plain crossrods. Single spiral belts, too are supplied with one-sided braiding pattern only and specially finished edges (please refer to page 7). This special finish along with the wide braiding structure give single spiral belts an excellent tensile strength at high temperatures although their own weight is low.

Available executions, Group 1300					
belt type	spiral wire diameter (mm)	crossrod diameter (mm)	spiral pitch (mm)	crossrod pitch (mm)	belt weight (kg/sqm)
1303,5	0,8	0,8	3,5	1,8	6,0
1304,4	1,0	1,4	4,4	2,4	6,9
1305,2	1,0	1,0	5,2	2,4	6,5
1310	2,0	2,5	10,0	15,0	9,6
1313	2,8	3,8	13,0	20,0	14,7
1315	2,8	3,2	15,0	20,0	13,8
1315	2,8	3,2	15,0	18,0	17,5
1316	3,2	4,5	16,0	16,0	21,5
1316	2,8	3,2	16,0	20,0	17,0
1316	3,2	4,0	16,0	20,0	20,5
1316	2,0	2,0	16,0	20,0	8,2
1320	2,8	3,2	20,0	20,0	10,2

Belt Identification

Example:

Belt type 1315 is a belt of group 1300 with a spiral pitch of 15 mm.



Picture 8: Single spiral belt with reinforced edges

Multiple Spiral Belt, Group 3000 and 4000

Multiple spiral belts are made of round or flat wire spirals similar to group 300 and 400 but with multiple insertions of extra spirals around additional crossrods. Multiple spiral belts are alternately braided in opposite senses with a very dense and smooth working surface and welded edges.

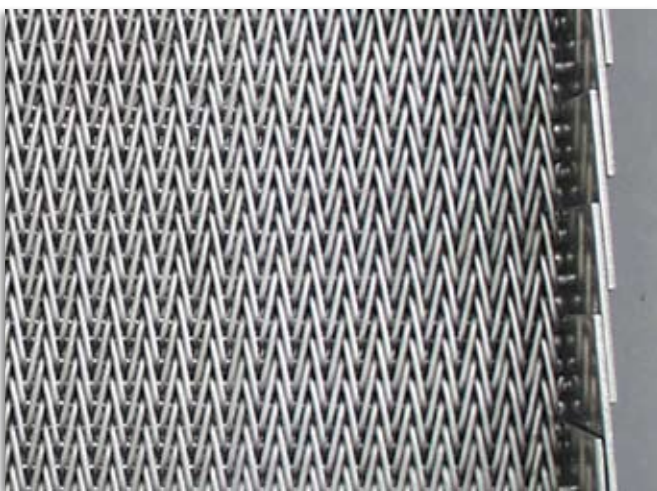
Because of these characteristics they are suitable for sensitive materials.

Multiple spiral belts can also be supplied with trough edges. Such belts are preferably used in heat treatment of very small products which are difficult to transport.



Picture 9: Triple spiral belt of group 3000 with welded edges

Available executions, Group 3000					
belt type	spiral wire w x h (mm)	crossrod diameter (mm)	spiral pitch (mm)	crossrod pitch (mm)	belt weight (kg/sqm)
3052	1,2 x 0,7	1,2 - 1,4	2,6	2,6	14,7
3063	1,2 x 0,7	1,2	2,1	2,4	12,1
3064	1,5 x 1,1	1,9	2,75	3,7	18,6
3065	1,5 x 1,1	2,0	2,2	3,6	20,2



Picture 10: Triple spiral belt of group 4000 with trough edges

Available executions, Group 4000					
belt type	spiral wire diameter (mm)	crossrod diameter (mm)	spiral pitch (mm)	crossrod pitch (mm)	belt weight (kg/sqm)
4022	0,71	0,71	1,35	1,6	14,0
4032	0,8	1,1	1,5	2,0	14,9
4043	0,9	1,8	1,5	2,7	17,4
4052	1,2	1,2 - 1,4	2,6	2,6	15,6
4063	1,0 - 1,2	1,2	2,1	2,6	17,0
4063	1,4	2,2	2,1	4,2	23,8
4083	1,6	2,2	2,8	4,1	30,0
4105	1,6	1,6	3,5	5,5	28,0
4112	3,1	3,4	9,5	9,5	27,0
4113	2,5	3,4	3,8	7,3	20,5
4115	1,8	2,0	2,3	4,0	17,0
4193	3,4	4,2	6,3	8,8	42,0

Wire Mesh Belt Qualities and Explanatory Notes

The operational conditions for wire mesh belts require a great multiplicity of different qualities. We produce and supply:

Standard belts

- St** = non-alloyed steel grades
- VS** = abrasion resistant special steel grade
- Fed** = spring steel quality

Temperature and high temperature resistant belts

- LS** = alloyed special quality
- HLS** = high temperature resistant alloyed special quality

Corrosion resistant belts

- X 8 Cr 17 Mat.-No. 1.4016 (AISI 430)
- X 5 Cr Ni 18 9 Mat.-No. 1.4301 (AISI 304)
- X 10 Cr Ni Ti 18 9 Mat.-No. 1.4541 (AISI 321)
- X 5 Cr Ni Mo 18 10 Mat.-No. 1.4401 (AISI 316)
- X 10 Cr Ni Mo Ti 18 10 Mat.-No. 1.4571 (AISI 316 Ti)
- X 5 Cr Ni Mo 17 13 Mat.-No. 1.4449 (AISI 317)

- St 550
- VS 600
- LS 650 / 700 / 800 / 1000 / 1200
- HLS 1050 / 1100 / 1150 / 1200

The figures behind the letters indicate in (°C) the max. temperature resistance of the steel quality for the belt. We do also produce belts made of brass, bronze and plastic. Wire mesh belts made of mild steel can be supplied with galvanized, tinned and plastic coated surface coating. Other special qualities on demand.

<p> \varnothing_s spiral wire diameter \varnothing_Q crossrod diameter t crossrod pitch </p>		
<p>Example: Belt type 215 is a belt of group 200 with 15 mm crossrod pitch</p>	<p>Example: Belt type 411 is a belt of group 400 with 11 mm spiral pitch</p>	<p>Example: Belt type 518 is a belt of group 500 with 18 mm mesh opening</p>

Belt Edge Executions

Type of belt edges for free running wire mesh conveyor belts

The most frequent execution is the looped edge type **S**, where the ends of the crossrods are looped into each other. Because of this loose connection the looped edge is not responsible for any tensioning forces. The different height between looped edges and the belt structure itself might result in damages to the belt and / or the product if scrapers are used.

With the flattened looped edge type **Sa** this is not the case. In order to avoid a bending up, if thin diameter crossrods are used, we recommend spot welded looped edges type **Sp**.





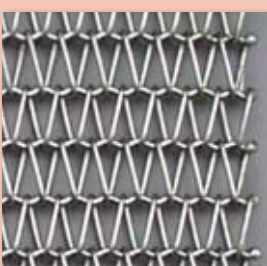


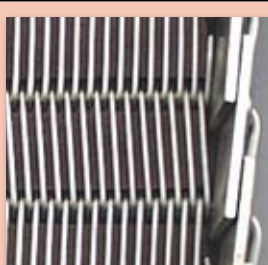
The bent edge type **B** is with crossrods bent back into the spirals. The overall height is lower than the spirals, so the bent edge is usually protected against damages, thus being recommend if scrapers are used or if there is a risk of contact with the side walls.

With the welded belt edge type **K**, used mostly for smaller pitch es, the ends of the spirals and crossrods are connected.

The edge type execution **g1-g3**, where the edges are up to triple pressed, is a special design for belts of groups 500 and 550.

The joined edge type **A** with bent crossrods butt welded to the spirals is a special design for belts of group 1300.

The trough edge type **Ri** is enlargening the load cross section thus increasing the transport capacity. It is made of specially formed sheets inserted between the spiral ends and the looped edges.

	<p>S looped edges (standard)</p> <p>Available for belts: Group 100, 200, 300, 400, 500, 550, 700, 900</p>		<p>Sa looped edges (flattened)</p> <p>Available for belts: Group 100, 200, 300, 400, 500, 550, 700, 900</p>
	<p>Sp looped edges (spot welded)</p> <p>Available for belts: Group 100, 200, 300, 400, 500, 550, 700, 900</p>		<p>B bent edges</p> <p>Available for belts: Group 100, 200, 300, 400, 500, 550, 700, 900</p>
	<p>K welded edge</p> <p>Available for belts: Group 100, 200, 300, 400, 800, 900, 1000, 3000, 4000</p>		<p>g 1 - g 3 single-pressed edge triple-pressed edge</p> <p>Available for belts: Gruppe 500 und 550</p>
	<p>A joined edges (bent crossrods butt welded to the spirals)</p> <p>Available for belts: Group 1300</p>		<p>Ri trough edges indicating the effective height difference between belt surface and upper edge of the trough sheet in mm</p> <p>Available for belts: Group 100 - 400, 800, 900</p>

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



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 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

