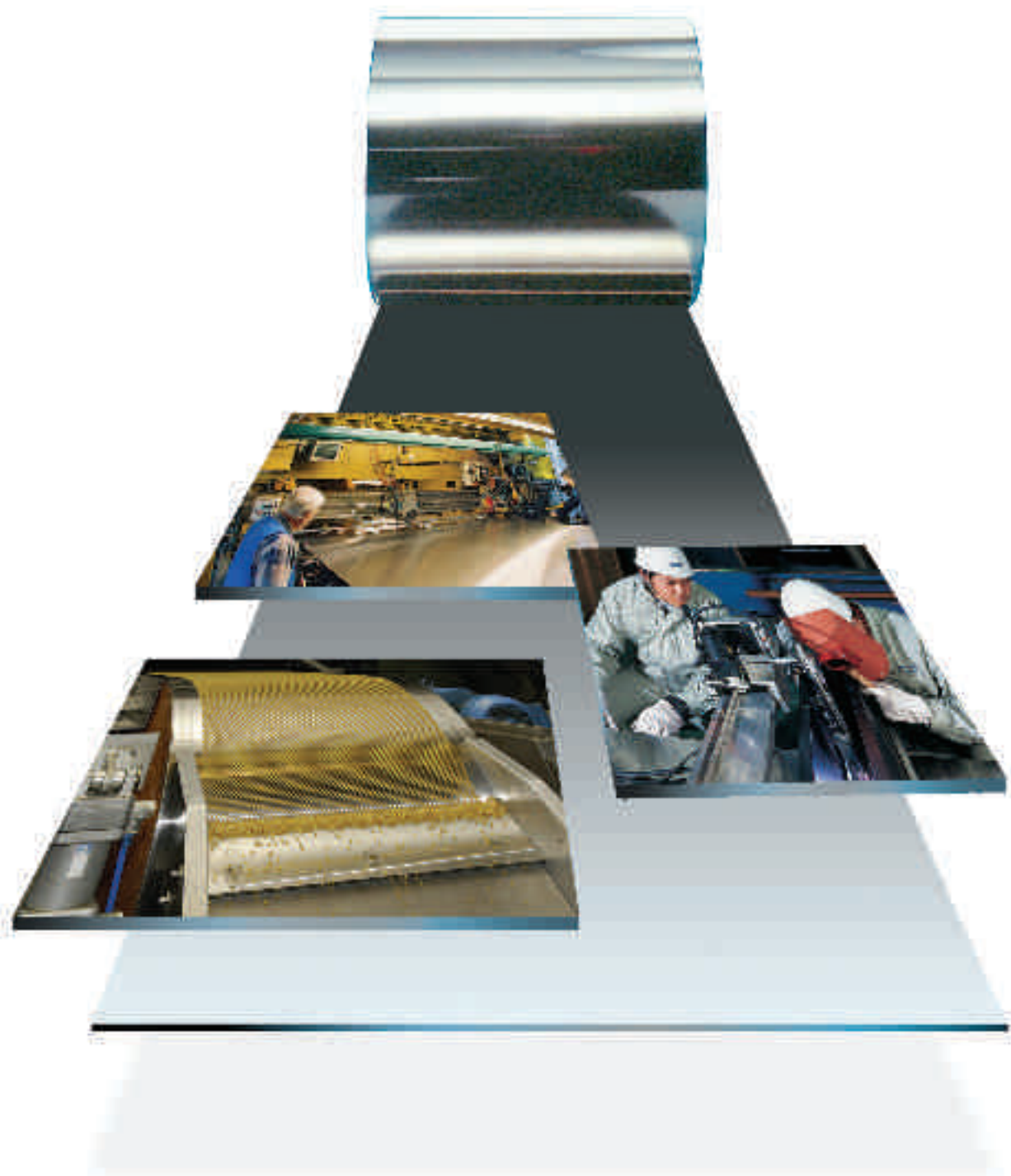


Steel belts for conveying and processing



Sandvik makes the steel belts that match your demands

Sandvik has a long tradition of supplying steel belts for all types of industries and has led the way in developing and adapting the steel belt to fulfil specific application needs. As the use of Sandvik steel belts has expanded, so too has our programme of manufacture.

Sandvik has a wide range of steel grades and dimensions, in a number of basic tolerances, to ensure the optimum choice for each application. The standard dimension range of individual steel belt grades, and their chemical composition applications can be seen from the tables below.

Steel belt grade programme

Designation Sandvik	Element			
	C	Cr	Ni	Others
1100C	0.65	0.20	-	-
1300C	0.65	0.20	-	-
1320C	0.15	-	-	Si, Mn, Al, Nb
1000SA	0.05	17.5	12.5	Mo=2.7
1200SA	0.1	17.5	7.5	-
1700SA	0.1	17.5	7.5	-
1050SM	≤0.05	13.0	4.0	Ti
1500SM	0.07	15.0	5.0	Cu, Ta, Nb
1650SM	≤0.08	14.0	7.0	Si, Cu, Ti, Mo

Sandvik uses a very simple easy to understand designation system for its steel belt grades, where the figures indicate roughly the tensile strength in MPa* and the letters the type of steel and microstructure:

C = Carbon steel

S = Stainless steel

A = Austenitic microstructure

M = Martensitic microstructure

* 1 MPa = 1 N/mm²

More detailed information and recommendations for each steel grade are available from separate data sheets.

Standard dimension programme

Sandvik 1000SA

Belt width									
mm	600	800	1000	1200	1400	1500	1560	3000*	4500**
inches	24	32	40	48	55	59	61	118	177
Thickness mm (inches)									
1.0 (0.040)	●	●	●	●	●	●	●	●	●
1.2 (0.048)				●	●	●	●		

Sandvik 1200SA

Belt width														
mm	200	300	400	500	600	800	1000	1200	1400	1500	1560	2080	3000*	4500**
inches	8	12	16	20	24	32	40	48	55	59	61	82	118	177
Thickness mm (inches)														
0.4 (0.016)	●													
0.6 (0.024)	●	●	●	●	●									
0.8 (0.032)	●	●	●	●	●	●								
1.0 (0.040)				●	●	●	●	●	●	●	●		●	●
1.2 (0.048)						●	●	●	●	●	●		●	●
1.6 (0.063)						●	●	●	●	●	●	●	●	●
2.0 (0.079)										●	●	●	●	●

Stock standard dimensions indicated with darker grey colour.

* max. width with one longitudinal weld.

** max. width with two longitudinal welds.



Conveyors and accessories

In addition to our comprehensive programme of steel belts, Sandvik also offers a wide range of tested accessories and components for steel belt unit as drums, sheaves, belt support, belt tracking control etc. as well as complete processing units.

Surface finishes

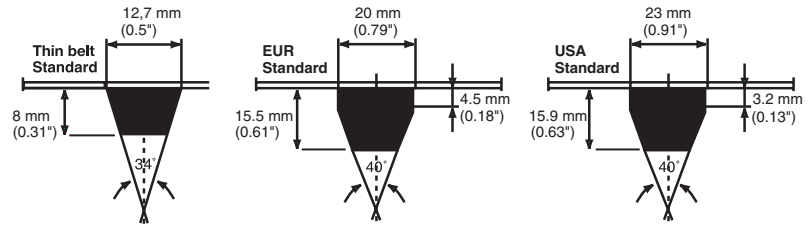
Sandvik has developed special techniques and equipment to provide continuous steel belts with surface finishes tailored to suit the product. A number of different finishes and treatments are available. Cold-rolled and different grades of ground finishes are provided as standard. Polished, PTFE-coated (Teflon™) surfaces, among others, are available on request.

Product retaining strips and true-tracking ropes

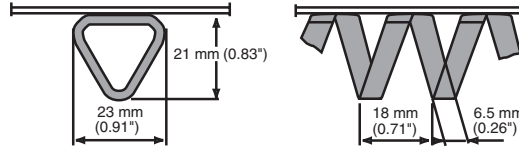
If required, the belt can be furnished with side retaining strips to keep the material on the belt, and true-tracking ropes to track the belt. Product retaining strips and true-tracking ropes are available in different materials and dimensions.

True-tracking ropes

Rubber V-rope



Stainless steel spiral-strip



Sandvik 1700SA

Belt width								
mm	100	200	300	400	500	600	800	1000
inches	4	8	12	16	20	24	32	40
Thickness mm (inches)								
0.3 (0.012)	●	●	●	●	●	●	●	
0.4 (0.016)	●	●	●	●	●	●	●	●
0.6 (0.024)							●	●

Sandvik 1050SM

Belt width									
mm	600	800	1000	1200	1400	1500	1560	3000*	4500**
inches	24	32	40	48	55	59	61	118	177
Thickness mm (inches)									
0.8 (0.032)	●	●	●						
1.0 (0.040)	●	●	●	●	●	●	●	●	●
1.2 (0.048)		●	●	●	●	●	●	●	●

Sandvik 1300C

Belt width											
mm	200	300	400	500	600	800	1000	1200	1250	2380*	3560**
inches	8	12	16	20	24	32	40	48	49	94	118
Thickness mm (inches)											
0.6 (0.024)	●	●	●								
0.8 (0.032)		●	●	●	●	●	●	●	●		
1.0 (0.040)		●	●	●	●	●	●	●	●	●	●
1.2 (0.048)			●	●	●	●	●	●	●	●	●
1.4 (0.055)				●	●	●	●	●	●	●	●

Sandvik 1650SM

Belt width							
mm	1000	1200	1400	1500	1560	3000*	4500**
inches	40	48	55	59	61	118	177
Thickness mm (inches)							
0.8 (0.032)	●						
1.0 (0.040)	●	●	●	●	●	●	●
1.2 (0.048)	●	●	●	●	●	●	●
1.6 (0.063)	●	●	●	●	●	●	●
1.8 (0.071)	●	●	●	●	●	●	●
2.0 (0.079)	●	●	●	●	●	●	●
2.3 (0.091)			●	●	●	●	●
2.7 (0.106)			●	●	●	●	●
3.0 (0.118)			●	●	●	●	●

Sandvik 1100C

Single belt widths 800-1500 mm, thickness 1.2-1.4 mm.

Sandvik 1320C

Stock standard dimensions: 400x0.6 and 500x0.8 mm.
Other dimensions: Belt width 1250 mm, thicknesses of 0.6, 0.8, 1.2, 1.4 and 1.6 mm.

Sandvik 1500SM

Single belt widths 1200-1560 mm, thicknesses of 1.2, 1.8, 2.7 and 3.0 mm.



True-tracking

To ensure exact tracking, the belts can be provided with Sandvik true-tracking strips, either in rubber (different grades are available) or in the form of a specially designed steel spiral strip as illustrated above.

Perforated belts

Five standard perforation patterns covering most requirements are available. A broad range of other patterns, with a minimum hole diameter of 0.8 mm (0.03 in.) and different spacings, can be provided to suit specific applications.

Standard Perforation Patterns						
Hole diameter mm (inches)	2.0 (0.079)	2.5 (0.098)	3.0 (0.118)	3.0 (0.118)	3.0 (0.118)	5.5 (0.217)
Triangular pitch mm (inches)	3.5 (0.138)	5.0 (0.197)	5.0 (0.197)	6.5 (0.256)	9.5 (0.374)	
Open area %	29.6	22.7	32.6	19.3	30.4	

Steel belt installation type		Important steel belt properties									Possible steel belt selection				
		Strength-ambient temperature	Strength-high temperature	Strength-low temperature	Stability against temperature diff.	Corrosion resistance	Wear resistance	Hygienic	Flatness	Straightness	Surface finish	Carbon (C)	Austenitic (SA)	Martensitic (SM)	High strength martensitic (SM)
Material Handling	Conveyors, general	●		○		○	●					×	×	×	×
	Sorting systems	●				○	●		●			×			
	Work tables, general					○	○		○			×	×	×	
Food Industry	Meat cutting tables					●		●	○				×		
	Steel belt dryers		○		○	●		●	○				×		
	Bake ovens		○		○		●	●	●	○	○	×			
	Contact freezers			●		●		●	○				×		
	Belt coolers/food				○	○		●	○				×	×	
Industrial Process Applications	Belt coolers/chemicals				○	○		○	○				×	×	
	Steel belt dryers		○		○	○		○	○	○			×	×	×
	Flow-through belt unit		○		○	○		○	○	○		×	×	×	×
	Double belt presses	●	○		●	○		●	○				×	×	×
	Belt skimmers					●			○				×		
Particle Board Industry	Single opening presses				●	○	●	●	●			×			×
	Multi opening presses				●	○	●	●				×		×	
	Rotation presses	●			●	○	●	●	●	●			×		×
	Double belt presses	●			●		●	●	●	●					×
Plastic Rubber	Rotation presses	●			●	●		●	●	●		×		×	

- = property always of importance
- = property sometimes of importance



Endless or open length

Sandvik belts can be supplied in open lengths, with ends prepared for welding on site or riveting or as endless belts with a welded joint.

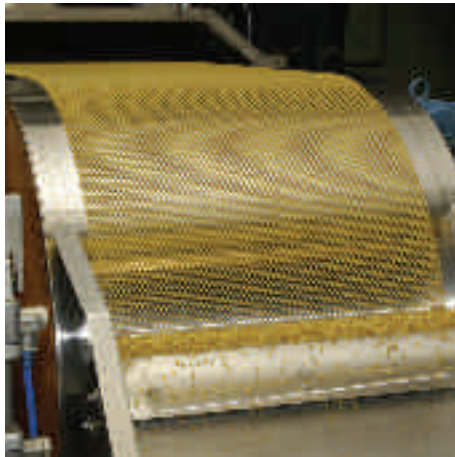
Share our experience...



Steel belts

Steel belts have been our business for more than 100 years. Our worldwide sales and service organisation houses a wealth of steel belt processing know-how from all types of industries. This vast experience allied to the very latest technology, progressive research and development activities and special manufacturing methods, will keep Sandvik steel belts at the forefront of technological development for years to come.

Our belt production facility in Sandviken/Sweden now has the capacity to manufacture up to 8 m width and up to 3.0 mm thick belts.



Chemical processing

Sandvik steel belts are one of the most economical propositions for the processing industries. Processing with a steel belt not only adds up to savings in labour and reduction of scrap, but also gives higher product quality and production in the majority of applications. Sandvik focuses its chemical processing capability through melt granulation and steel belt casting systems. Our granulation expertise includes cooling and solidification systems to produce slates, flakes, strips, pastilles and micropastilles.



Service

We make it our business to supply the right level of technical service to ensure our customers' systems continue to deliver maximum competitive advantages. Wherever you are, we can cover your entire process, either directly or via 24 hour service hotline.

Sandvik Process Systems
– your partner in profitable processing

Quality Assurance

Sandvik Process Systems manufacturing of steel belt is certified according to ISO 9001 and ISO 14001.

Service

Sandvik steel belts are backed by an international service network, with well-trained personnel using specialised service equipment ready to give on site assistance with installation, start-up and maintenance of your steel belt and processing unit.

More information

If you have a problem you think could be solved by a steel belt, please contact Sandvik. With our experience, there is a good chance we already have the answer. If not, our technical department will soon be working hard to find one.



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