Innovation and expertise in steel belts and steel belt-based process systems
Our product ranges include solid, perforated and special surface belts; single and double belts systems for granulation, film casting and lamination; as well as a variety of drying, cooling, freezing and conveyor belt systems.

This brochure provides a high level introduction to our capabilities and illustrates some of the key applications for our innovative products and systems. It is not meant to be a comprehensive catalogue – new applications for our steel belts are discovered all the time – but a document designed to inspire you, whether you’re a new and existing customer, to consider how our organizations might work together.

**Steel belts for every application**

The Sandvik steel belt (or band) is a smooth, continuous, spring-hard, flat section of carbon steel or stainless steel strip, and each belt is mill-prepared according to the end application.

A steel belt offers a unique combination of flexibility and strength; no other commercially available belt material offers such durability and resistance to damage. Steel belts can be up to 8000 mm wide – even wider to order – and made to virtually any length. They can be ultra-thin – as little as 0.3 mm – or, for more aggressive applications, to a maximum thickness (as of today) of up to 3.6 mm.

Our company has been at the forefront of steel belt innovation for more than a century, developing steel belt grades and finishes to meet the specific needs of hundreds of different applications. These are just a few.
This process is used for the bulk solidification of sulphur at many of the world’s largest oil and gas refineries. Other products successfully processed on this system include:

- Fertilizers (urea, sulphur bentonite)
- Foods (chocolate, fats etc)
- Agrichemicals
- Rubber/plastic additives
- Resins/waxes
- Bitumen/pitch

**Innovative process solutions for the food industry**

A stainless steel belt is inherently hygienic. It’s flat and smooth, so there are no crevices or holes in which dirt can hide. It’s impervious, so it will not absorb bacteria, odours or flavours. And its hardness not only makes it long-lasting but also means that it can be cleaned and sterilised by a whole range of methods involving heat, scrubbing, high pressure sprays and even chemicals.

We work in partnership with food manufacturers and processors around the world. We design and help develop high performance systems for drying, cooling, freezing, baking and ‘live storage’ accumulation applications.

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**Market-leading solutions in chemical melt granulation**

The main focus of our chemical processing capability is on granulation – directly from the melt, in a single step – in the form of pastilles, micropastilles, flakes and strips.

All our systems follow the same basic principle: the melt is fed onto a continuously running stainless steel belt which is cooled by water sprayed against the underside. The resulting transfer of heat from the melt to the cooling water, via the belt, enables quick, controlled solidification of the product.

Single- and double-belt granulation systems based on this simple but proven process provide clean, efficient and economical solidification of a whole range of product types including chemicals, resins and waxes.

**Rotoform® – the world’s favourite pastillation process**

The Sandvik Rotoform granulation process was introduced in the early 1980s and has gone on to become the most widely used system of its kind, delivering pastilles of highly uniform shape, stability and quality, in an environmentally-friendly manner.
Steel belts are also used for conveying applications such as meat cutting lines and chocolate conveying.

Conveying – our stainless steel belts have been used for the clean and hygienic handling of wet foods for decades.

Drying – our dehydration systems offer fast throughput, low bacteriological count, optimum drying cycle profiles and reduced operating costs.

Cooling – our Rotoform system is extensively used by the food processing industry for products ranging from fats and emulsifiers to chewing gum base.

Freezing – Sandvik steel belt freezers are used for fast freezing of coffee/tea extract as well as shrimps, prawns, fish and fish fillets.

Steel belt-based film/sheet casting systems
We are a leading name in the design and installation of single and double belt systems for sheet casting and the production of films and foils, compound (composite) materials and synthetic stone/artificial marble.

Our systems offer the advantages of continuous production, environmentally-friendly processing and the ability to combine multiple processes (i.e. pressing, heating and cooling) in one plant.

Wood-based panels, laminates and rubber belting
We have been a close partner of the wood-based panel industry since its earliest days, introducing steel belts to the industry in the 1950s.

Today we supply steel belts for WBP presses used in the production of particle board, MDF, OSB and coated boards, as well as the smooth and textured press plates and endless press belts used to create the look and feel of today’s naturally inspired laminate surfaces.

Sandvik high-strength stainless steel belts are also used in single belt rotation presses for the production of wide rubber belts used by the mining industry.

A key partner to the WBP industry for decades, supplying specialist steel belts for all kinds of presses: double belt, SOP and rotation.
Customer partnership and service

Full technical and service support
The right level of technical service will ensure that your system continues to deliver maximum competitive advantage, and our service organization is never more than a call away. Your regional Sandvik service center can provide all the support you need including:

- Spare parts
- QuickTool options for in-house repair/maintenance
- Commissioning and start-up
- Operator/technician training
- Preventative maintenance agreements
- On-site support from trained service engineers
- 24 hour technical tele-assistance

Trial your own products at a Sandvik test centre
Sandvik test centers are at your disposal for assessing the benefits – in terms of product quality and productivity – of our systems. We can even arrange to set up a working production line for you to try out your own products, and our technical specialists will assist you in planning the most efficient and economical system for your process needs.

Over 100 years’ experience in steel belt production
In 1901, we produced the world’s first steel belt conveyor, used for transporting waste from a sawmill in Sweden.

While the transportation of bulk goods from A to B remains an important application, today’s steel belts are more likely to be found at the heart of sophisticated production systems for products as diverse as films for LCD screens, wood-based boards and panels, filtration materials and baked goods.

You’ll even find our steel belt technology used as a rolling road in the wind tunnels used for improving Formula 1 car aerodynamics.
**Sandvik Group**
The Sandvik Group is a global high technology enterprise with 44,000 employees in 130 countries. Sandvik’s operations are concentrated on three core businesses: Sandvik Tooling, Sandvik Mining and Construction and Sandvik Materials Technology – areas in which the group holds leading global positions in selected niches.

**Sandvik Materials Technology**
Sandvik Materials Technology is a world-leading manufacturer of high value-added products in advanced stainless steels and special alloys, and of medical implants, steel belt-based systems and industrial heating solutions.

**Sandvik Process Systems**
Sandvik Process Systems, a product area within Sandvik Material Technology, is a world leader in steel belt process technology, designing, manufacturing and installing steel belts and belt systems for the food, chemical, wood based panel, oil and gas and many other process industries.

**Quality management**
Sandvik Materials Technology has quality management systems approved by internationally recognized organizations. We hold, for example, the ASME Quality Systems Certificate as a materials organization, approval to ISO 9001, ISO/TS 16949, ISO 17025, and PED 97/23/EC, as well as product approvals from TÜV, JIS and Lloyd’s Register.

**Environment, health and safety**
Environmental awareness, health and safety are integral parts of our business and are at the forefront of all activities within our operation. We hold ISO 14001 and OHSAS 18001 approvals.