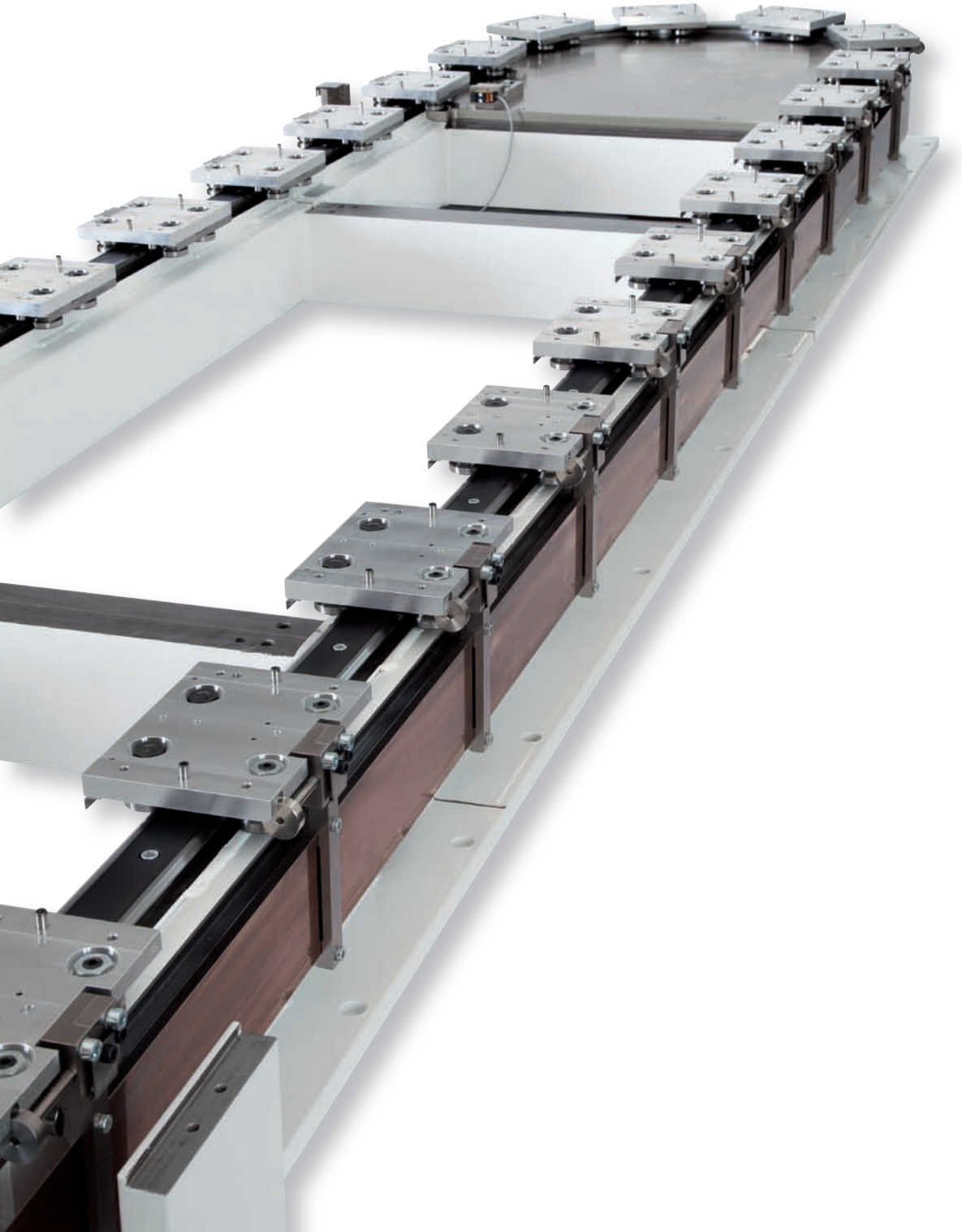
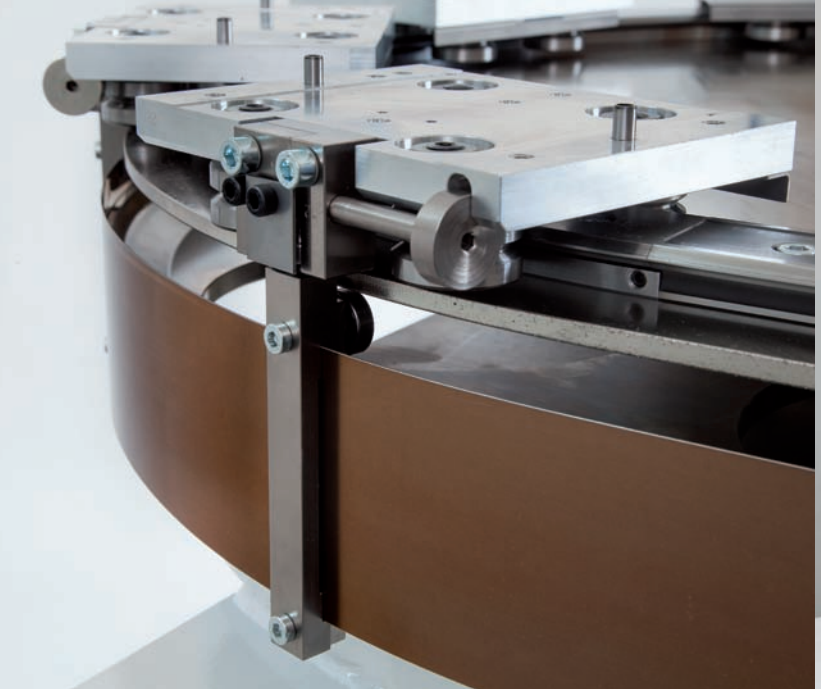
Sandvik Steel Belt
Report about Taktomat



SANDVIK



Sandvik steel belts combined with pallets.

Project team: Horst Pelz, Sandvik discussed the linear motion system LB with Norbert Hostetter, owner Taktomat and Sigmund Kumeth, consulting engineer at Taktomat.

Sandvik Steel Belt
In an Automated Linear Motion System

Taktomat GmbH, a company based in South Germany, is a market leader for components for special-purpose machines including, among others, parts for linear and linear motion systems. Established in 1989 by Norbert Hofstetter, the company advanced to be a high-tech supplier thanks to continuous innovative development. Today, the company stands for absolute precision and reliability in drive systems and components.

Taktomat's type LB linear motion system is used in automated processes that call for high positioning accuracy. The system is suitable for a wide range of applications. The size and design of the component are freely selectable within a very wide range, depending on the application.

A challenge of precision and flexibility

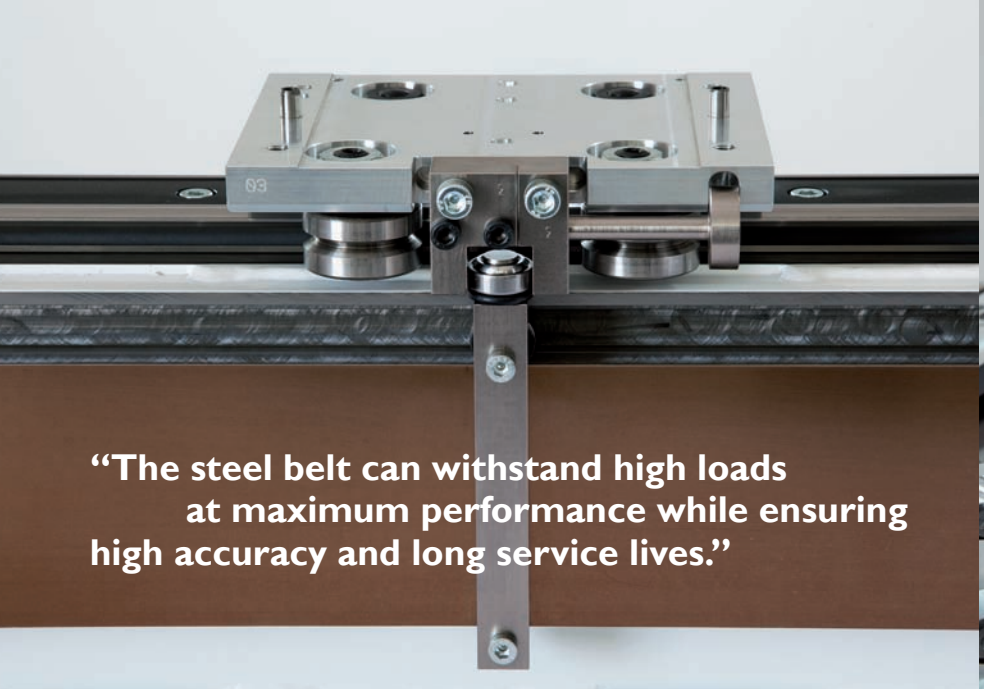
Sandvik was called upon to provide a component – the steel belt – that would ensure quick transfer and accurate positioning of work carriers in automated linear motion systems. In the specific application, the belt has to be moved with extraordinary precision and at different strokes . This could not be achieved with the drive systems available on the market.

Therefore, it is not without pride that the people at Taktomat speak of a trail-blazing development. This product measures up to customer requirments, especially in the area of work carrier technology and linear motion cylces.

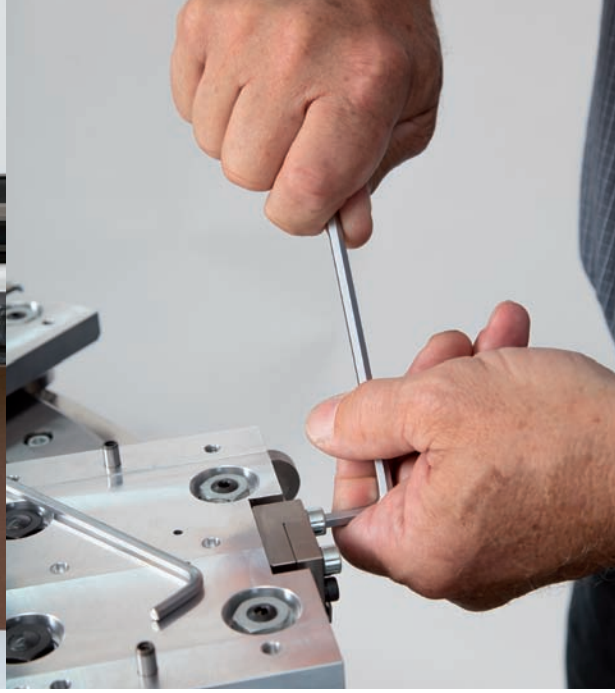
It is exactly in this area that Sandvik's steel conveyor belt provides significant advantages. The steel belt makes sure, for example, that there are no unpredictable linear elongations that may lead to inaccuracies as experienced with conventional machine elements.

The Taktomat solution featuring a steel belt has proved its reliability in various applications. Users from the auto and medical technology industries, printing machine manufacturers as well as textile and yarn processing companies have trust in this system for which Taktomat has filed a patent application.

The concept leaves room for the mechanical synchronization of the work carriers; it ensures perfect roller guidance for all assembly-relevant carrier systems and can be flexibly adapted for use in a wide range of applications.



Precision in use



Flexible handling of the linear motion system which can carrier numerous pallets

“The cooperative partnership with Sandvik has made it possible to offer an innovative product on the international market.”

Facts:

Dimensions:	
Belt:	8,400 × 80 × 0.6 mm (must be adapted to the load)
Radius Diameter:	713 mm
Pallets:	30 pcs
Indexing accuracy:	± 0.04 mm
Cycles/min:	up to 0.4 sec
Max. load:	4 kg per work carrier
Tension:	0.4 – 0.8 kN

After five years of development, there are now several units in operation around the globe, which give our customers the desired accuracy and flexibility.

Mr Sigmund Kumeth, engineer and developer of the new product line “LB Linear System”, confirms: “The idea of an endless steel belt resulted from the requirements of our customers who asked for flexible indexing and high positioning accuracy. This could not be achieved with a conventional transfer system. The steel belt provides unrivalled accuracy of ± 0.04 mm. The steel belt can withstand high loads at maximum performance while ensuring high accuracy and long service lives.”

Mr Hofstetter states: “We are pleased to be in a position to offer our customers a modular linear system for their specific applications. Our engineers bring many years of experience and know-how to this project. It is precisely in this area that we will continue to position ourselves. The cooperative partnership with Sandvik has made it possible to achieve an excellent development result based on competence and experience and – thanks to good service – to offer an innovative product on the international market. The LB linear motion systems are used in the most sensitive applications, such as small-part assembly processes as well as in the printing, furniture and electrical industries. And as they are cleanroom-compatible and hygienic, they are even used in the medical technology sector.”

Flexible indexing pallets with high positioning accuracy

AB Sandvik Process Systems
81181 Sandviken
Fon: +46-26-265600, Fax: +46-26-258675
info.sps@sandvik.com, www.sandvik.com/steelbelts

S-PS047-B-GER-12, Case Study „Taktomat", Germany
produced in Ennepetal (MN), gzd-empeer 08/2012, technical modifications reserved