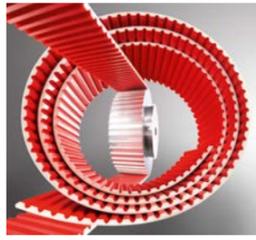




Super combination

How BRECO timing belts with weld-on belt profiles increase the efficiency in a fully automated sanding line for skis.

More on page 1 and 2



Consistent innovation

Due to strong demand now also sold by the metre for linear technology: BRECO continues a track record with the new BRECOmove AT10.

More on page 6



Predestined for precision

JAT GmbH relies on CONTI® SYNCHROFLEX GEN III high-performance timing belts in depanelisation machines. The result: Repeat accuracy of 2 microns.

More on page 1 and 7

Increasing efficiency in ski production through mobile paternoster lifts

Since 1939, the Swiss company Montana has been supplying machines to ski service providers worldwide, enabling them to provide optimal support to winter sports enthusiasts. Montana has not only developed high-end ski treatment machines with different degrees of automation for ski rentals, but also, for instance, air-conditioned ski depot systems. With a new machine type design, Montana has now branched out to offer its innovative services for ski production.



The fully automatic sanding line presented here was developed from Montana machines for ski rentals and is designed for medium-sized batches. Montana's long-standing chief designer Johannes Höfflin explains the machine concept: „Nowadays there is a very discerning clientele with special requirements – people will gladly pay 2,000 euros or even significantly more for a pair of skis. Our new machines facilitate ski production of small and medium batch sizes on an industrial scale and with industrial precision, specifically for this market.“

The control system of the sanding line provides suitable parameter sets for any type of ski. You can select the required parameters for the current ski type and start the machining process on the display. The procedure is always the same: Smoothing the coating, grinding in the required surface structure, sanding and polishing the edges, drying and waxing the ski.

► Continued on Page 2

Effortless success

Polyurethane timing belt drives precision positioning axes

in dynamic

The T-shaped construction, consisting of a linear motor axis and a gantry axis made of carbon fibre reinforced plastic (CFRP), is a particular feature of the 2-axis linear systems from JAT. They are specifically designed for use in depaneling machines. They position electronic PCBs with a repeat precision of 2 µm by means of grippers. A CONTI® SYNCHROFLEX GEN III timing belt is used for the very fast and precise drive of the gantry axis. High rigidity, minimal total weight and the compact design were some of the defining criteria for the JAT specialists in deciding in favour of these high-performance polyurethane timing belts.



Shortly before delivery: CFRP gantry system from JAT for use in a depaneling machine.

In 1990, after German reunification, the former development engineers from Carl Zeiss Jena founded Jenaer Antriebstechnik GmbH (JAT). Their objective was to supply dynamic

and precise drive systems tailored to the application for special-purpose machines. Within a few years, the small engineering office became an internationally sought-after partner for customized drive solutions.

Handling systems and dynamic single- and multi-axis systems are some of the company's specialities. The drive systems are used in the packaging, printing, and textile industry, as well as in medical technology and

the semi-conductor industry. For this market, with a very high degree of automation, JAT offers gantry systems for depaneling machines.

Depaneling machines

In PCB production, large panels are populated with electronic components, soldered and then separated into many small PCBs, a process which is called depaneling. In this way, about 60 to 80 PCBs for smartphones are made from a finished panel with a size of 25 by 25 inches. The machines for separating these panels are called depaneling machines. Depending on the geometry, required precision and susceptibility of the PCBs to damage, depaneling is carried out in the industry by cutting, milling, and recently also by lasers.

► Continued on Page 7

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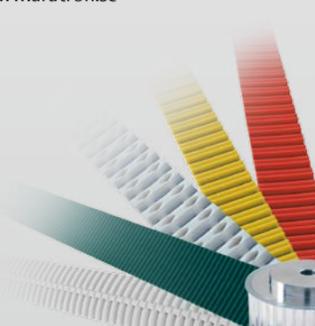


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► Continued from Page 1

Increasing efficiency in ski production through mobile paternoster lifts



Fully automatic Montana sanding line with mobile paternoster lifts.

Photo: KNOLL-MONTANA

This fully automatic sanding line can process up to 30 pairs of skis. To date, the only manual steps were positioning the skis on the cross transport belt and removing the skis from the machine.

Johannes Höfflin remarks on the topic of machine line operation: „As serial ski production requires that the skis are stored between the individual processes in any case, we wondered whether these 'buffers' could simultaneously be used for automatic feeding of skis into the sanding line. This led to the idea of a mobile paternoster lift as a ski carrier and intermediate storage system.“

Employees now have a convenient way to load and unload the mobile paternoster lifts on the upstream and downstream stations or work areas. Most notably, this method is independent from the timing and location of the sanding line and its cycle rate. The loaded paternoster lift is simply moved to the sanding line, aligned approximately and connected to the control system. „With this method, the mobile paternoster

lift permits a significant increase of the main production time, the sanding line output and the overall ski production. Furthermore, linking different work stations becomes significantly easier,“ Johannes Höfflin says, confident in the new system.

Two studded timing belts transport the skis from the paternoster lift into the sanding line. A second paternoster receives the skis in the same manner after machining.

Two endless joined BRECO timing belts with welded profiles are used for transport on the paternoster. Engineer René Preßler of Mulco's sales partner Hilger u. Kern based in Mannheim explains the project: „Basically, we had two options. Either we weld the profiles to the back of the belt or we use BRECO's ATN system. The latter had a higher load bearing capacity, but requires double bolting for each individual profile. Montana decided on the welded variant.“

The solution for fitting and dismantling the ski carriers from the profiles



Profile welded onto the back of the BRECO® timing belt for fastening the ski carriers.

is particularly elegant and practical: Spring-loaded balls lock the holding bolts in place axially, making bolting unnecessary and making it possible to replace the ski carriers without tools.

Over 2.600 profiles are available

The timing belts and customer-specific profiles are manufactured and the profiles welded onto the belts directly at the premises of the manufacturer and Mulco member BRECO Antriebstechnik in Porta Westfalica. Like the timing belt, the profiles consist of high-quality polyurethane.

All in all, over 2.600 profile shapes are available and can be adapted to their specific task through mechanical reworking (drilling and milling), depending on the measurements.

In addition, BRECO also creates customised profile shapes. The injection dies are produced in the company's own tool shop. René Preßler adds: „For customised solutions we have to ensure that the timing belt flexibility is not impacted. As a rule, the profile position 'opposite the tooth' is the preferred position. For this reason, the profile pitch is always selected as an integral multiple of the tooth pitch.“ It is also notable that there is an option for injecting customised moulded metal inserts, e.g. threaded sleeves or pins, into the profiles. Undercuts of moulded inserts guarantee a stable joint between the polyurethane and the insert.

A keyway and a drilled hole are sufficient for fastening the coated ski carriers to the profile. Although the load of the ski weight is relatively low, the belt requires a relatively strong tension for problem-free guiding of the skis. Bearing supports on both sides of the pulleys provide a stable support for the drive shaft and prevent excessive bending. A 24V motor with a worm gear unit is used for the drive. The self-locking mechanism of the worm gear unit ensures that the paternoster lift remains at a standstill when the motor is switched off.

The 24VDC voltage has several advantages. First of all, it reliably prevents danger to the operating staff, even in case of an electrical fault. Secondly, a 24 V battery permits mobile operation of the paternoster independently from the sanding line. This is a major simplification of ski handling and the manufacturer's workflow and permits an ideal utilisation of the sanding line capacity.



Transfer of the skis from the unloading level to the paternoster lift.

Photo: KNOLL-MONTANA

Finally clean air in the canal

CONTI® SYNCHROCHAIN CARBON in diesel-electric boat drives make city traffic emission-free.



Trial run for the diesel-electric boat drive of REAPsystems.

Photo: TransDev

In Venice 550 water taxis and buses transport 32 million visitors per year through the historic and picturesque lagoon town. Add to this thousands of private motor boats. The exhaust fumes and noise of the combustion engines cause alarming levels of pollution hazardous to both people and the environment. A quick, practical solution is needed.

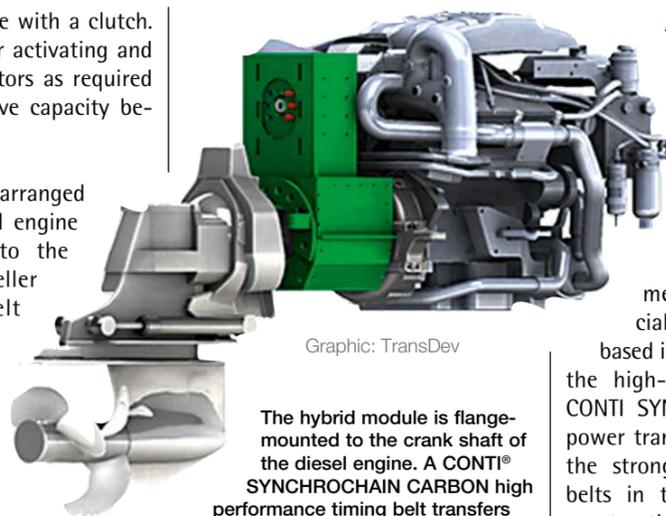
Venice's traffic problems on water are very similar to those of other cities on land. For this reason, hybrid drive systems - that is, a clever combination of combustion engines and emission-free electric motors - practically suggest themselves as a solution for Venice. At low speeds in the city, the diesel engine can be „clutched out“ and deactivated. The purely electric drive then guarantees quiet, emission-free driving. During fast movement with the diesel engine, the electric motor may also assist to reduce exhaust emissions. During medium to high speed, such as when transiting the lagoon, the diesel engine automatically kicks in, driving not only the propeller but also the generator. The batteries are charged and the efficiency range of the engine is improved.

Hybrid drives for Venetian marine traffic

REAPsystems from Hampshire, England, specialises in developing environment-friendly drives. This English company is currently developing a prototype of a Venetian water taxi with a diesel-electric drive. The hybrid module consists of an efficient electric motor, lithium-ion batteries, an HSCU (Hybrid System Control

Unit) and a belt drive with a clutch. The HSCU is used for activating and deactivating the motors as required and dividing the drive capacity between the two units.

The electric motor is arranged parallel to the diesel engine and is connected to the drive train or propeller via the timing belt drive and the clutch. The clutch is engaged for the diesel drive and disengaged for the purely electric drive. REAPsystems has designed this hybrid module as a retrofittable solution. It has therefore been developed to be suitable for a large variety of boat drive configurations, e.g. stern drives and shaft systems. This is particularly important for retrofitting the large number of motor boats and water taxis in Venice. Apart from the environmental benefits, the company estimates an average fuel saving of at least 50 % compared with modern diesel engine boats.



Graphic: TransDev

The hybrid module is flange-mounted to the crank shaft of the diesel engine. A CONTI® SYNCHROCHAIN CARBON high performance timing belt transfers the electric motor power to the propeller.

A maintenance-free, compact drive solution

When it came to the drive belt and pulley solution REAPsystems turned to TransDev and ContiTech. The Mulco member TransDev, a specialist for drive technology based in Dorset, England, selected the high-performance timing belt CONTI SYNCHROCHAIN CARBON as power transmission belt. It is one of the strongest polyurethane timing belts in the market. It permits a construction width reduction of up to 80 % compared with other timing belts. Small space requirements were particularly crucial for the retrofitting solution.

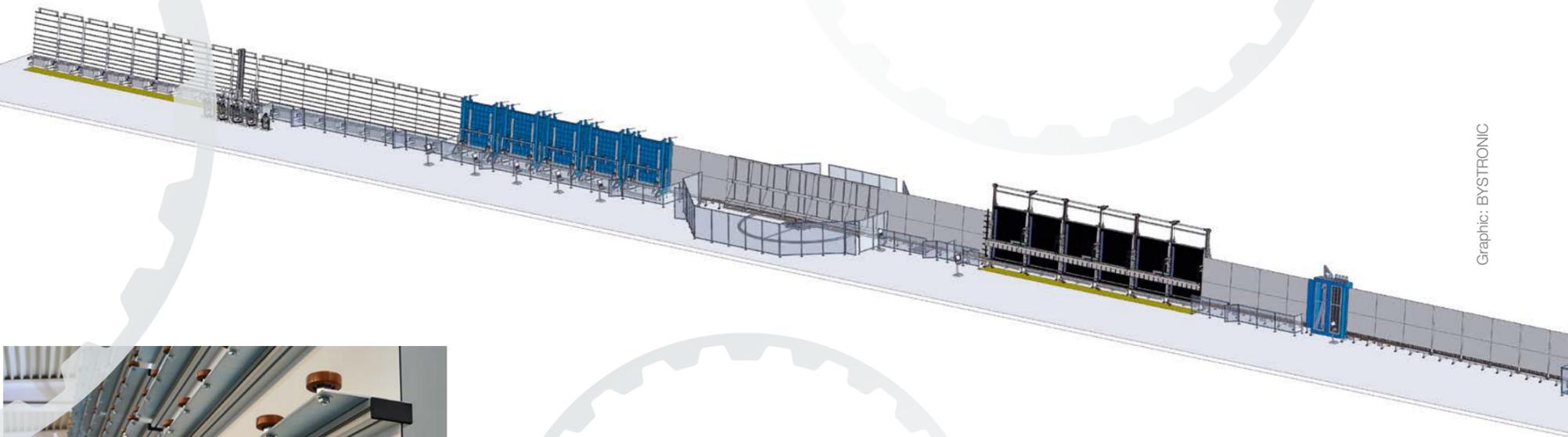
A yellow mesh on the tooth surface makes the timing belt extremely wear resistant. The service life of the CARBON high-performance timing belt is up to 100 % higher than the service life of timing belts using aramid tension members. As the carbon tension member is not subject to plastic elongation, there are practically no losses in pre-tension force. Retensioning the belt - and with it, maintenance work - becomes unnecessary. With its combination of cold, heat, oils, diesel and salt water, the engine compartment of any boat is a technological challenge. The CONTI SYNCHROCHAIN CARBON timing belt is perfectly resistant to these factors. It is also resistant to oils, greases, UV and ozone, suitable for use in tropic climates and can be used in temperatures between -40 and 80°C.

TransDev has created special steel timing belt pulleys with through bores and flanges for the hybrid module. The Dorset-based drive specialists have become a main development partner and sponsor of the green project that hopes to transform marine traffic and transportation. The boat is set to transport passengers - noiselessly and without emissions - through romantic waterways shortly to prove the practical applicability of the hybrid drive.

This high-performance CONTI® SYNCHROCHAIN CARBON timing belt with its CTD profile makes even extreme applications such as the hybrid engine possible.



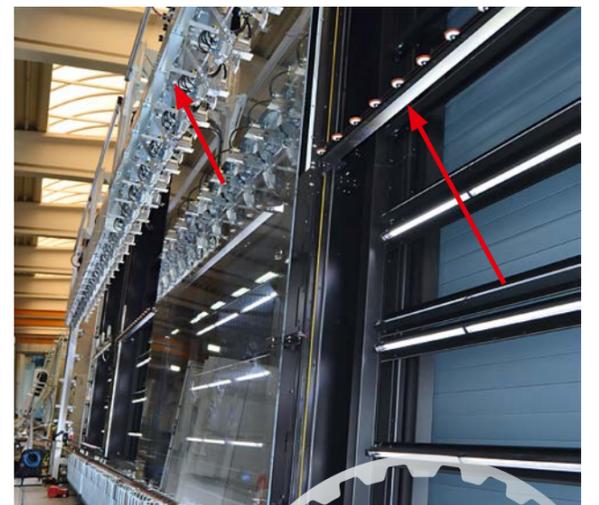
Photo: ContiTech



Timing belt drives in a row with the coated BRECOFLEX® AT15 for transport and precise positioning during CNC processing.



Bystronic glass development manager Stephan Kammerer (on the left) and engineer René Preßler, technical customer consultant at Mulco's sales partner Hilger u. Kern.



Inspection station: Dirt and scratches are made visible in front of the black background with special lighting. On the top left, the gripper beam; on the top right, the support beam with smaller rollers.

500 meters of BRECO polyurethane timing belts in the largest insulated glazing production line in the world

With their shiny façades, modern sky scrapers, hotels and shopping centres have an elegant and futuristic appearance. Architects employ ever larger glass elements up to 18 m in length as a design feature. The dimensions of the insulated glazing production lines have increased accordingly. The world's largest machine line currently being completed at Bystronic glass in Neuhausen in Baden-Württemberg, measures 160 m in length. Four different BRECO timing belts are used – from standard belts to special custom-designed high-performance timing belts – for transporting the heavy glass weighing several tons and for driving the complex processing machines.

Insulated glazing – construction

Insulated glazing consists of at least two glass window panes (standard) and up to four glass window panes (high end) separated by special spacer

bars. Most glass panes are covered with a special coating to achieve maximum R-values. The space between the panes is filled with noble gases like Argon and Krypton.

The spacer frames can be made of different materials such as aluminium, stainless steel, plastic or composite materials, and are bonded to the glass via the primary seal. This primary seal consists of polyisobutylene and is responsible for the gas tightness of the construction.

The unit consisting of glass panes and spacer frame is filled with gas and pressed to the required dimension. In the last production step, the joint on the outer edge between the panes is filled with secondary sealant such as silicone. Once this secondary sealant has cured, the panes are firmly bonded together, gas-tight and ready for further processing or transport to the construction site.

The glass panes are processed at a total of six stations in Bystronic's production lines:

1. The automatic edge deletion machine for removing metal coatings from the edge of the glass pane (e.g. UV protection).
2. The glass pane washing machine for complete cleaning of the glass panes.
3. The inspection station for checking for dirt and scratches and for bonding the spacer frames with the primary sealant.
4. The turning station for turning the glass elements when required.
5. The assembly and gas filling press where the glass panes are precisely positioned with the spacer frame, filled with gas and pressed to the required dimension.
6. The automatic sealing machine which bonds and fills the joint on the outer edge between the panes, for example, with silicone.

Insulated glazing – manufacturing process

In insulated glazing production lines, the glass panes are tilted back at an angle of 6° from the vertical. They lie against rear panels equipped with small rollers, or are held at the rear by horizontal support beams with small rollers.

BRECOFLEX® timing belts transport glass elements weighing 7 tons

The glass elements always lie on strong transport rollers or on the back of coated timing belts. The timing belt drives perform three functions:

- They transport the glass elements through the 160 m long line,

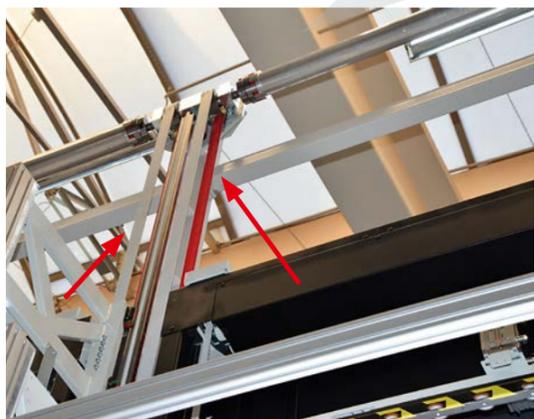
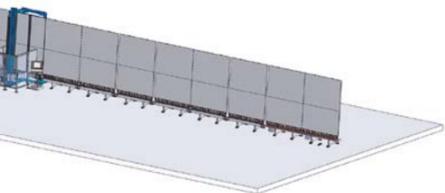
- they feed the glass elements for CNC processing (automatic edge deletion and sealing machine), and
- they serve to precisely position the glass panes to a few tenths of a millimetre in the assembly and gas filling press.

The BRECOFLEX AT10 timing belt was not able to provide the required tensile forces and stiffness in this machine line for transporting the huge glass panes measuring up to 18 m in length and 3.3 m in height. The next standard size is type AT20. However, the large teeth of the AT20 inevitably lead to larger deflection rollers and timing belt pulleys.

Customer visit to the timing belt manufacturer

Stephan Kammerer, development manager at Bystronic glass, explains: „The pitch of 15 mm was exactly the right size for design and performance. BRECO offers this pitch in series production. However, we had a few special requirements, therefore four of our design engineers

Think BIG



View from below of the inspection station: BRECOmove timing belts hold the heavy gripper beam with threefold safety.



View from the rear of one of the five assembly and gas filling presses installed side-by-side.



A clever solution: One joined BRECO® AT10 timing belt drives four spindle drives in the huge assembly and gas filling press.

visited the timing belt specialist in Porta Westfalica with a catalogue of questions and concrete tasks. Our objective was to achieve the perfect design and configuration of the timing belt for our application."

Engineer René Preßler, technical customer consultant at Mulco's sales partner, Hilger u. Kern, initiated the visit for Bystronic glass at BRECO in Porta Westfalica. Higher stiffness of the timing belt was at the top of Stephan Kammerer's list of requirements. The product development manager explains: "We position the glass elements against a positioning rod. Due to the elongation of the 3.5 m long belt span under the load of several tons, the belt contracted by a small amount after positioning the glass panes, which slightly changed the position of the glass panes. A tolerance of 0.5 mm must not be exceeded. Therefore maximum stiffness of the tension member is crucial for the quality of the insulated glazing panes."

Customized development and endurance tests

In a development project for Bystronic glass, BRECO equipped the ATS15 timing belt in comparison to the standard timing belt with a special thicker tension member specially designed to achieve the necessary stiffness and to withstand the occurring tensile forces. René Preßler explains: "The larger diameter of the tension member means that as the timing belt runs around the pulley, the diameter on which the neutral fibre of the tension member lies becomes larger. Therefore the timing belt pulleys have to be adapted to the diameter of the new timing belt to compensate for the change in length. This has to be taken into consideration when calculating the costs."

In addition, it was necessary to prove in practice that the frictional heat created at the stainless steel support rails by the weight of the glass panes was adequately dissipated. The green textile-like nylon tooth facing PAZ was used for reducing the friction. Stephan Kammerer adds: "We had endurance tests carried out at BRECO in which the temperature increase of the belt was tested with the maximum permissible line load of 400 kg/m at two operating speeds. The results were very positive. We now use the friction pairing PAZ/stainless

steel on all support rails subjected to high loads in our machines."

Warping of the timing belt

A last problem had to be solved regarding the ATS15 timing belt: the coating on the back of the belt. When a wide timing belt is coated on the back, the coating process causes varying tensions in the belt. This leads to slight warping of the timing belt transverse to the direction of run. In the case of small light-weight glass panes, the warping can lead to undesired movement of the glass on the belts, and negatively affects the positioning accuracy in the machine. Stephan Kammerer explains: "BRECO again recommended the optimum configuration and suitable thickness of the coating for this. It was 100 % successful. The belts are not subject to warping and we achieved the necessary stiffness. The backing has the required hardness and the PAZ coating reduces friction and wear, and the power requirement."

Much in demand for vertical axes: BRECOmove AT10

In the inspection station, the glass panes are not held by support panels, but by several horizontal 18 m long support beams. These support beams can be adjusted to the height of the glass elements. BRECO and BRECObasic AT10 timing belts are used here as traction mechanisms.

An additional beam with a length of 18 m, called a gripper beam, positions the spacer frame in relation to the top edge of the glass. Unlike the support beams, the gripper beam is in front of the glass and therefore in the operator's area. "In order to meet the strict safety guidelines it was necessary to provide proof that the timing belts used can hold three times the rated load. The new BRECOmove high-performance timing belt is ideal for this task," says Stephan Kammerer.

The BRECOFLEXmove timing belt was originally developed purely for power transmission with an improved tooth geometry, friction reducing film and a reinforced tension member. The safety that BRECOmove – as open length version – offers against tearing is so high that it is also ideal for use in vertical axes. René Preßler explains: "Demand for this product with the field engineers at Mulco's sales partners was so high that the date of the series launch was brought forward. BRECO excels in realising demanding development projects for its customers. Mulco partners' field engineers are the consulting link in this process. On the one hand, they offer their customers exceptional solutions. On the other hand, they promote the further development of products by the timing belt manufacturer."

"A total of about 500 metres of different timing belts are fitted in this production line, which is the largest of its kind in the world."

Stephan Kammerer, development manager at Bystronic glass

BRECOFLEXmove and BRECOmove

Two high-performance timing belts for demanding applications

The name *move* not only refers to the English word *move*, it is also an acronym describing the excellent properties of the red high-performance timing belts from BRECO. **m**aximum performance, **o**ptimised tooth shape, **v**ersatile application **e**fficient.

Exactly two years ago, Mulco first presented BRECOFLEXmove AT10 at the Hanover Fair 2015. Due to high demand from customers for an open length version of this timing belt type, BRECOmove AT10 will be presented at the Hanover Fair 2017.

Maximum performance

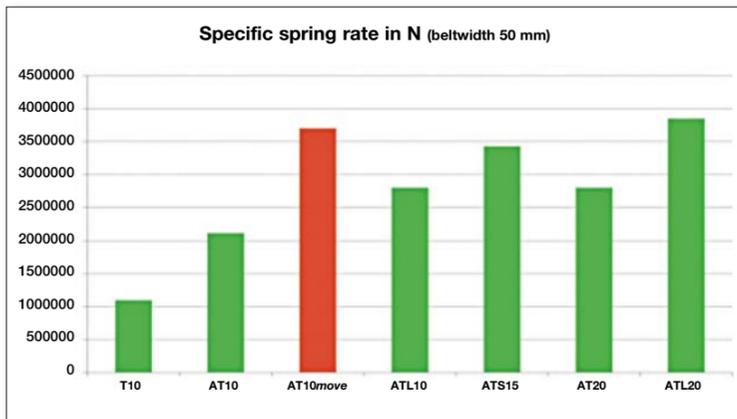
BRECO developed a thicker tension member with approximately 30 % higher strength and excellent flexibility for the high-performance timing belts of the „*move*“ family. This increased the tear strength and the admissible tensile forces.

Optimised tooth shape

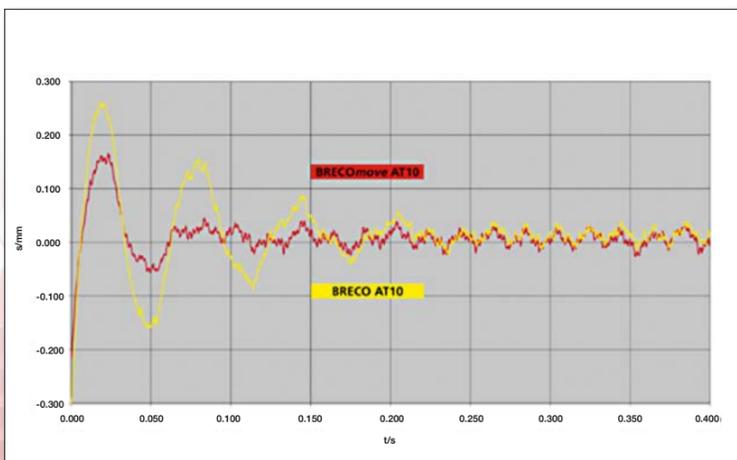
Greater tensile forces transmitted by the tension member lead to higher stress in the root of the tooth and higher surface pressure on the tooth flank. With the aid of finite element topology optimization, BRECO was able to develop a new tooth geometry that ensures more uniform distribution of the load acting on the teeth. At the same time, the development engineers changed the tooth geometry so ingeniously that the „*move*“ timing belt still fits existing AT profile pulleys.

Versatile application

With almost 70 % higher tensile stiffness in comparison to the previous version, BRECOmove AT10 offers minimum settling times (diagram) in linear axes for cycle operation and positioning. Depending on the drive, this permits steeper starting and stopping ramps. The reduced cycle times allow the machine manufacturers to increase the productivity of their linear axes and entire machines.



Technical advantages.

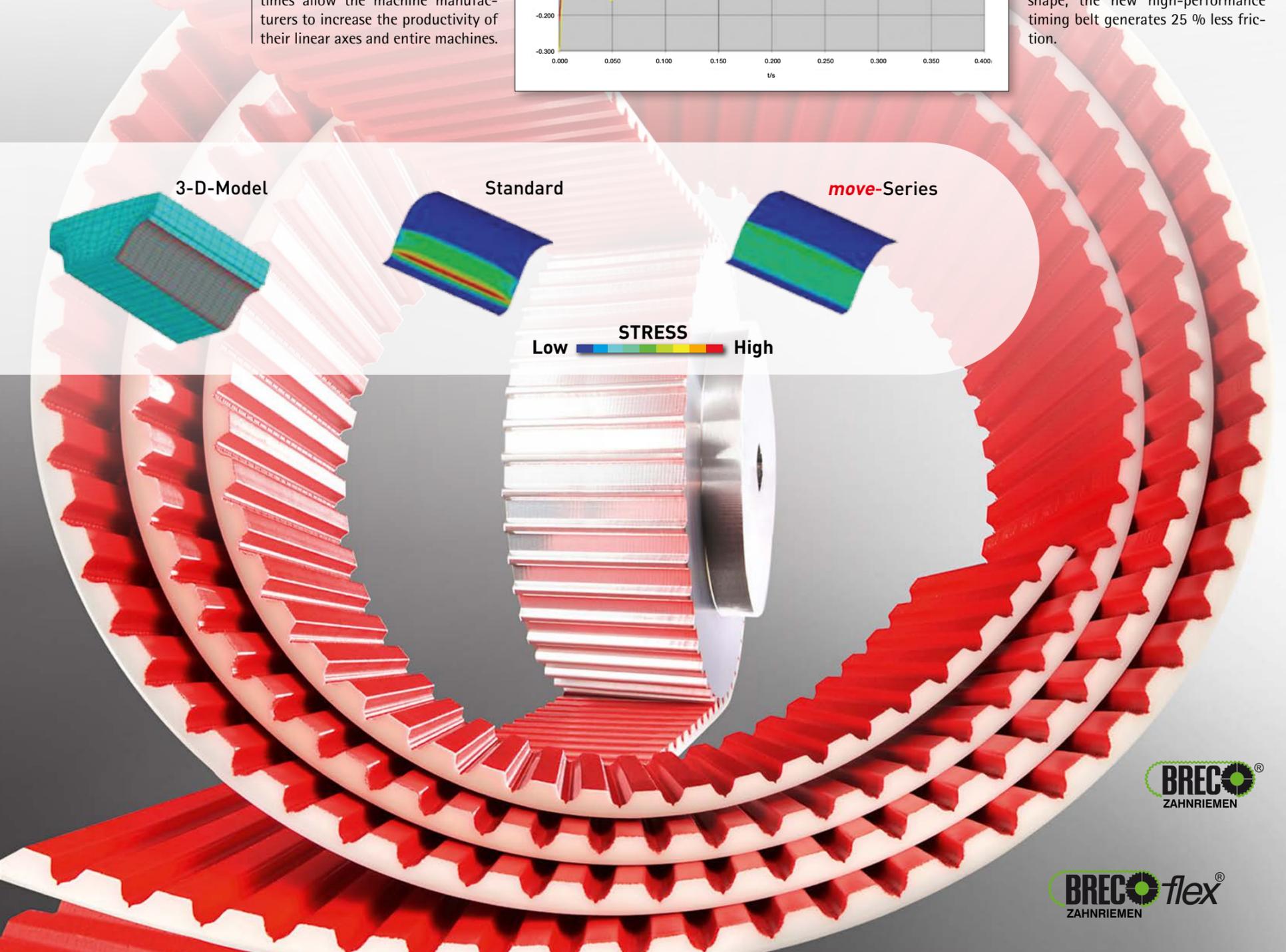


The exceptionally high transmitted tensile forces of BRECOmove make it very interesting as a traction mechanism in vertical axes. It has not been possible before to demonstrate the necessary safety of timing belts with this pitch; this is now possible with BRECOmove. An example of application in vertical axes is shown in this issue of mulco innovativ in the article „Think Big“.

Efficient

With BRECOmove, AT10 belt drives can be now be designed approximately 30 % narrower. The narrower pulleys not only require a smaller installation space, they are also cheaper. BRECOFLEXmove AT10 polyurethane timing belts are offered in the widths 25 to 100 mm and lengths of 1.400 to 30.500 mm.

A wear-resistant polyethylene laminate protects the tooth flank of the BRECOFLEXmove timing belt. In conjunction with the optimised tooth shape, the new high-performance timing belt generates 25 % less friction.



► Continued from Page 1

Effortless success

The X/Y axis system shown here is designed for the transfer of the finished milled PCBs out of the machine. For this, the customer installs a gripper weighing 20 kg with Z and additional rotating axis to the slide of the gantry axis. This gripper transfers the PCBs, for example, to a transport conveyor, stacking system or a work-piece carrier. The CFRP gantry system has to perform two important functions, which considerably determine the cycle time of the machine: The positioning of the gripper over the PCB and the subsequent transfer of the PCB to the next process including the return of the gripper to its original position.

JAT design engineer Bastian Sadewasser explains: „The transfer is particularly time-critical, as milling cannot be carried out at the same time. The X/Y system has to offer very high positioning accuracy and high speeds for the transfer. The axis settling times have to be very short to make it possible to achieve the positioning times. We use a very light-weight but rigid supporting structure made of CFRP. This reduces the required drive power of the linear motor and increases the speed of the X-axis. Therefore we also wanted a particularly light drive system for the Y-axis. It also had to be backlash free, maintenance free and sufficiently rigid.

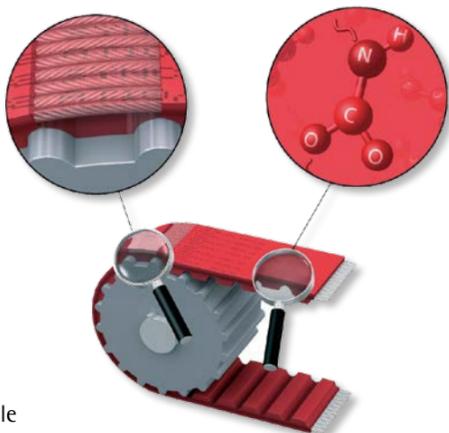
Light-weight and rigid drive for the Y-axis

In the comparison of different drive concepts for the Y-axis such as direct drive, spindle

drive and timing belt drive, the timing belt drive proved to be ideal given the technical requirements. It offers the lowest weight for this application. The servo motor can be positioned very close to the carrier axis, which has a positive effect on the natural settling behaviour of the gantry axis. By carefully selecting the motor size, and small pulley diameters it was possible to do without a conventional gear unit, eliminating backlash. The timing belt drive mass to be moved is very low.

„The stiffness of the timing belt, required to achieve the desired positioning times, proved to be a challenge. We were only able to meet the required settling times with the very stiff CONTI SYNCHROFLEX GEN III polyurethane timing belt and with a belt tension precisely tailored to the load mass and acceleration,“ Bastian Sadewasser explains.

CONTI® SYNCHROFLEX GEN III: a higher packing density of the steel cord increases the permissible tensile forces and the stiffness. The harder polyurethane increases the number of load-bearing teeth.



JAT was given technical assistance in the design and configuration by the technical dealer and timing belt specialist Wilhelm Herm. Müller GmbH & Co. KG, Garbsen. Engineer and customer consultant André Schmidt from the Müller branch office in Leipzig has been advising JAT for many years and explains the principles: „The timing belt span functions in principle like a stiff spring. With the mass of the gripper attached, a typical spring-mass system is created. The settling times depend on the stiffness of the timing belt, on the load mass – in this case of the gripper – and on the motor rating. As the load mass was specified by the customer and the motor size was determined by the gearless concept, the stiffness of the timing belt was the decisive optimization parameter for meeting the requirements of speed.“

The CONTI SYNCHROFLEX GEN III is one of the highest performing polyurethane belts of the manufacturer ContiTech Antriebssysteme GmbH. The high-performance polyurethane specially developed for this belt is harder than the standard SYNCHROFLEX timing belt. The tension is distributed up to 30 % more load-bearing teeth. Furthermore, the GEN III timing belt can reliably transmit up to 45 % more tension and also offers 45 % higher rigidity than the standard SYNCHROFLEX timing belt. This is achieved, amongst others, by a higher packing density of the steel cord tension members. „This was essential for achieving the desired speed and low settling times of the Y-axis,“ Bastian Sadewasser adds.



André Schmidt, customer consultant at Wilhelm Herm. Müller GmbH & Co. KG (on the left) and Bastian Sadewasser, design engineer at JAT. The innovative gantry made of CFRP is driven by a CONTI® SYNCHROFLEX GEN III timing belt and weighs only 5.2 kg.

Mulco timing belt training in Lübeln



Roland Schötz, (on the left) Head of Customer Services at Mulco's partner, Roth GmbH & Co. KG from Nürnberg, together with Ulrich Schröder, the Manager of the Rolling Stones Fan Museum in Lüchow.

On 18/19 October 2016, the annual sales training course for learning about the latest developments in polyurethane timing belt technology, was held in Lübeln near Lüchow in Wendland. This Mulco event was hosted by ContiTech Antriebssysteme at their plant in Dannenberg.

The Mulco-Europe EWIV group unites the products, services and expertise of the timing belt manufacturers BRECO and ContiTech and eleven reputable sales partners in the area of polyurethane timing belt technology. Once a year, Mulco organises a sales training course for the employees of all member companies with the aim of informing them about the products and for knowledge exchange. The training course is rounded off by an evening programme and a factory tour.

„The extensive variety of products in the ContiTech range makes regular training necessary,“ Detlef Harbecke, industrial engineer and Area Manager for the industrial sector, explains. Dr. Vollbarth, Head of Sales and Product Development at BRECO Antriebstechnik, confirms the need for regular training. In Lübeln, he gave a detailed presentation of the new polyurethane timing belt BRECOmove (open length) as a logical addition to BRECOFLEXmove (endless timing belt).

In the evening, the Mulco team visited the Rolling Stones Fan Museum in Lüchow. This was followed the next day by a tour of the ContiTech plant in Dannenberg.

The training course is an important part of „Mulco in action“ and is an example of the close interaction of the Mulco partners. The high degree of cooperation between the partners in technical and commercial matters allows both cost-effective and technically sophisticated drive solutions in all areas of industry. Mulco excels in the development of customised drives for the fields of transport technology, linear technology and power transmission technology in combination with consulting expertise. The host of this year's Mulco training course for sales personnel and field and administrative technicians is BRECO Antriebstechnik in Porta Westfalica.

MULCO innovativ



Sales partners in Germany



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