

Slip-free monolithic AT5 conveyor belts

SLIP-FREE. ACCURATE. HYGIENIC.



SLIP-FREE CONVEYOR BELTS

Smallest pulley diameters with positive drive

The positive-driven AT5 conveyor belts from BEHAbelt enable slip-free traction, even with the smallest pulley diameters of only Ø 18 mm. This means that even conveyor sections with the smallest transfers can now be utilized with a slip-free belt solution.

In combination with a maximum belt width of up to 700 mm, the new product series from BEHAbelt represents a new product solution which once again shifts the previous limits of the possible applications of positive-driven belt solutions on the market.

For high hygienic requirements

The completely monolithic construction of the conveyor belts without aramid strands or fabric layers offers an optimal hygienic belt design which meets the highest requirements in the food industry according to HACCP and offers a preventive hygienic machine design.

Thanks to a careful selection of raw materials for direct food contact, the belt solutions offer very good microbial, hydrolysis and chemical resistance.

APPLICATIONS & BENEFITS

Guiding concepts for belts

Because of the flexibility of the slip-free belts, very small pulleys can be designed at the drive and idler pulley, which, in addition to cost savings or conversion of the motor and drive concepts, may also require less installation space and allow better accessibility to the system parts.

Design standards simplify belt configuration

The slip-free belts from BEHAbelt allow a process-safe application, thanks to a standardised pretension recommendation for all belt widths and belt designs. The low pretension of only 1.5% +0.5% enables easy installation and also reduces the bearing load and heat development in rolling nose bar (usually made of plastic).

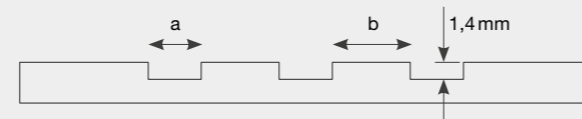
For the operation of the elastic belts we recommend to use AT5 pulleys to allow a maximum range of application; T5 pulleys can also be used under certain conditions.

BELT DRIVE TYPES

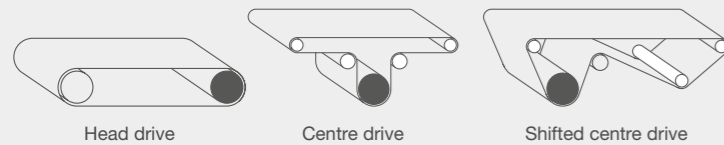
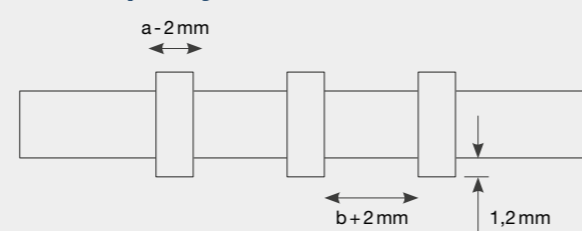
Universally applicable and even more

The AT5 belts can be used in different belt drive concepts. For cost reasons but also to simplify the implementation of the belt guiding concept, usually only the non-driven belt pulleys are designed as smooth rollers with guide bars, while the AT5 drive usually does without guide elements.

Design of the guide grooves in the conveyor belt



Design of the guide bars on the pulley



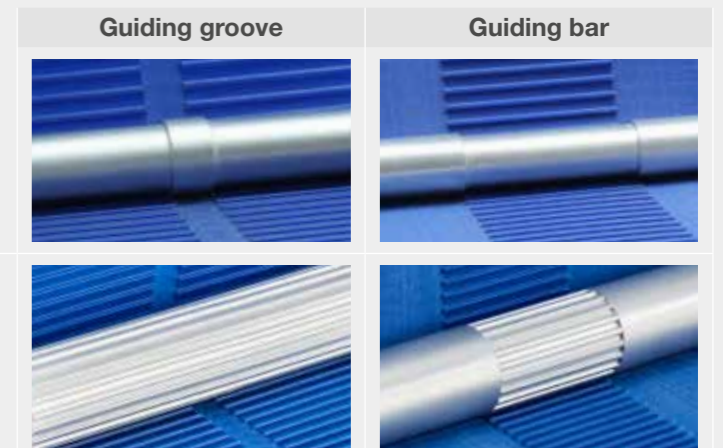
DRIVE AND GUIDING CONCEPTS

Illustration of drive and guide concepts

The interaction of AT5 (also T5) drive with optimum belt guidance ensures tracking stability and slip-free drive.

Several guide grooves basically increase the guide stability of the belt, whereby the arrangement of the guide grooves should preferably be centred in the middle of the belt and in the inner third of the belt width. Guide grooves near the outer edges of the belt are not recommended.

Guide



Drive

PRODUCTS

Functional belt surfaces

BEHAbelt already offers a wide variety of functional belt surfaces in this product category.

Due to our close contact with machinery engineers and end users, we have continuously expanded and adapted our belt surfaces to optimally convey greasy, moist, dry or frozen products.

Let us know if you need an alternative based on your requirement.

Belt surface	Smooth matt	Slightly rough
Type Description	SM / AT5	SR / AT5
Grip	+++	++
Features	Excellent grip. Very good cleanability.	Good release properties. Universal application possibilities.
Belt construction	monolithic, 2 components	monolithic, 2 components
Hardness (Shore)	72A / 84A	72A / 84A
Maximum width	700 mm	700 mm
Reinforcement	no	no
Min. pulley diameter Ø	18 mm	18 mm
Tooth height	1,2 mm	1,2 mm
Belt thickness (total)	3,0 mm	3,0 mm

Diamond	Nub top	Spikes	Transversal grooves (A)
ID / AT5	NP / AT5	SP / AT5	TGA / AT5
+	++	+++	++
Very good release properties. Universal application possibilities.	Very good release properties combined with very good grip and very good cleanability.	Especially suitable for greasy and frozen products.	Good release for dough products. Self-cleaning. For sticky and greasy products.
monolithic, 2 components	monolithic, 2 components	monolithic, 2 components	monolithic, 2 components
72A / 84A	72A / 84A	72A / 84A	72A / 84A
700 mm	700 mm	700 mm	700 mm
no	no	no	no
18 mm	25 mm	25 mm	28 mm
1,2 mm	1,2 mm	1,2 mm	1,2 mm
3,0 mm	3,2 mm (plus Nub 0,5 mm)	3,0 mm (plus Spikes 1,5 mm)	3,8 mm

APPLICATIONS



Suitable application areas

Due to the elastic monolithic belt construction, the use of the belts is essentially recommended for small and medium weights.

Wherever precise timing, positioning and reversing is required, this belt solution is an great alternative and product solution.

Replacement of T5 timing belts with aramid and steel reinforcement

Thanks to the belt width of up to 700 mm, multiple belt strands designs can be replaced by one belt, which represents hygienic improvement and simplifies the design of the systems.

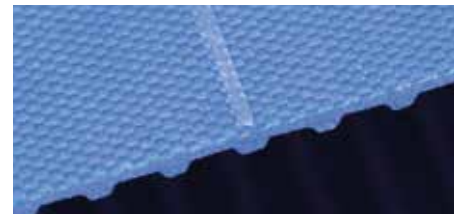
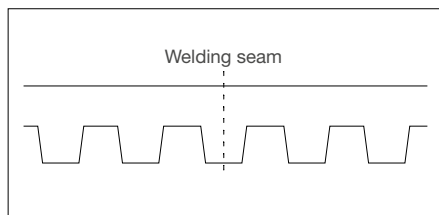
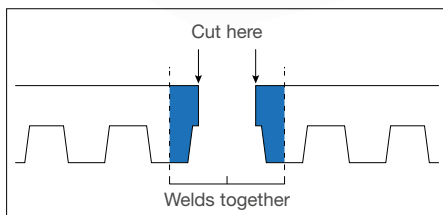
Particularly for light and medium loads, timing belt solutions can be replaced, which were previously used as "conveyor belts". Consult your BEHA representative for assistance.

WELDING TECHNOLOGY



Simple butt welding is enough

A simple butt welding is sufficient for the connection of the elastic monolithic AT5 conveyor belts. The HS400 & 800 welding device from BEHAbelt, together with special AT5 adapter plates, ensures precise connections.



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Product samples & technical advice

We will be happy to send you our sample ring free of charge with all currently available AT5 belt surfaces.

The slip-free belts are already successfully in use in many installations. We will answer your questions with technical competence.

We look forward to receiving your feedback.