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Driving gear and conveyor technology
Profiled belts
Continuous round belts
turned and plaited

Testing Service

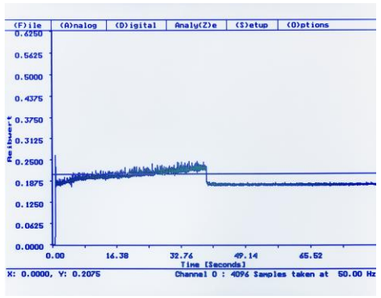
Belt transmissions

There are force-fit and form-fit belt transmissions.

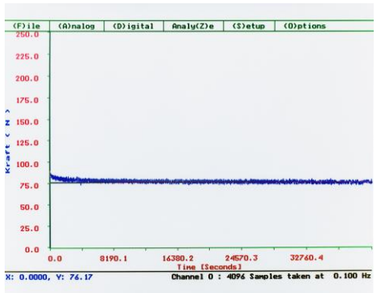
Round, flat, V- and Poly-V-belt transmissions are force-fit belt transmissions.

Force-fit belt transmissions transmit the tangential force by friction (traction) from the driving pulley to the belt and from the belt to the output pulley. The transmittable turning moment depends on the existing friction coefficient and the contact force between the belt and the pulleys. The capacity reaches its limits when the belt slips or breaks. With the wedged shape of the belt the contact force can be increased, leading to an increase of the transmittable turning moment while the drive shafts are strained consistently.

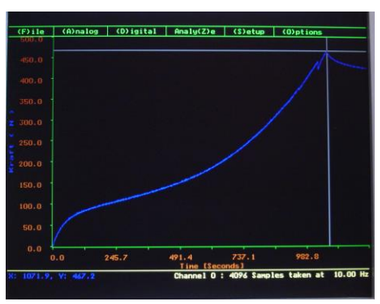
Form-fit belt transmissions are tooth belt transmissions.



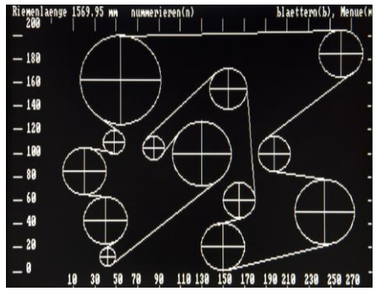
The **friction coefficient** between the surface of the belt and the friction partner is determined according to our test specification SPPN 91.001. For transmissions belt pulley material can be used; for transport assignments the guiding profile or the goods to be conveyed respectively.



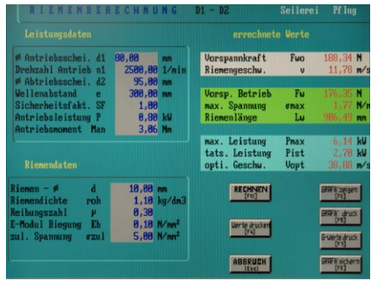
Dynamic power and elongation tests allow us to determine the tension forces of the belt transmission during the application. Our tests stands are infinitely variable from 120 – 4850 rpm. Thus we are able to conduct tests within the speed range of 0,2 – 51 m/sec. with a maximum tensile stress of 500 n.



We use **breaking resistance tests** to identify new basic materials, to control the quality and to document the tensile strength of our products. We also determine limit values when permanent distortions occur in static applications.



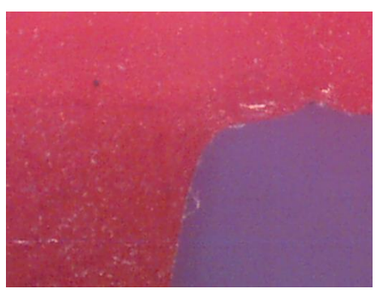
Special computer programmes enable us to make complex **calculations of lengths** for our customers and to document them effectively.



Transmissions designs made with programmes especially developed by us, based on the dynamically determined belt data, allow us to choose the ideal type of belt prior to a new development or enable us to improve an already existing belt transmission. The stress on drive shafts, the degree of efficiency, tensile stresses of tight and slack span and the maximum performance data are also calculated automatically.

We use **computer based linear measurements** of 172 mm LI – 9090 mm LI both in the final inspection and in 100% tests; in the test record both the inside length and the effective length and the statistical distribution are listed.

Digital **hardness testing** according to shore A and D enables us to exactly classify customer samples, to monitor our manufacturing process and to record the performance data of the quality control clearly in writing.



Microscopic analyses up to the enlargement factor 200 give information about the development of damages and weak spots and help us to monitor the quality of our manufacturing process and to develop it further. At the same time this technology enables us to support our customers in conducting research regarding the cause of wear and tear or irreproducible failures.

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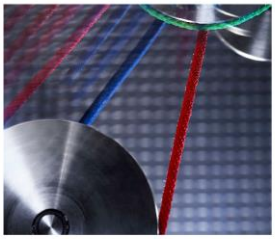
Company profile



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Testing Service

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Welded timing belts in short lengths

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Round belts for heat-setting machines

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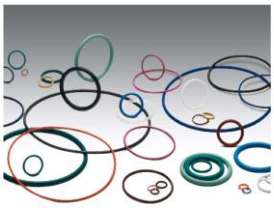
Endless injected round belts



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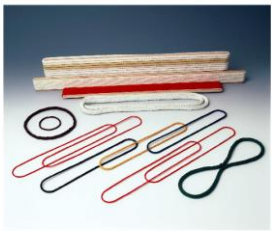
Endless turned round belts



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Endless plaited round belts

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Hooked belts

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PU round- and profile belts

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PU profile belts and special profiles

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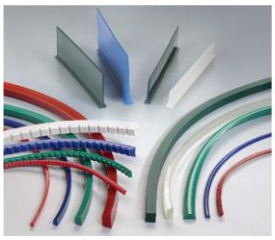
PU tracking guides, cleats and guides



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Food line

Types for the food industry compliant to EU/FDA

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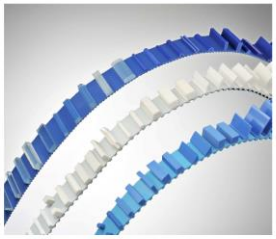
PU cleats and block profiles



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PU Poly-V belts

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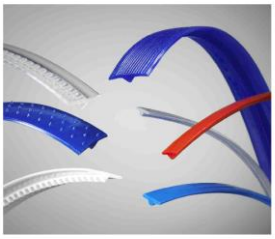
PU-V-guide belts compliant to EU/FDA



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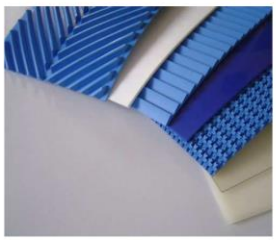
PU coatings



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