

Technical design high performance round belts RONDLAST®

Initial situation

A leading manufacturer of letter sorting systems needs round belts as the central drive element for the removal of letters on his sorting unit. The built-in belts are deflected over several pulleys, have to transmit enormously fluctuating torques and reach very high speed. So the belts must be low stretched, enable a high power transmission and still not rub off or break in the worst case. Even before the development of a new high-performance sorting unit, the construction department of the customer has already reached the engineering team of Dipl. Ing. Werner Graf AG.

Task

The round belts of leading manufacturers available on the market are welded in a semi-automated friction process. Within a few seconds of the bonding process, the molecular structure of the thermoplastics can not align and form a forced linkage. In the high-precision ultrasonic process of Dipl. Ing. Werner Graf AG, the round belt molecules are gently and constantly aligned evenly during the welding process; this allows for complete homogenization at the compound. A breakpoint due to overload can thus be demonstrably excluded.

Solution

On the market in the current generation of the high-performance sorting system, the manufacturer only uses the specifically designed round belts from Dipl. Ing. Werner Graf AG. The requirements of the enormous bending changes, the strongly changing tensile forces and the high operational reliability - to the supposed C-part - were solved by Dipl. Ing. Werner Graf AG together with the customer's design team, by providing a previously unattainable quality of high-performance round belts was developed.

