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Advanced SZ-stranding technology for flexible conductors

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Currently many cable producers all around the world have to optimise their production facilities to increase the profit or just to keep alive. They have to check all parts of the production to reduce the cost for producing the cables and to increase their flexibility according delivery time and special requirements (f.e. new cable designs). In case of producing stranded cables the SZ stranding technology compare to classical helical stranding methods is one chance to meet some of this interests.

SZ stranding is well known in the cable business since several years and in cause of the advantages it is now the standard in many parts of the cable production. In the past years Rosendahl-Austria spend a lot of attention on this process and we have spared no efforts to optimise the process and the configuration of the machinery. After using SZ-stranders for communication cables, for fibre optic applications and for standard building wire constructions (class 1 & 2) some customers come up with the idea to use this technology also for the handling of flexible (class 5) cords. The handling of this "dynamic" conductors is much more difficult compare to solid or stranded conductors and the result was, that the production of this cables was possible, but with some limitations. This limitations are the max. production speed (~140 m/min) and a good quality of this cables. For a more economic and profitable production it's necessary to increase the performance of the corresponding machines. Therefore Rosendahl have developed a new high-speed SZ stranding machine with a central positioned torsion shaft. This TSZ technology is since several years used on our side with success for voice and data cables and based on this experience we have developed this new TSZ 35 for flexible cords.

Due to the fact that the stranding machine is only one part out of many which influence the production, we have also developed an new combined torsion-block and powdering system with minimized space requirements and optimised performance. Also other parts of the line (f.e. a suitable crosshead design) are essential for a good product quality at high production speeds. The result out of all this improvements is, that we are in the position to offer complete lines or upgrades for already existing facilities with a minimum spaced requirement and with a productivity which is up to 50 % higher than the already available solutions on the market. With a proper conductor quality, proper tooling and raw materials it's possible to reach speeds around 200 m/min.

With this "up to date" configuration the production of flexible building wires, white good -, control - and special cables can become a new and higher status in the product portfolio of a cable manufacturer.