



Past and present developments

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When set up, the Company employed staff formerly working in a local heat production company dealing largely with heat production-related activities. ELTE s.r.o. ranks among organizations that were instrumental in upgrading tubular heat exchangers produced in the past. Typical for those was a low throughput speed resulting in streamline flow taking place in the exchanger and - consequently - a low value of the α -heat-transfer coefficient, accompanied subsequently by a low volume of the overall k-coefficient of heat transfer, and a low exchanger output.

In an effort to improve the exchanger operating properties, the designers and engineers kept tackling the issue of replacing the existing exchangers with more cutting-edge ones offering significantly better parameters. Through increasing exchanger throughput speed, and maintaining the turbulent flow of heat-transfer fluids, a lot better heat transfer was achieved, namely due to more intensive intermix of fluid particles. As a result, heat output was boosted, sediment deposition decreased, and the weight of heat exchangers dropped. Moreover, the transition from ordinary construction steel to all-stainless steel resulted in an enormous jump in the life of exchangers.



In the municipality of Buštěhrad (close to Kladno), ELTE s.r.o. set up its own operating division. In it, new Czech products are largely manufactured, namely all-stainless coiled tubular heat exchangers of MAX type. MAX exchangers are made in through-flow, counter-flow, or of parallel-flow versions. Intensive steady heat transfer takes place on contrary-coiled helixes made of pipes. Due to dilatation of pipes with the exchanger on the run, helixes provide for proper compensation, and a so-called secondary flow, improving the α -heat-transfer coefficient.

The manufacture of helixes is carried out on a facility that constitutes ELTE s.r.o.'s intellectual property. Helixes are produced accurate to 0,5mm (bending diameter). Pressure testing takes place with every operation, i.e. pressure-tested is each single helix, each tube plate, and ultimately the entire heat exchanger.



In doing so, the Company has given jobs to a highly skilled staff that had been let go as a result of Poldi Kladno steel plant liquidation. MAX exchangers have become a much sought-after product on both the domestic and foreign market; the demand for the supply thereof keeps increasing. Within almost no time, the necessary manufacturing technology was managed. Also, all requisite legislation authorizations were acquired. Nowadays, ELTE exchangers are technically excellent top quality products. Evidence of that is the huge interest displayed - by the technically-oriented community - on professional shows and fairs. There ELTE products win appraisals awarded to technically excellent products. Aware of these facts, the Company has currently completed the construction of an additional new production hall, including social background - all in a budget volume of no less than 12 million CZK. In the new hall, scores of additional experts involved in the field will find a job.

