



PLAYGROUND EQUIPMENT

PRODUCTION IS CHILD’S PLAY!

LAPPSET

Lappset, leading manufacturer of playground and exercise equipment for children and adults, has opened a new plant in Tallinn, Estonia. The objective is to improve quality, reduce costs, and have flexibility in new product development by having complete control of the manufacturing process.



Lappset is a 45 year old Finnish company specialized in playground equipment for children and relax and fitness equipment for adults. Mr. Reine Karlsson, Supply Chain Manager, whom we met at the Tallinn plant in Estonia, introduced the company: “Lappset is a family business, now being run by the second generation. Our core business is creating, designing and manufacturing playground equipment but we also manufacture sports equipment. We have plants in Finland, Sweden, Estonia and Holland and sell our products in over forty countries worldwide generating a total turnover of approximately 50 million Euros”.

Finland is currently Lappset’s most important market. The company exports mainly in Europe to countries such as Sweden, Holland, Germany, France and the UK. Understandably, the main customers are local administrations, construction firms and “anyone who loves playing” added Mr. Karlsson with a smile.

He went on to illustrate the lifestyle concept on which Lappset is founded:

“We firmly believe in the power of playing as a tool to improve health and well-being during one’s entire life. Moving and exercising are useful for adults and the elderly as well as children”.

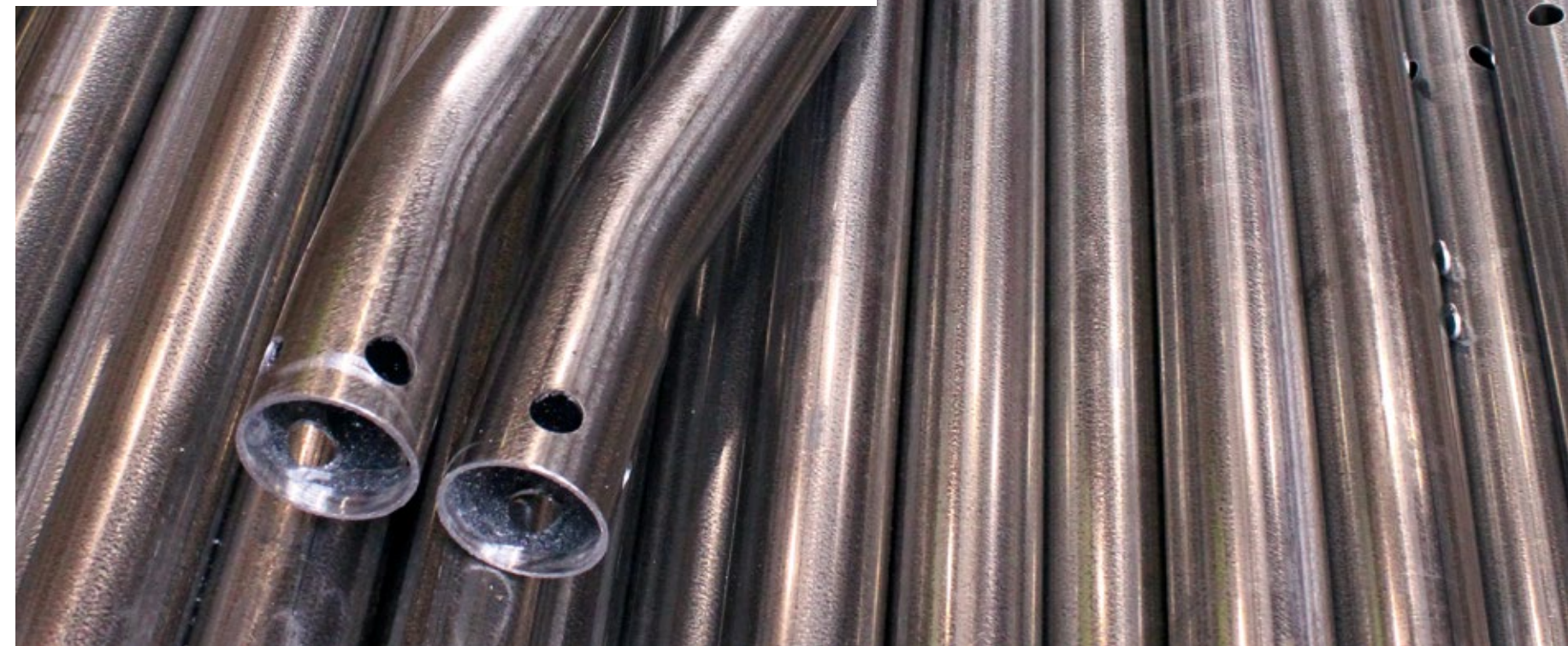
It is not a coincidence that the Lappset catalogue includes exercise equipment for adults and the elderly and they export it all over the world.



PROCESS CONTROL AND ECONOMICS OF SCALE

The Tallinn plant has been recently built. It is about 3,600 m² large and employs 30 people. It was designed for production and it is equipped with modern, high-quality machines to manufacture components and assemblies for the main plant and also to carry out some job-shop activity.

“Playground equipment production has changed over the years”, Mr. Karlsson explained. “In the past, wood used to be the most common material but now metal and other materials are widely used. This is why we decided to open this plant dedicated mainly to metal fabrication in which we manufacture a variety of parts. These parts were once outsourced. Now, our policy is to do all the work ourselves to control the process and exploit economics of scale”.



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single part

instead of 4 pieces to be welded together

NEW IDEAS FOR OPTIMIZING PRODUCTION

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Efficiency and cost reduction are thus the main objectives of this optimized plant, that's why it is equipped with modern production systems capable of carrying out various processes with extremely good quality like Laser cutting, tube and sheet bending, assembly, welding and painting. "We receive tubes and sheets, cut them, bend them and weld them using welding robots as well as manually. As a result, Lappset Estonia can supply mechanical parts not only to Lappset, but also to other customers in the Baltic area and all around the world. This is what we want to do to expand our business and we already started with some customer in Central Europe."

Coherently with the goal of increasing efficiency of the plant, a modern, innovative approach was adopted and lean manufacturing principles were implemented also in the overall organization. "The decision to go lean was taken last year and since then many ideas have been implemented to optimize the production cycle of various products. We have also taken major decisions to improve material flow and do things right", said Mr. Karlsson. "We started only three years ago purchasing nearly all the machines. Quality was the main criterion in machine selection. We started walking and now we need to run".



SAVING TIME AND COSTS WITH LASERTUBE

Naturally, they turned to the BLM GROUP for tube processing and bought two machines with mutually complimentary functions: an ADIGE Lasertube LT722D for laser tube cutting and a BLM all-electric tube bender ELECT-M.

“ We need accuracy to ensure that the laser cut and bent parts can be correctly welded with other parts during assembly and for this reason the quality of the cutting and bending systems is crucial for us ”.

It took some time to learn how to use the laser machine. We attended the training in Italy, it was very helpful in learning how to extract maximum advantage of this new technology. During the start-up period, an engineer from the Rovanemi

plant in Finland also worked with them to learn how to exploit all the potentials of Lasertube technology by properly designing the parts. Mr. Karlsson showed us a frame made from a single round tube by exploiting the cut and bend technology of LT722D. Earlier this frame was manufactured by welding four separate components together.

“ The advantages in terms of finished part cost are many, considering processing time, the logistic advantages of handling one single part instead of four separate ones and - above all - the huge amount of time saved in the welding step ”, Karlsson explained.

The Artube programming system is highly appreciated. They said it was very practical, fast, user-friendly and permits quick generation of work programs starting from scratch.

It looks like everything is set to keep “running” and we wish Reine Karlsson all the best for the future.



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