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Jaakko-Tuote & Systron: Progressive company relies on technically advanced machinery

All around Scandinavia Jaakko-Tuote Oy is known for its enormous innovative strength. Even checked by the US secret service, this company meets every requirement the flat glass market asks for. Their very individual and highly sophisticated machinery park is now supplemented by a seaming and grinding machine from Systron.



Fig. 1: The systron 5027es can seam and grind glass panes with 5m length.

In 1971, Veli Harjunpää, father of the current owner Aki Harjunpää, started the business in Panelia, Finland. One of their first flat glass products were laminated glass and windshields, manufactured with their self-designed windshield glass annealing furnaces. Building their own production equipment and machinery precisely tailored to their needs paved the way for expansion. Growing in space and employees, Jaakko-Tuote could invest in one of the largest autoclaves for producing laminated glass for the Olympics in Moscow 1980. For the European Conference in Helsinki, they were supposed to produce bulletproof glass. Before delivery, US secret service officers visited Jaakko-Tuote's test firing range to ensure the security requirements of the President of the United States. Many stories and milestones like the ability to toughen 3-millimeter and selective glass already in 1986 made them become a precursor in many fields.



Fig. 2: Jaakko-Tuote owner Aki Harjunpää is very satisfied with the price/performance ratio of his Systron seaming & grinding machine.

An innovative machine pool

Now they supply almost anything conceivable, from automotive or marine glass to glass facades and aquariums, to specially designed security glazing for parliament buildings, museums, etc., where all safety glass requirements are needed. About 90% are safety glass. The company is full of self-made special machines that were previously not available on the store shelf. They have 5 jumbo cutting lines, 4 autoclaves, 4 laminating lines, 5 tempering ovens, three of them are equipped with bending stations. 10 glass bending furnaces and a TPS jumbo line to produce insulating glass, as well as 10 horizontal CNC centres. 220 jumbo-trailers of raw glass are processed every year. With 145 employees they reached an annual turnover of 19.4 million Euros in 2022.

Special demands require special know how

"There was a need to grind large and very thin glass with about 1.6mm for bending. We wanted to be able to grind both sharp and rough edges in one processing tower. The machine had to be placed next to the tempering machine, so a vertical machine was the only option," Aki Harjunpää explains. Systron's edge seaming and grinding machine 5027es was exactly the right size for Jaakko's main products and could be delivered quickly. For the very thin glass, Systron developed a special Double- PE profile tool with medium grit size to optimize performance and lifetime. Production mainly consists of sharp edge grinding (4-5-6-8-10 mm) for construction industry and rough edge (3-4-5 mm) for automotive industry grinding hardening/laminating.

Top quality and low maintenance costs

"After 1,5 years of operation we can say that our maintenance costs for the Systron seamer are low, the service works are carried out by our own team and once a year with a Systron technician. Contact and remote service are excellent," says Aki. He adds: "This seaming machine really works as it should, speed and quality are grand. After installation, some software adjustments were necessary, they were done by Systron quick and free of charge. The compatibility between the Glaston tempering furnace and the Systron seamer is excellent. Moreover, the production efficiency is very good and even 1.6mm glass can be processed successfully." Jaakko-Tuote Oy is very satisfied with the price/performance ratio.



Fig. 4: Machine operator Patrik Nieminen is highly satisfied with the systron seamer es1.



Fig. 5: Exactly the right size for Jaakko-Tuote Oy, the seaming and grinding machine systron 5027es.



Fig 6: All seamed glass panels go on to the tempering furnace of the laminating line.