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Herralan Saha: One hundred years and three generations

The first sawmill in Hankaa 1903 – 1913

Farmer Vilho Mäkelä (1871 – 1952) set up a small steam-powered sawmill by the side of a brook in the proximity of his Mäkelä homestead in Hankaa in 1903. The location was most suitable for the sawmill as there was water available. The water was necessary as the sawmill was steam-driven. The “axe-fed” frame saw and edger were powered by a steam engine. Power transmission to the circular saw and blade sharpening machine and steam-driven mill was arranged by means of a gear-shifting shaft. In addition, there was a small locomobile running an electricity dynamo supplying the farm’s electric lighting. In winter, the logs were drawn by horse from Korpikylä downhill to the sawmill located in a small gully. It was easy to roll the logs down onto the frame saw’s feeding carriage. After being sawn, the boards and planks were edged to regular width.

The sawn timber was then taken by horse and sled a distance of 5 kilometres to a stacking area at Herrala railway station to dry. In spring and summer, by which time the timber had seasoned and was ready to be shipped, it was time to load it onto railway carriages to be taken to ports or to Helsinki to be used in construction. The first sawmill was quite modest in terms of production volumes. The annual production of this sawmill reached at its maximum 100 standards (approx. 16000 cubic feet) of sawn timber, but then the sawmill was in operation for only a few months per year, and this was in the winter. However, the sawmill was a profitable venture as Mäkelä extended the main building, purchased more land and built, among others, a cowhouse out of bricks. Before founding the sawmill, Mäkelä had served as a slaughterer and sold agriculture machines to supplement his farming income.

Second sawmill set up on Herrala farm in 1913

The sawmill, which had taken off so well, was destroyed by fire in the winter of 1913. Sawn timber enjoyed good demand at the time, and this encouraged Mäkelä to build a new sawmill immediately after the fire. However, the new sawmill was not built on the farm in Hankaa; instead, Mäkelä rented a block of land for this purpose in 1913 close to the Herrala railway station. The sawmill was ready for production by the

autumn. The new sawmill was also a steam-driven single frame-saw operation powered by a 35 hp steam engine. The frame saw and the edger were supplied by a manufacturer based in Lahti. The advantage of this new location with respect to old was that the haul to the loading point along at the railway station was a short one. The landing was located on the north side of the track, on the way to Lahti on the north side of the track while the sawmill was on the opposite side.

The new location of the sawmill in Herrala proved to be an immediately success. When Mäkelä made an unusually large log purchase in the autumn of 1913 (a total of 17,403 standing conifer trees) the sawmill went on-stream with a bang. This timber transaction kept the sawmill busy for two winters with a total of 60 or so horsemen bring logs to the sawmill. Soon the sawmill established its status as the reliable supplier of sawn timber and its production steadily increased. The sawmill prospered particularly at the end of the 1920s when the demand for sawn timber was so great that the sawmill was at times in operating in two shifts. All earlier sawing records were then broken. In its peak year of 1927, the sawmill purchased approx. 10,500 cubic feet of sawlogs and the production of sawn timber exceeded 400 standards (65,000 cubic feet). Contemporaries have reminisced that the sawmill's landing was at times so full of horsemen bringing in loads that there were queues.

Economically, too, the sawmill did well in the 1920s and so Vilho Mäkelä set up a new household the railway track. This was costly move and building the new homestead in the years 1917 – 1922 was a major undertaking, which would hardly have been possible without a successful sawmill operation. In the space of a few years, Mäkelä cleared farming land and built all the necessary farm buildings on the estate.

The Great Depression in the early 1930s impacted also on Herralan Saha. It was shut down for a while, but with the worst of the depression over production was restarted. However, the existence of the sawmill was not threatened even during the depression years because already then Mäkelä ran his business with due attention to trade cycles. When there was no demand for sawn timber, the mill was shut down. From 1933 onwards, the sawmill operated normally and its clientele expanded, including customers such as Oy Vienti-Export from Turku and Maanviljelijäin Metsäkeskus from Helsinki.

World War II put an end to this favourable trend. The sawmill suffered slight damage when bombed by the enemy. However, Mäkelä's farm manager of long standing perished in the bombing. Mäkelä himself was also near to losing his life. During the years 1941 – 1944 the sawmill was operational in the winter, but sawing volumes were much smaller than before the war. The sawmill's operation was made more difficult especially by the labour shortage as nearly all men of working age and fit for work were involved in the war effort. When the war ended, a powerful period of reconstruction began and this was made itself felt also at Herralan Saha. Vilho Mäkelä was 73 years old when the war ended, but he still continued to be in charge of the sawmill. However, the best years were already behind. In 1948 Vilho Mäkelä got his son as Pertti (then 16 years of age) to help at the sawmill. Pertti had over three years to learn things from his father at the sawmill and he became well acquainted with the sawmill and its operation.

Pertti Mäkelä carries on running the sawmill

Vilho Mäkelä's death in January 1952 changed the situation and Pertti and his mother Suoma assumed responsibility for the sawmill and the farm. Pertti made his first log purchase in the autumn of 1953 and the sawing started early in the new year.

The young sawmill entrepreneur took to his job eagerly. He had the sawmill provided with electric power and added machinery. Other investments included a log conveyor, which replaced horse power in the transfer of heavy logs. The sawmill soon got its first automobile as well and a tractor. The production of the sawmill increased following these upgradings, but the old steam engine restricted further growth.

During these "schooling years" of the 1950s, the thought of staying on in the sawmilling business gradually established itself in Pertti Mäkelä's mind. It was in this conjunction that the sawmill was made into a company in 1960 bearing the Kommandiittiyhtiö Herralan Saha, owned by Pertti Mäkelä & K:ni. Soon after this incorporation, work commenced on planning the new sawmill. This time the sawmill was built on own land. It was provided with an area of its own from the Mäkelä estate along the railway track and close to the old sawmill, i.e. its present site.

The new sawmill was completed in 1961

New dual frame-saw sawmill was finished in the autumn of 1961 and sawing in the new facilities started early in 1962. Right away in its first year the sawmill produced 3,750 cubic metres of sawn timber, i.e. more than doubling the old sawmill's production figures. The sawmill's turnover increased even more and amounted to FIM 39.2 million (equivalent of EUR 690,000 in the year 2001). The sawmill had 19 employees in its first year plus a dozen or so wood cutters and horsemen. The first chainsaws were introduced at the end of the 1950s. Tractors gradually replaced the horse in hauling timber out of the woods.

Already in its second year of operation, the sawmill got a VK-26 debarker, a log sorter, chip silos and a chip screen. The sawmill began to chips its sawing waste to serve as raw material for the pulp and paper industry. Right from the outset, these chips have been sold to Enso Gutzeit's mills in Kotka. This customer relationship has continued for more than 40 years. The haulier taking the chips to Kotka has also been the same throughout, i.e. Kaivolän Kuljetus. The investment proved to be profitable right away and it ensured the uninterrupted operation of the sawmill over the next recession.

The 1960s were years of great economic fluctuation in sawmilling. In the early years of the decade, sawmills did well, but then the difficulties began. The situation was at its worst in 1967 when production was unprofitable at most of the sawmills following rising production costs and fluctuations in the prices paid for sawn timber. The situation at Herralan Saha was also difficult; the production then was 2,510 cubic metres, the lowest for the decade.

However, the enterprise's turnover increased a little and the result showed a profit in the end. The devaluation of the Finnish markka in October of 1967 soon resulted in rising sawn timber prices and with demand growing, sawmills experienced a boom as the 1960s drew to its close. Herralan Saha also closed the 1960s with a new production record of 4,100 cubic metres of sawn timber. The sawmill's turnover had increased to FIM 744,000 (equivalent of EUR 125,000 in the year 2001). Then the sawmill employed 25 people, but with logging and transportation included the final number was 30 plus. The sawmill had clearly evolved into an export sawmill by then with 75% of its production going abroad. The bulk of the exports went to Holland, Britain and West Germany.

Steady development

The 1970s were a period of steady development for Herralan Saha and of reacting to the trade cycles affecting the industry. The sawmill's production increased in ten years from 5,200 cubic metres to nearly 8,000 cubic metres and its turnover nearly quintupled. The sawmill managed to survive the economic fluctuations well by adapting production to correspond to the demand. Pertti Mäkelä had, in his position as sawmill owner, learned to react quickly to changing trade cycles.

The growth in production required investments, too. Immediately in the early 1970s, the sawmill invested in separate storage facilities for dry sawn goods, towards the end of the decade a length-based packaging machine was acquired and two kilns were built. The competitiveness of the sawmill was ensured through these investments. These reforms also meant less manual labour being required. Investments continued with increasing frequency in the 1980s. Machinery and plant were renewed, e.g. both saw machines were replaced, new log carriages and knife guides were acquired, new chip and sawdust silos were built, and a dual-chamber condensing kiln was constructed. The first PC was purchased at the end of the decade. These and other investments radically changed the look of the sawmill. Fixed storage structures and kilns visible from far away replaced stacks of drying timber. The replacement of the frame saws for its part enabled increased production. In 1989, the sawmill had reached a production level of approx. 10,000 cubic metres, i.e. 7.22 cubic metres per hour.

Major changes in the 1990s

The 1990s were the decade of the greatest changes in the history of Herralan Saha. Those were the years when decisions influencing developments far into the future were made as were decisions ensuring the uninterrupted operation of the sawmill. A new stage began when Pertti and Riitta Mäkelä's sons Markku, Harri and Jukka joined the sawmill enterprise. The sawmill enterprise was transformed into a limited liability company in 1992. The share capital was divided so that the father Pertti owned 55% and the boys 15% each. Markku had joined the sawmill staff in 1989 after completing his forestry engineer studies and Harri did likewise in 1994 after completing similar studies. Jukka has got his Masters degree in Economics, is employed elsewhere but he is still a partner in the sawmill company.

The sawmill was effectively rebuilt in the 1990s. The decade began with the building of a new condensing kiln and replacement of the log sorter. A fully-automated finishing-treatment section for sawn timber was built in 1992, and it was the single biggest investment in the history of the company thus far. It cost FIM 6.7 million. The sawing capacity increased from 640 to 1,340 cubic metres per person per year. Salary expenses decreased when the number of employees was reduced by six from 18 to 12. The reduction in the labour force was carried out through negotiations. Since then, no workers have been dismissed at the sawmill. Actually, new workers have been recruited. Neither have there been any temporary dismissals.

The acquiring of the finishing-treatment section proved immediately to be a good decision and in 1995 an even bigger investment was tackled. That was when the entire sawing system was renewed and the sawmill was rebuilt. The choice in regard to production line went in favour of a quadruple bandsaw – chipping canter combination. The old frame saws had to give way and they were replaced by bandsaws, which also meant that the entire sawmill building had to be built anew. There was the break of a couple of months in production in the autumn of 1995 and the new sawing system was in use in November of the same year. However, it took until February of the next year for full speed in sawing to be achieved. The sawmill was then almost entirely automated with the sawyer being able to process as many logs as the debarking machine and edgers could handle. The packaging section needs to be operated 10 hours a day in order to make room for production. The renewing of the sawing system enabled growth in production up to 20,000 – 26,000 cubic metres. The new sawmill line and the alteration work required by it cost FIM 10 million.

The need for investments did not end with the upgrading of the sawmill. A 2 MW bio-boiler plant based on a rotating grate was built in 1997. This heating plant uses fresh bark as its fuel and is manufactured by company based in Kiuruvesi. Herralan Saha is the first Finnish company to have installed this type of a biofuel heating plant. We have been very satisfied with the heating plant right from the outset. "It may well be our most profitable investment since the combination sawing system," says Pertti Mäkelä.

The third generation in charge

Following these large investments, some rearrangements were implemented at Herralan Saha Oy. Pertti Mäkelä took up the duties of chairman of the board in May of 1998 and Markku Mäkelä was appointed managing director. Concurrently with these, a detailed division of tasks was made regarding the management of the sawmill. Markku Mäkelä bears the responsibility for sawing and attends to the foreign trade in square-edged sawn goods. Harri Mäkelä's areas of responsibility are packaging, drying and deliveries of sawn timber and domestic sales. Heikki Maattola attends to procurement of raw material and forestry operations. Pertti Mäkelä's responsibilities include money transactions. Changes took place in company ownership in the year 2000 when Pertti Mäkelä sold the bulk of his shares to his sons Markku and Harri. This meant that the third generation of Mäkeläs now assumed the main responsibility for the family business. Jukka, the eldest son, continues to be a shareholder in the sawmill enterprise.

Herralan Saha entered the new millennium with a reassured mindset. The uninterrupted operation of the sawmill had been ensured through large, but at the same time successful and correctly-timed investments. Full automation has clearly increased the profitability of sawing, and this is manifested in the business result. And best of all, quality has improved all the time. The production use of the new dryer system and sawmill information system has further improved the sawmill's competitiveness. Indeed, Herralan Saha is renown as a manufacturer of high-quality whitewood (spruce timber). The sawmill's aces include the high-quality of the sawn timber produced using the region's highly-valued spruce resources and timely deliveries starting from customers' special dimensions. Herralan Saha's brand product proper at the moment is plank material for stairs, which is mainly destined to Britain.

The sawmill's quality production is also reflected in its right to use PEFC origin-of-product label on its products, which was awarded to the sawmill in 2001.

Thus, Herralan Saha is in a position to look forward with confidence to the new century. The sawmill is in technically good order and the management is comprised of a new enterprising generation. Sawn timber will always be needed, and the future looks bright.

The major investments after year 2003:

- 2004 New log sorting line
- 2005 New debarking machine
- 2006 Machine vision technology in sorting and cutting sawntimber
- 2007 New warehouse
- 2008 Automatic stacking and new packing line
- 2011 New.measuring equipment in log sorting
- 2012 Modernization for kilning chambers
- 2014-2015 New liftrucks
- 2016 New on-line equipment for size control of sawing process