

... CHAPTERS FROM HISTORY OF VENEERS AND PLYWOOD

The technique of decoration of timber products with various kinds of wood has been known since Antiquity. Furniture was laid with thin plates of exotic wood by old Egyptians five thousand years ago and the craft was also developed by other nations standing by the cradle of our civilisation, such as the Chinese. Renaissance of this ancient technique came thanks to cabinetmakers in France, who started manual manufacture of veneers. Its mass spread across Europe came in 16th century. Only after Napoleonic wars, around 1819, the first machine for veneer peeling was made. Its construction was invented independently in Russia and in England and the first prototypes were made simultaneously in both countries. The inevitable development continued towards the invention of plywood – several veneers (then still up to 3 mm thick) glued together. In America plywood was patented in the summer of 1868 by John K. Mayo of New York. The growing industrial productions, driven by the growing consumption, required new, cheaper materials not demanding with regard to raw materials. And so four years before corrugated cardboard plywood was born, a new material replacing rare massive timber and saving time and money to manufacturers. Sufficient supplies of quality trees, especially birch and alder, allowed for development of this timber processing industry in the North of Europe. The oldest plywood plant in Europe

was founded in the Tsarist Russia, in the today 's Tallinn, in 1887.¹ The plant was established with the aim to become the principal supplier of plywood boxes for English tea importers from English colonies. The light and firm plywood boxes had no competitor in tea packaging industry.





In Finland the first plywood plant was opened in Jyväskylä² in 1912 and further plants grew later in Sweden and in Poland. Germany followed in 1889.³ And finally in 1905 the first specialised plant was founded in Oregon, America.⁴ A year later Japan joined.⁵ The actual progress of industrial production of plywood started in Europe after First World War only. In 1918 the first plant was built in England⁶, followed by France in 1920.⁷ The first plant in the Czech Republic specialising in veneer manufacture was built at Nová Huť pod Nižborem in a former iron mill by Albert Jirát in 1921. Together with his partner Nattermüller, who was his son-in-law, he began more plywood manufacture in a new branch plant in Solnice, Eastern Bohemia, in 1922. The Solnice plant exported plywood under Alfa trade mark to a number of European countries. When the Nová Huť plant was destroyed by fire in 1927, Jirát transferred the manufacture to Vysočany in Prague, where a new plant was built and named Orel. The plant was believed to be the most advanced plywood manufacturing facility visited by many international however, still retained its largest plywood manufacturer, plants as early as in 1914. The the tradition until World War II, States. The leading European not limited to Germany, Finland, Sweden, held one third of global

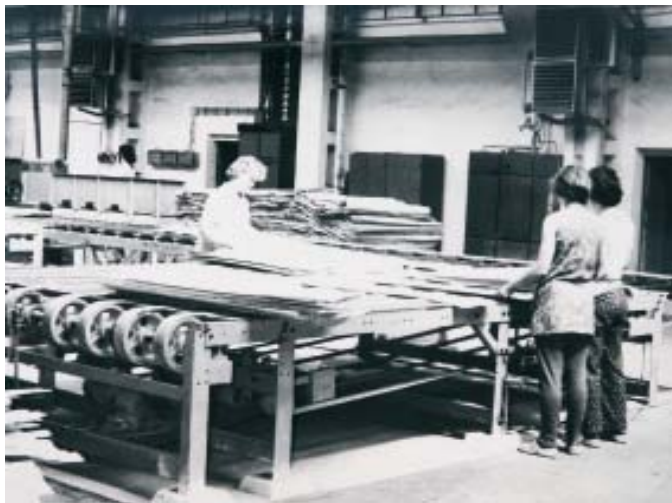
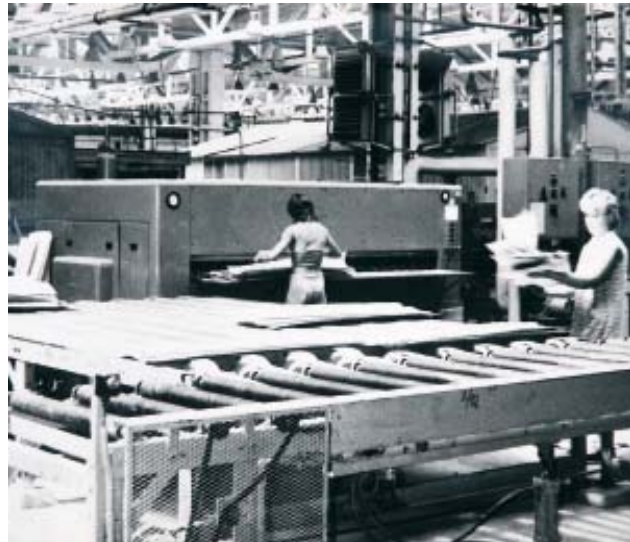


in Central Europe and was experts.⁸ The Tsarist Russia, reputation of the world 's with its nearly fifty plywood Soviet Union continued with followed by the United manufacturers, including but Poland, France, Italy and production.⁹



... KOHN PERIOD

The history of Ploma company started in 1907. Then Adolf Kohn, owner of a timber shop, decided to extend his activity – timber trading – with log cutting in his own sawmill. The mill was built in the place of his former timber store on the western periphery of the town of Hodonín by Vídeňská street. Very soon the original log production in two wooden houses with two frame saws and a band saw was extended with parquet manufacture. In the course of World War I Kohn's saw was used by Austrian-Hungarian army and the plant was extended with another building for the purpose of military production in 1917. In December 1920 the saw witnessed the general strike, in which all Kohn labourers took place. In 1928 his Hodonín plant discontinued parquet manufacture and started plywood manufacture, using one peeling machine, one single-level veneer dryer and one cold press (simultaneously with continued manufacture of lathes). The plant then has less than 100 employees.

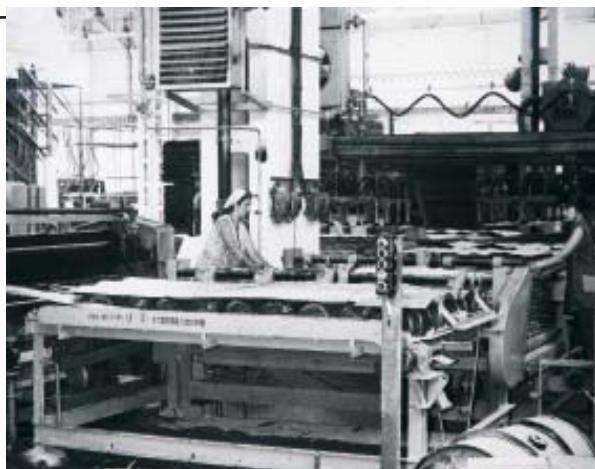


ADOLF KOHN - PILA A PARKETÁRNA • ČESKÁ AKCIOVÁ



IN RINGHOFFER'S SERVICES

In 1931 Kohn's sawmill was already affected by the global economic crisis of 1930s. Sales dropped and wages dropped with them, by 15%. It is hard to find out today why the plant was involved in an allegedly speculative bankruptcy proceeding in 1932. One thing is certain, though, and that is that the plant was closed for four years and in June 1935 an auction was organised to sell the property of Adolf Kohn and his shareholders - son Viktor and some Alfred Boch. More than 2 million CZK was paid by the Prague company Czech Joint-Stock Veneer Factory, which was part of the Ringhoffer – Tatra concern, for the plant acquisition. In addition to furniture factories the Czech Joint-Stock Veneer Factory in Prague became the principal supplier to the Ringhoffer Engineering Empire, especially its divisions producing railway carriages, cars and aircraft. The Hodonín sawmill thus complemented the existing plant at Kralupy nad Vltavou, acquired by the Prague company in 1923, after acquisition of the local bankrupt cooperative veneer plant. In early 1936 the Tatra concern took Kohn's sawmill over and the previous manufacture was resumed over a certain necessary period of time. Between March and September 1937 the plant was extended with land leased and later sold to the owner by the Hodonín sugar refinery for the purpose of construction of a new, 160 m long and 40 m wide manufacturing hall with an in-house siding. The current 1800 square metres were thus extended to nearly a triple the area.





Nevertheless, most of the land plots were still owned by the State or by private individuals. Quality improvement of the machinery came with installation of a new ten-level plywood press. Power supply, so far provided by an in-house vapour generator, was taken over by Western Moravian Power Plant Management. On 1 November 1937 the new plant operation was staffed with 300 new employees and the new general manager Alexander Haas. As seen from statistics, in addition to this company there were 17 other manufacturers of veneers and plywood in Czechoslovakia in 1937. The technology of plywood processing continued to develop globally in 1930s; in comparison to 1930 plywood manufacture increased in Czechoslovakia 2.5times in 1937¹³ and immediately before the war the annual capacity of plywood manufacture reached 4800 cubic m. The plywood plant in Hodonín flourished in late 1930s, which was manifested, among other things, by wage growth by a third. Under Nazi occupation Tatry received German administrators headed by the Austrian Payer. The CEO and technology manager needed to be loyal to the Nazis and therefore the occupants appointed Engineer Bandhauer for this position.¹⁴ Manufacture again concentrated on military production – the best Slovak beech was used for manufacture of riddle butts and Hodonín plywood shipped packages of plywood to German ammunition factories for manufacture of aircraft for the Nazi Luftwaffe. In 1940 the neighbouring private plots were leased by the plant for construction of the central timber warehouse.





BUILDING ERA

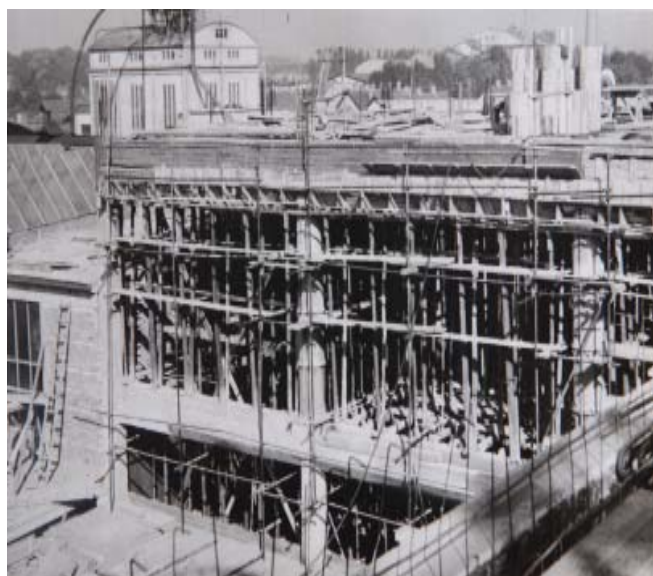
By decree of President Beneš of October 1945 the Tatra plant was nationalised in the spring of 1946 and its assets were transferred onto the new national establishment called Plywood and Veneer Plants with registered seat in Prague. In 1947 a two-year modernisation and extension began, with the original wooden sheds pulled down and replaced with new modern manufacturing hall, including a canteen. Thanks to the post-war modernisation the Tatra plant in Hodonín became one of the major manufactures of its kind. That was also one of the reasons why in autumn 1949 over 500 participants to the first national plywood and veneer conference met here to discuss future development and organisation of plywood and veneer manufacture. Conclusions drawn at the conference led to split of the national establishment in Prague, meanwhile extended by acquisitions of further smaller timber processing plants, to two independent establishments in 1950, including the Czech Plywood and Veneer Plants with registered seat in Prague, and the Moravian Plywood and Veneer Plants with registered seat in Hodonín. In 1952 both establishments split even further, in Bohemia to the East Bohemian and the



Central Bohemian Plywood and Veneer Plants, and to three new plants in Moravia, including the Hodonín Plywood and Veneer Plants with registered office in Hodonín, The Moravian Slovakian Plywood and Veneer Plant with registered office at Uherský Ostroh, and the Břeclav Veneer and Parquet Manufacture with registered office at Břeclav. The split brought about little progress to the plants, rather to the contrary. In 1955 the current operations system of the three Moravian establishments producing plywood definitely proved to be impractical, and therefore a re-merger resulted in re-establishment of a single national establishment called Moravian Slovakian Timber Processing Plants with registered office in Hodonín. Only three years passed before a nationwide casting in national establishment organisation



resulting in a new regrouping. national establishment Plywood Hodonín. In addition to the establishment included Lignum Ostroh and again the Prague factories - Vysočany, Kralupy na Vltavou, Satalicw and Chrást u Chrudimi. In 1960s plywood production was revitalised, and plywood manufacture began to replace the dropping production of lathes. The manufacture of the latter was pushed to the background by growing production of chipboards. An independent engineering factory Kovo was founded in Hodonín with the sole aim to provide the plywood plant with the needed machinery and other technologies. After 1960 the quality of Hodonín-made plywood was such that exports to western countries could be commenced. The nationwide campaign "Let us Protect Our Forests" was supported by the plant with commencement of serial production of shaped plywood in 1962, used as legs for restaurant tables. About 220 thousand pieces of these legs were years after manufacture the slovakia in the Lukavec plant commenced in Hodonín. The the new manufacturing line, total worth CZK 56 million, in new line was commissioned of a new building with social employees, including a canteen, and a medical surgery. of modernisation of the old plant



The change resulted in a new and Veneer Plants at parent Tatra plant the Hodonín, Dyas Uherský. Three first chipboard in Czechothis manufacture was also brand new product first left built in 1960 - 1963 and in early November 1963. The together with opening background for the a corporate dinner factory Meanwhile the long process was completed: the muddy



paths on the premises were replaced with concrete roadways, tree trunks began to be vaporised in new vaporisation pits, a new crane was erected and the boiler room was reconstructed. One year after commissioning of the chipboard line, in 1964, manufacture was started of water-resistant plywood for technical purposes, with a wide range of applications in many industries – from boat manufacture to concrete boarding in building industry. The manufacture in Hodonín grew and as early as in 1964 replaced with its volume the full capacity of the wound up plywood plant at Satalice.¹⁹ In 1965 the plant began manufacture of prefabricated chipboards for furniture industry. A year later the chipboard line was largely damaged with fire, which resulted in a short outage. However, the production plan for the year was still accomplished. Beginning in

1974, in the context of the organisational changes connected with launch of operation of the new plant 3, a separate PLOMA Company was established. The name was derived from manufacture of flat materials in the new plant. The plant extension continued in the years 1976 - 1980 by construction of a new chipboard line (line 2), whose designed annual capacity was 105 thousand cubic m. The new facility, worth 56 million, launched its three-shift operation in 1980. Meanwhile the company saw more organisational changes – in early 1977 the Ploma and the Tatra plants merged. In consequence of the passed State Establishment Act the state establishment was transformed as of 1 January 1989 to a national establishment under the current name of Hodonín Plywood and Veneer Plants.²⁰ This step was like foreshadow of the events to come in November 1989.





A NEW CHAPTER IN THE PLANT HISTORY



Under the new conditions of market economy, when the plant prepared for its privatisation, manufacture of composite boards based on timber matter and polypropylene was started in 1991. On the basis of the approved privatisation project the first round of privatisation resulted in establishment of a joint-stock company, entered in the Commercial Register on 1 May 1992 under the name Hodonín Plywood and Veneer Plant. The new modernisation process concerning both manufacture and management resulted in grant of the prestigious ISO 9001 certificate in 1996. In 1999 the chipboard line was modernised and in 2001 a new type of lathes with glued core was introduced to the manufacturing programme. A year later the plant returned to its old name of Ploma. After 41 years of manufacture of chipboards Ploma terminated their production in 2004 to introduce a completely new manufacturing programme a year later – manufacture of assembled houses with timber-framed skeleton. In 2006 the plastic division was sold and orientation to timber production was underlined by commencement of production of veneered materials.

But that already is the present of Ploma, which will once become history. What will its image be in the eyes of future generations, depends on us, the authors of this present chapter.





PLOMA TODAY

At present PLOMA is the largest Czech manufacturer of plywood and lathes. The plant is part of the CE WOOD holding, a major forestry and timber processing corporation, providing for service in the area of timber cutting and trading. The group is consumer chain certified with C-o-C pursuant to CFCS 1004-1.

The principal area of business activity of PLOMA, a.s., joint-stock company, has been manufacture of large-area timber materials newly complemented with manufacture of assembled timber-framed family houses. The principal programme of division 1 – timber is manufacture of basic plywood materials – plywood itself, lathes and their modifications. The manufacturing programme includes:

<i>PLOMA PLAT</i>	<i>cabinet-making plywood</i>
<i>PLOMA TECH</i>	<i>water-resistant plywood</i>
<i>PLOMA FOIL</i>	<i>foil-covered plywood</i>
<i>PLOMA MULTI</i>	<i>multiplex</i>
<i>PLOMA BOARD</i>	<i>lathes</i>
<i>PLOMA PREFA</i>	<i>veneered materials</i>

The input raw material includes logs of specially grown deciduous and coniferous trees and coniferous cut timber. Qualitative parameters of the products comply with the target use and effective quality standards. Division 1 – timber was quality certified pursuant to ČSN EN ISO 9001:2001 in April 2004.

The products are mainly sold on European markets. The target customers include furniture manufacturers, manufacturers of household accessories and interior decorations, automotive industry, building industry, foundries, packaging material manufacturers etc.



In 2005 PLOMA started manufacture of modular timber-framed houses. The houses are designed for young families and therefore their brand name under which they are marketed is START.

The advantages of our houses include:

- **Low energy demand**
- **Environment friendliness**
- **Simple construction**
- **Low price**

Further advantages include developer sales mode including assistance in application for mortgaged loans.

PLOMA supports not only students of timber processing specialisations but also students of art schools. Creative cooperation is supported by provision of materials for:

- *Czech University of Technology in Prague, Faculty of Architecture, school studio project*
- *Brno University of Technology, Faculty of Architecture*
- *Academy of Fine Arts in Prague, Inter-Media Studio of Professor M. Knížák*
- *Student exhibition plomaART in cooperation with BUT in Brno, Faculty of Fine Arts, Sculpture studio II.*

