



180 GODINA LAFARGE BEOČINSKE FABRIKE CEMENTA

180 YEARS OF LAFARGE BEOČIN CEMENT PLANT

Beograd 2019 / Belgrade 2019

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Izdavač

Lafarge BFC doo Beočin

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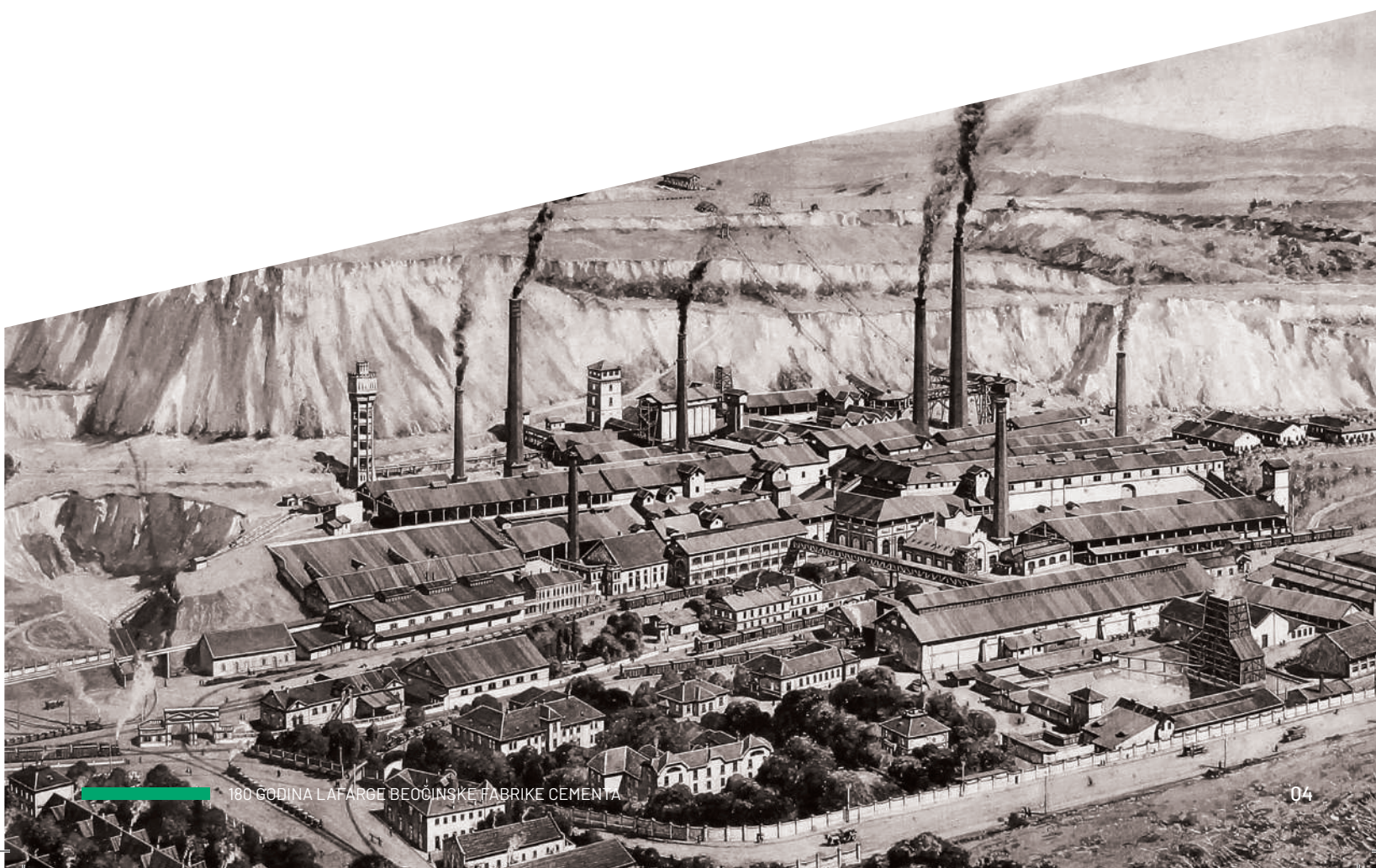
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1 PREGOVOR

Lafarge Beočinska fabrika cementa 2019. godine obeležava sto osamdesetu godišnjicu postojanja. Povodom jubileja priređena je monografija u kojoj je predstavljena istorija fabrike duga bezmalo dva veka, potkrepljena bogatim arhivskim materijalom, uz osvrt na različite društveno političke i ekonomske prilike u kojima je beočinska cementara poslovala.

Dugu istoriju fabrike vrlo temeljno je istražio profesor Nikola Gačeša, koji je svoja saznanja prikazao u knjizi *Istorija Fabrike cementa u Beočinu*, a koja je u najvećoj meri konsultovana prilikom pisanja monografije pred čitaocem.





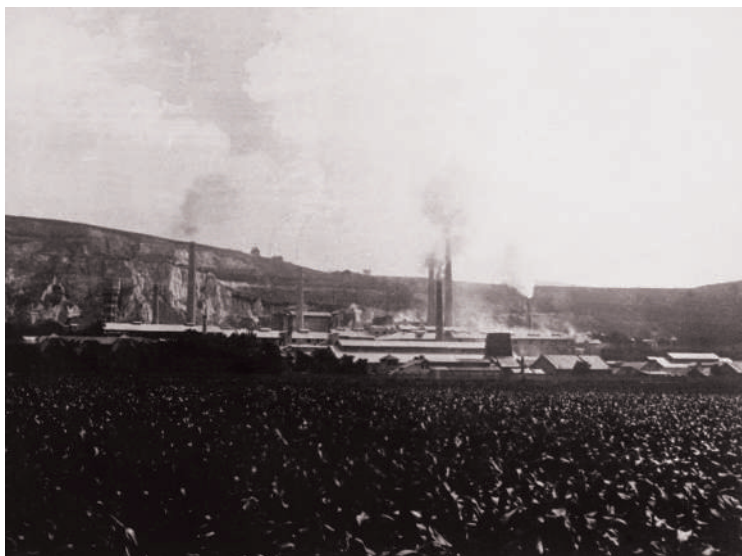
1 FOREWORD

In 2019, Lafarge Beočin Cement Plant (Lafarge BFC) is celebrating its 180th anniversary. On this occasion, a monography is published, compiled on the basis of sizeable archival materials and including comments on various social and political circumstances in which the Plant operated.

The factory's long history was thoroughly investigated by professor Nikola Gaćeša, who presented his findings in a book titled *Istorija Fabrike cementa u Beočinu* (History of the Beočin Cement Plant). Professor Gaćeša's book was the main reference used to write this monography, which brings forth the almost two centuries long history of the Plant.

2 ISTORIJAT

“Centralna fabrika” početkom XX veka /
“The central factory” at the beginning of the 20th century



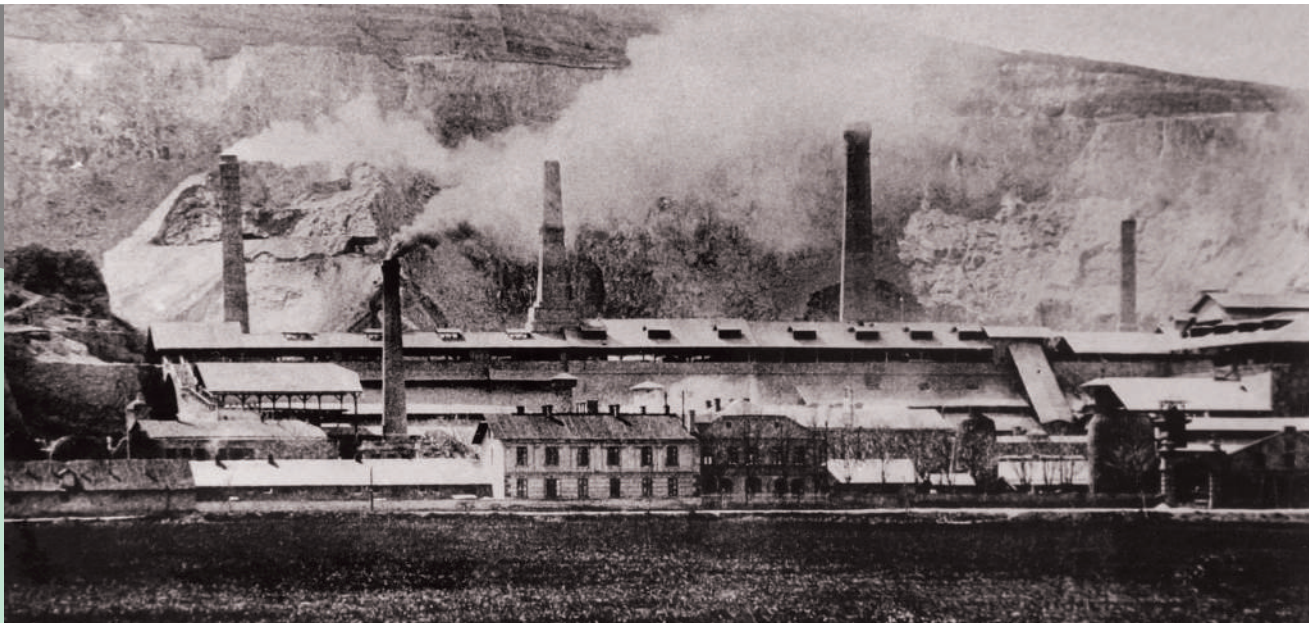
Fabrika cementa na Filijali (1905. godina) /
Cement plant on “Filijala” (1905)



Beočinska fabrika cementa od osnivanja do 1918. godine

Prvi industrijski koraci malog naselja na obodu Fruške gore načinjeni su u XIX veku kada je započeta eksploatacija lapora, tzv. beočinske kaje. Najstariji zapisi o korišćenju pomenute rude potiču iz 1839. godine, kada je engleski inženjer Adam Klark upotrebio beočinski lapor za izgradnju stubova Sečeni-jevog lančanog mosta između Pešte i Budima. Most, koji je simbolizovao kako privredni, tako i sveopšti napredak i uspon Ugarske tog doba, nagoveštavajući buduće ujedinjenje dva dunavska grada, slovio je u vreme izgradnje za izuzetan graditeljski poduhvat, što jasno ukazuje na značaj beočinske rude korišćene za njegovo podizanje (Gaćeša 2008: 20–21). Do danas je, međutim, usled nedostatka pisanih tragova, ostala nepoznanica da li se neimaru lančanog mosta u današnjoj Budimpešti, inženjeru Klarku, mogu pripisati i zasluge za „otkriće” beočinskog lapora, ili se pak ruda eksploitala i koristila u građevinarstvu i u prethodnom periodu, kako pretpostavljaju pojedini hroničari (Terzić: 49).

Pored Adama Klarka, koji je izgradnjom Lančanog mosta afirmisao beočinski lapor širom tadašnje Ugarske, za istoriju beočinske cementare je posebno značajno ime Josifa Čika, za koga se vezuju počeci industrijske proizvodnje. Čik je, kako navodi mađarski istraživač Futo Mihalji, krajem tridesetih godina XIX veka eksploitalisao lapor na svojoj zemlji, palio ga i mleo u vodenici potočari. Godine 1855. otkupio je beočinski rudnik od preduzeća *Weiner Wasser Baumt* i sa dve peći otpočeo proizvodnju tzv. „roman cementa” na današnjoj Filijali, uspostavljajući time prvu cementaru na teritoriji tadašnje Habsburške monarhije (Gaćeša 2008: 23). Preduzetnički duh i želja za novim saznanjima odveli su Čika i korak dalje. Poseta Svetskoj izložbi u Parizu 1867. i upoznavanje sa proizvodnjom „portland cementa”, kao i boravak i rad u fabrici cementa u Engleskoj, obezbedile su preduzimljivom Čiku dovoljno znanja za modernizaciju proizvodnog procesa.



Izgled fabrike iz 1869. /
Factory outlook from 1869.

2 HISTORY

Beočin Cement Plant from its foundation until 1918

The first industrial steps of the small settlement on the slopes of Fruška Gora were made in the 19th century, when they began the exploitation of marlstone, the so called *Beočin Kaja*. The oldest records testifying to the use of the above mentioned ore date back to 1839, when British engineer, Adam Clark, used the Beočin marlstone for the construction of the piers for the Széchenyi Chain Bridge between the cities of Buda and Pest. The bridge, which symbolized both economic and overall advancement and rise of Hungary of that time, announcing the future unification of the two cities on the Danube, was regarded as an exceptional architectural achievement at the time, which clearly points to the importance of the Beočin ore used for its construction (Gaćeša 2008: 20-21). However, due to the lack of written traces, it is still unknown whether the constructor of the chain bridge, Adam Clark, can also be credited with the “discovery” of the Beočin marlstone, or the ore had actually been exploited and used in construction before, as some chroniclers presume (Terzić: 49).

Apart from Adam Clark, who made the Beočin marlstone known across Hungary with the construction of the Chain Bridge, another important name in the history of the Beočin cement plant is Josif Čik, whose name is connected with the beginnings of the industrial production. As stated by Hungarian researcher Mihaly Futo, in the late 1930's, Čik exploited the marlstone from his own land, and baked and ground it in his water mill. In 1855, he bought the Beočin quarry from the company *Weiner Wasser Baumt* and with two kilns, he began the production of the so called Roman cement at today's Filijala (“outpost”), thus establishing the first cement plant in the territory of what was then the Habsburg Monarchy (Gaćeša 2008: 23). His entrepreneurial spirit and pursuit of new knowledge led Čik even further. A visit to the World Fair in Paris in 1867 and introduction to the production process of Portland cement, as well as his stay and work at a cement plant in England, provided sufficient knowledge for this inquisitive man from Beočin to modernize the production process.



Beočinska fabrika 1910. godine (razglednica) /
Beocin plant 1910 (postcard)

Svega pet godina nakon osnivanja *Prve sremske fabrike portland cementa i hidrauličnog kreča Josifa Čika u Beočinu*, kako je glasio njen zvanični naziv, beočinska cementara se susrela sa konkurencijom. Naime, 1860. hroničari beleže dolazak još jedne, po beočinsku istoriju veoma važne ličnosti – Hajnriha Orenštajna, koji je, doselivši se iz Temišvara, od manastira Beočin zakupio 29 jutara „kajonosne zemlje“, te otpočeo sopstvenu proizvodnju cementa.

Konkurentna borba između dve fabrike – Čikove na Filijali i Orenštajnovе „Centrale“ na lokaciji današnje fabrike, trajala je sve do Čikove smrti, kada je Orenštajn na javnoj dražbi 1898. u ime firme *Redlich, Ohrenstein i Spietzer*, otkupio Čikovu cementaru. Time je formirano jedinstveno akcionarsko društvo *Unija beočinskih fabrika cementa Redlich, Orenštajn i Špicer* (Gaćeša 2008: 24).

Društvo je od 1906. poslovalo pod nazivom *Unija beočinskih fabrika cementa a.d.*, a u svom sastavu brojalo je i dve fabrike cementa u Slovačkoj, fabriku u Šejpu (Mađarska), rudnik Ujbanj u Rumuniji, a takođe je bilo i glavni akcionar fabrike cementa u Podsusedu.

Investiranjem u kupovinu dodatnog zemljišta na kome je eksploatisana ruda, Orenštajnova firma je nastojala da osigura sirovinsku bazu za proizvodnju,¹ dok su ulaganja u izgradnju i kupovinu šlepova, kao najrentabilnijeg sredstva za transport cementa Dunavom u tadašnjim prilikama, doprinela konkurentnosti fabrike na onovremenom tržištu. Naročita pažnja je u narednom periodu posvećena unapređenju proizvodnog procesa; sa namerom da se poveća produktivnost rada i podigne obim proizvodnje, pratila su se naučna i stručna dostignuća, kao i mogućnost njihove primene u samom procesu. Prva značajna tehnološka novina zabeležena je već 1904. godine – modernizovan je proces pečenja klinkera, čime je ostvaren veći kapacitet proizvodnje, kao i poboljšanje kvaliteta samog cementa.²

1 Orenštajnova fabrika je tokom poslednje decenije XIX veka otkupila od manastira Beočin kajosanu zemlju koju je do tada uzimala u zakup, kao i dodatne površine bogate rudom. Kupovina manastirskog zemljišta je, međutim, izazvala negodovanje javnosti i pokretanje sudskog spora koji je trajao decenijama (Gaćeša 2008: 26-36).

2 Novina se odnosila na unapređenje procesa pečenja klinkera. Naime, decenijama unazad klinker je dobijan pečenjem sirovine u pećima koje su radile periodično. Godine 1904. peći su snabdevene ventilatorom za uvođenje vazduha, čime je obezbeđen njihov kontinuirani rad, a to je neminovno vodilo povećanju kapaciteta, kao i kvaliteta samog proizvoda (Fišang 1969: 14-18).

Only five years after the establishment of the *First Srem Portland Cement and Hydraulic Limestone Factory of Josif Čik at Beočin*, which was its official name, the Beočin Cement Plant faced competition. In 1860, chroniclers recorded the arrival of another very important person for the history of Beočin – Heinrich Ohrenstein who, after moving there from Timisoara, leased from the Beočin Monastery 29 morgens of marl-rich land and began his own cement production.

The competition between the two factories – Čik's at *Filijala* and Ohrenstein's *Centrala* at the location of today's plant lasted until Čik's death, after which, at the public auction in 1898, Ohrenstein bought Čik's cement plant on behalf of the *Redlich, Ohrenstein and Spietzer* company. This marked the formation of the joint-stock company *Union of Beočin Cement Plants Redlich, Ohrenstein & Spietzer (Unija beočinskih fabrika cementa Redlih, Orenštajn i Špicer)* (Gačeša 2008: 24).

The company operated under the name *Union of Beočin Cement Plants JSV* from 1906, and it also included two cement factories in Slovakia, a factory in Selyp, Hungary and Újbánya Mine in Romania, and it was also the main shareholder of the cement factory in Pod-sused.

By investing into the purchase of additional land used for exploitation of the ore, Ohrenstein's company tried to secure raw materials for the production,¹ while the investments into the construction and purchase of barges, as the most profitable means of transport on the Danube under the given conditions, contributed to the factory's competitiveness on the market. In the following period, special attention was dedicated to the improvement of the production process; with an intention to increase work productivity and expand production capacity, they followed scientific and technical achievements and explored the possibilities of their application in the process. The first great technical novelty was recorded already in 1904 – the process of burning clinker was modernised, which increased the production capacity and improved the quality of the cement.²

1 During the 1890s, Ohrenstein's factory bought the marl-rich land that it had previously leased from the Beočin Monastery, as well as additional land rich in the ore. However, the purchase of the Monastery's land caused public disapproval and was taken to court, and the trial lasted for decades (Gačeša 2008: 26-36).

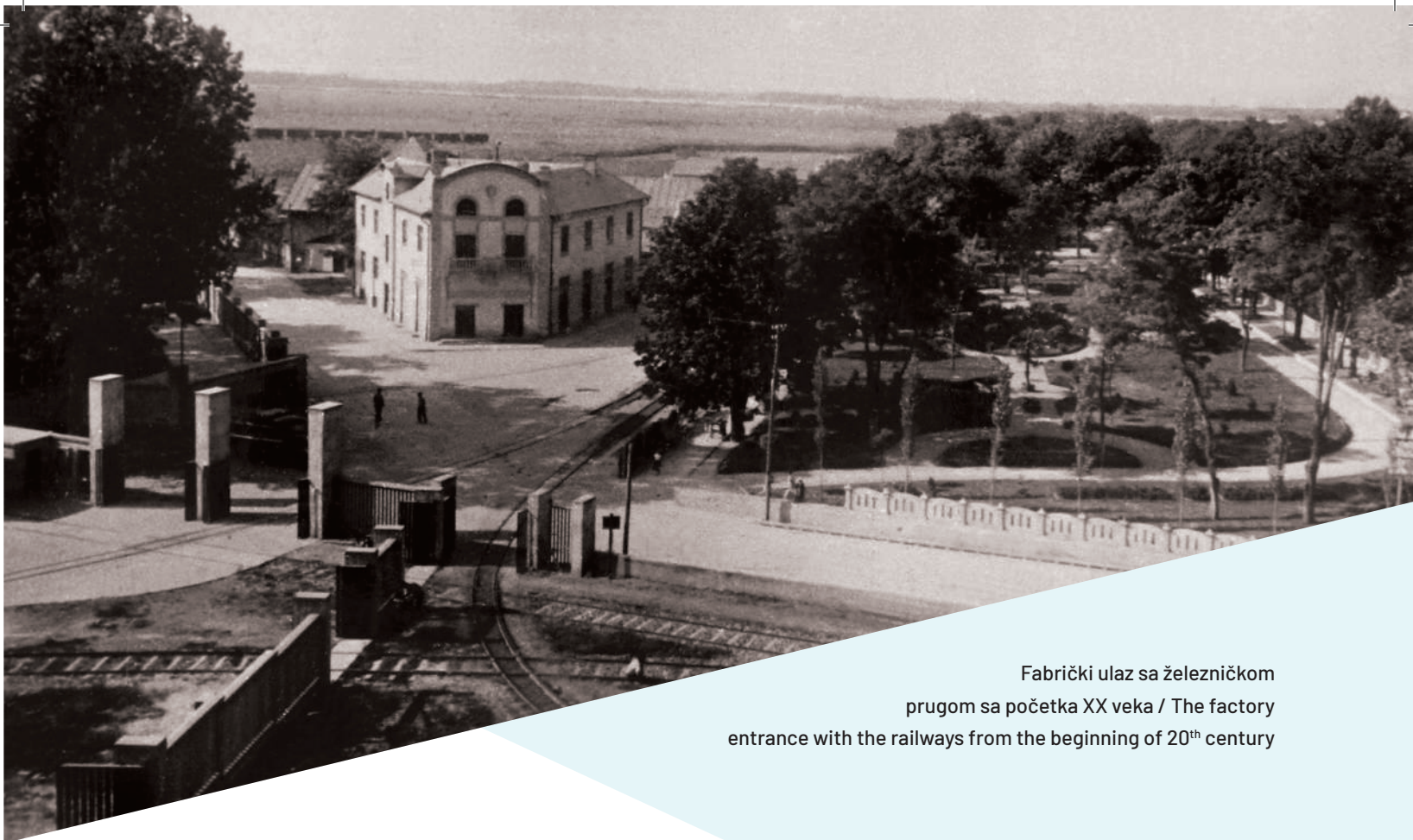
2 The novelty was related to the improvement of the clinker-burning process. For decades, clinker was obtained by baking raw material in kilns that worked only periodically. In 1904, the kilns were equipped with a fan for the introduction of air, which secured their undisturbed operation, which consequentially led to an increase in capacity and the quality of the product (Fišang 1969: 14-18).

Utovarna stanica na Dunavu iz 1908. godine / Loading station on Danube in 1908



Detalj iz izvoznog potkopa rudnika lapora / One detail in export marl mine





Fabrički ulaz sa železničkom prugom sa početka XX veka / The factory entrance with the railways from the beginning of 20th century

Od naročite važnosti za dalji razvoj fabrike bila je koncesija za izgradnju pruge Beočin–Petrovaradin, koja je puštena u rad 1908. godine; izgradnjom ove deonice cementara je povezana sa prugom Pešta–Zemun, čime je omogućen transport cementa u sve delove Austrougarske.

Krajem prve decenije XX veka otvoren je krečni kamenolom *Erdelj*, da bi se već 1910. krečanjak dopremao na, za tadašnje prilike veoma napredan način – žičarom iz samog kamenoloma u fabriku. Važna novina vezuje se i za 1913. godinu tokom koje su konstruisani tzv. pokretni roštilj i automatski uređaj za pražnjenje peći, čime je kapacitet peći povećan za čak 100%.

Novembra 1915. godine bivša Čikova fabrika na Filijali prestala je sa radom usled zastarelosti tehnologije. Dve godine kasnije otpremljena je i poslednja količina roman cementa nakon čega je fabrika nastavila isključivo sa proizvodnjom portland cementa (Lebl 1959: 190).

Krajem XIX i početkom XX veka Unija beočinskih fabrika cementa je, neosporno, bila jedan od najvećih i najpoznatijih proizvođača ovog građevinskog materijala u Evropi. Tome je značajno doprinelo unapređenje procesa proizvodnje na prelasku dva veka, o čemu rečito govore sledeći podaci – godine 1889. na tržište je plasirano 30.180 tona beočinskog cementa, dok je 1913. u fabrici proizvedeno čak 236.114 tona (Fišang 1969: 18–28). Ovako obiman plasman je svakako bio uslovljen i pripremama za Prvi svetski rat, tokom kojeg je cela produkcija beočinske cementare bila u službi austrougarskih ratnih napora. Nakon završetka rata fabrika će se naći u sastavu nove države, što će usloviti njeno prilagođavanje novonastalim okolnostima i usloviti izmene u njenom pravnom statusu.

Concession for the construction of the Beočin-Petrovaradin railway line, which was put into operation in 1908, was particularly important for the future development of the factory; construction of this railway section connected the cement plant with the Pest-Zemun railway line, which enabled the transport of cement to all parts of the Austria-Hungary.

In the late 1900s, limestone quarry *Erdelj* was opened and as early as 1910, the limestone was being transported in a very modern manner for that time – using a ropeway directly from the quarry to the factory. An important novelty was introduced in 1913, when a so-called movable grill and an automatic device for discharging the furnace were constructed, which increased the capacity of the kiln by 100%.

In November 1915, former Čik's factory at the Filijala stopped operating due to the obsolescence of the technology. Two years later, the last amount of the Roman cement was shipped off, after which the factory continued to exclusively produce Portland cement (Lebl 1959: 190).

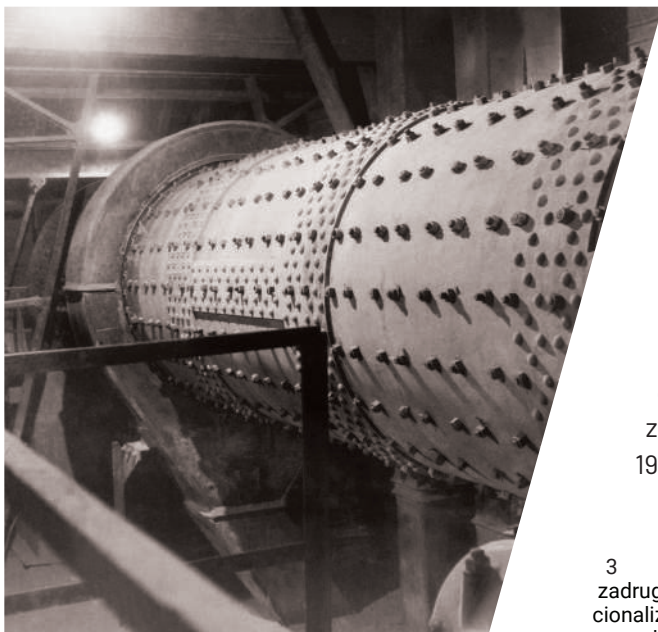
In the late 19th and early 20th century, the Union of Beočin Cement Plants was undoubtedly one of the largest and the most famous producers of this construction material in Europe. That has been largely contributed by the improvement of the production process at the turn of the 20th century, which is quite clearly testified by the following data – in 1898, 30,180 tons of Beočin cement were placed on the market, while in 1913 the factory produced 236,114 tons of cement (Fišang 1969: 18-28). Such a large quantity of the produced cement was definitely due to the preparations for World War I, during which the entire production of the Beočin factory was at the disposal of the Austrian forces. After the end of the war, the factory found itself in a new state, which required its adjustment to the newly created circumstances and brought about changes in its legal status.

Izgradnja žičare za krečnjak od kamenoloma krečnjaka "Erdelj" do pripreme vertikalnih peći - 1910. godina / Erection of the limestone wire mill from limestone quarry "Erdelj" to the vertical kilns preparation (1910)





Priprema sirovine vertikalnih peći, 30-ih godina XX veka /
Preparation of raw materials for vertical kilns, the 1930



Mlin cementa "Miag" /
Cement mill "Miag"

BFC od 1918. do 1944. godine

Austrougarska monarhija, pod čijom se ingerencijom nalazila Unija beočinskih fabrika cementa od 1867. godine, nestala je sa mape sveta po okončanju Prvog svetskog rata, dok je Beočin, kao deo Srema i današnje Vojvodine, ušao u sastav Kraljevine Srba, Hrvata i Slovenaca, zvanično ustanovljene 1. decembra 1918. godine.

Pripadnost novoj državi podrazumevala je i nove pravne okolnosti u kojima se cementara obrela. Još tokom rata, Kraljevina Srbija je 1915. godine donela zakon na osnovu koga je bilo moguće sekvestrirati preduzeća državljana neprijateljskih zemalja, a koji je nakon stvaranja Kraljevine SHS bio primenjivan na celoj teritoriji nove države. Na ovaj način pod sekvestar su dospela mnoga imanja i privredna preduzeća građana Austrije, Ugarske, Nemačke, Bugarske i Turske, pa i *Unija beočinskih fabrika cementa a.d.*, mada ne zadugo. Nerešen odnos između stranog vlasnika kapitala i jugoslovenskih državnih vlasti nije odgovarao nijednoj od strana, te se težilo pronalaženju što bržeg i efikasnijeg rešenja. Imajući u vidu dugoročne kapitalističke interese, kako u mađarskom tako i u jugoslovenskom društvu, pribeglo se najboljem rešenju za tadašnje prilike – formalnoj nacionalizaciji, te je fabrika 1920. godine transformisana u nacionalno preduzeće pod novim nazivom *Beočinska fabrika cementa a.d. Beočin*. Njenim Upravnim odborom je do početka Drugog svetskog rata predsedavao Miloš Savčić, istaknuti srpski preduzetnik, mada je suštinski uprava i dalje bila u rukama inostranih vlasnika kapitala.³ Značajan deo akcija cementare se od završetka Prvog svetskog rata do nove nacionalizacije fabrike 1944. godine nalazio u vlasništvu koncerna *Cementia Holding* sa sedištem u Cirihu, te su predstavnici koncerna imali značajnu ulogu u donošenju odluka koje su se odnosile na rad fabrike (Lebl 1959: 181).

³ Miloš Savčić iz Beograda, predstavnik Prometne banke, Izvozne banke i Beogradske zadruge, imenovan je za predsednika Upravnog odbora Beočinske fabrike cementa nakon nacionalizacije, a zadržao se na pomenutoj funkciji do Drugog svetskog rata; istom prilikom za potpredsednika izabran je Eduard Špicer. Odabirom beogradskog akcionara na vodeći položaj, stvoren je utisak da je fabrika cementa transformisana u nacionalno preduzeće, mada je sasvim izvesno da je stvarna rukovodeća pozicija bila uslovljena kapitalom, odnosno akcijama kojima su određene ličnosti u sastavu Upravnog odbora raspolagale (Lebl 1959: 179-180).



Fabrika uoči II svetskog rata / The factory shortly before the World War II

BFC from 1918 to 1944

The Austro-Hungarian Empire, which exercised jurisdiction over the Union of Beočin Cement Plants since 1867, disappeared from the map of the world after the end of World War I, while Beočin, as part of Srem, was integrated into the Kingdom of Serbs, Croats and Slovenes, which was officially established on December 1, 1918.

Integration into the new state also implied new legal circumstances for the cement plant. During the war, in 1915, the Kingdom of Serbia adopted a law based on which it was possible to sequester companies owned by nationals of the enemy countries, which was applied throughout the territory of the new state upon the establishment of the Kingdom of Serbs, Croats and Slovenes. In this way, numerous estates and companies owned by Austrian, Hungarian, German, Bulgarian and Ottoman citizens, including the *Union of Beočin Cement Plants JSV*, were sequestered, however, not for long. Unresolved relationships between the owners of foreign capital and the Yugoslav state authorities did not suit any of the parties, so they strived to find the quickest and the most efficient solution. Bearing in mind the long-term capitalist interests, both in the Hungarian and the Yugoslav societies, they resorted to the best solution at the time – formal nationalization, so in 1920 the factory was transformed into a national company under a new name, *Beočin Cement Plant JSV Beočin*, whose Board of Directors, until the onset of World War II, was presided by Miloš Savčić, distinguished Serbian businessman, even though the essential management was still in the hands of foreign capital owners.³ A significant part of the shares in the cement plant, from the end of World War I until the new

³ Miloš Savčić from Belgrade, representative of Prometna banka, Izvozna banka and Belgrade Collective, was appointed Chairman of the Board of Directors after nationalization and he remained in that position until World War II; on the same occasion, Eduard Spitzer was elected Vice Chairman. By choosing a Belgrade shareholder to take the leading role, they made the impression that the cement plant was transformed into a national company, even though it is quite certain that the decision-making was in the hands of shareholders and the capital at the disposal of certain persons on the Board (Lebl 1959: 179-180).

Afirmacija Beočinske fabrike cementa kao značajnog kapitalističkog preduzeća nastavila se tokom dvadesetih i tridesetih godina XX veka, uprkos velikoj ekonomskoj krizi koja je pogodila gotovo čitav svet, utičući značajno i na privredu u tadašnjoj Kraljevini SHS. Akcionari cementare u Beočinu otkupili su 1926. godine fabriku cementa u Splitu, a 1927. i preduzeće *Adria* u Drnišu. U ovakvim prilikama započeta je i proizvodnja nove vrste cementa, tzv. *specijalnog cementa* koji je u stručnim krugovima naišao na pohvale i najveća priznanja. (Gaćeša 2008: 54)

Period između dva svetska rata obeležila je dalja modernizacija fabrike. Nastavilo se sa usavršavanjem proizvodnog procesa, izgrađeni su kupolna klinker hala kapaciteta 20.000 tona i impozantno mlinsko postrojenje, a pogoni su elektrifikovani (Gaćeša 2008: 62). Novine su uslovile dalje poboljšanje kvaliteta proizvoda. Najveći deo investicija tokom ovog perioda bio je usmeren na kupovinu kajonosne zemlje. Godine 1940. okončan je sudski spor sa manastirom Beočin, te je fabrika najzad obezbedila vlasništvo nad zemljom kupljenom od manastira pre početka Prvog svetskog rata, a uložena su sredstva i u obezbeđivanje vlasništva nad novim površinama bogatim rudom.

Drugi svetski rat u Jugoslaviji počeo je 6. aprila 1941. Nakon kapitulacije države usledila je okupacija i podela zemlje između sila Osovine. Fabrika je tokom rata uglavnom radila kontinuirano, smanjenim kapacitetom, sve do oslobođenja Beočina 16. oktobra 1944. godine.

Izgradnja kupolne klinker hale vertikalnih peći (1932/33.godina)

Erection of the dome clinker hall for vertical kilns 1932/33





Hala klinkera vertikalnih peći /
Large vertical kilns clinker hall



Nova hala peći
/ New kiln workshop

nationalisation of the factory in 1944, was owned by *Cementia Holding*, with headquarters in Zürich, so the representatives of the Concern played a prominent part in making decisions that were related to the factory operation (Lebl 1959: 181).

The reputation of the Beočin cement plant as an important capitalist company continued during the 1920s and 1930s, despite the Great Depression which affected almost the entire world, also having a strong impact on the economy of the Kingdom of Serbs, Croats and Slovenes. In 1926, shareholders of the Beočin cement plant bought a cement plant in Split and in 1927 they also bought a Drniš based company *Adria*. These were the circumstances in which they began the production of a new kind of cement, the so called *special cement*, which was greatly praised and acclaimed in the professional circles (Gaćeša 2008: 54).

The period between the two world wars was marked by further modernisation of the plant. They continued improving the production process, built a domed clinker hall with a capacity of 20,000 tons and an impressive milling facility and also electrified the facilities (Gaćeša 2008: 62). The novelties caused further improvement of the product quality. The majority of investments in this period were used for the purchase of marl-rich land. In 1940, the litigation with the Beočin Monastery was finished, so the plant finally secured the ownership of the land purchased from the Monastery before World War I, and they also invested in securing the ownership of the newly purchased ore-rich land.

World War II in Yugoslavia began on April 6, 1941. Capitulation of the state was followed by occupation and the division of the country between the Axis powers. During the War, the plant operated almost continuously, with a smaller capacity, up until the liberation of Beočin on October 16, 1944.

BFC od nacionalizacije 1944. do privatizacije 2002. godine

Nakon završetka Drugog svetskog rata Jugoslavija se suočila sa velikim demografskim i materijalnim gubicima. Uništena su preduzeća, pogoni, infrastruktura – industrijska postrojenja pretrpela su strahovita oštećenja, rudnici su bili van funkcije, a veliki broj puteva, železničkih šina i mostova sasvim je razoren (Čalić 2013: 228). Ni beočinska fabrika nije izbegla stradanja u ratnom vohoru. Pred samo oslobođenje, minirani su neki od vitalnih objekata za proizvodnju – uništeni su moderna razvodna stanica i turbogenerator, što je uslovalo potpunu obustavu proizvodnje. Međutim, kao i u ostatku zemlje, posleratna obnova bila je nošena elanom, jakim optimizmom i radnim entuzijazmom, te je sanacija fabrike započeta odmah po povlačenju okupatora iz Beočina.

Novi, posleratni period u poslovanju beočinske cementare, okarakterisan je izmenjenim imovinsko-pravnim statusom fabrike u odnosu na prethodno doba, kao i ubrzanom modernizacijom, te prerastanjem BFC-a u savremeno preduzeće cementne industrije (Gaćeša 2008: 93).

Fabrika je 1944. nacionalizovana; prethodno rukovodstvo, pod patronatom akcionara iz Budimpešte, Ciriha, Berna, Beograda i Zagreba, razrešeno je dužnosti, dok je nova uprava, postavljena od strane državnih vlasti, preduzela radove na sanaciji oštećenja; rezultati njihovog zalaganja bili su vidljivi već polovinom 1945. godine kada je obnovljena proizvodnja. U narednom periodu cementara je ulagala napore u pravcu ostvarivanja zadataka planiranih tzv. Prvim petogodišnjim planom, usvojenim od strane jugoslovenskog državnog vrha 1947. godine, a kojim je predviđen višestruki rast industrijske proizvodnje, sa akcentom na teškoj industriji kao osnovi za brži razvoj ostatka privrede.

Krajem četrdesetih godina dolazi do zastoja u proizvodnji u većini privrednih preduzeća, te je rukovodstvo zemlje rešenje ovog problema videlo najpre u smanjenju, a potom i u ukidanju dotadašnje odlučujuće uloge države u privrednom životu, što se moglo ostvariti predajom preduzeća na upravljenje radnicima. Prvi radnički savet izabran je 31. decembra 1949. u fabrici cementa *Prvoborac* u Solinu kod Splita, dok je radničko samoupravljanje zvanično ozakonjeno u junu 1950. godine. Cementara u Beočinu predata je na upravu radnicima 10. septembra iste godine, kada je izabran prvi radnički savet (Čalić 2013: 228).

Na sednici Radničkog saveta / At the Trade union meeting



Izbori za samoupravne organe / Self-management elections



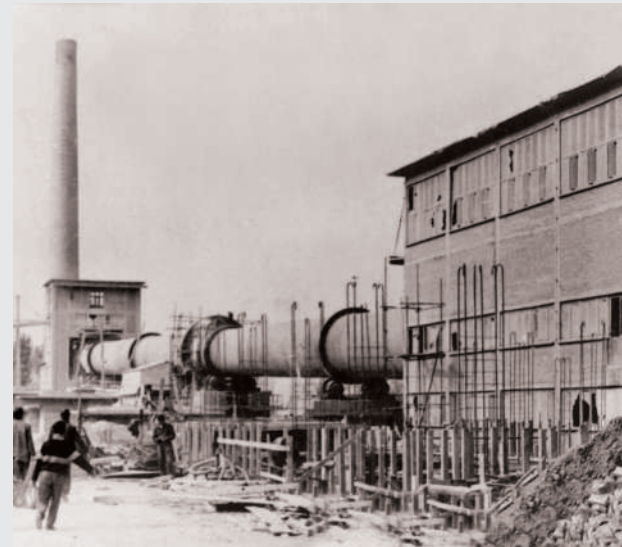
BFC from nationalisation in 1944 until privatisation in 2002

After the end of World War II, Yugoslavia was faced with serious demographic and material losses. Companies, facilities and infrastructure were destroyed – industrial facilities suffered tremendous damage, mines were out of operation, while a large number of roads, railway tracks and bridges were completely demolished (Čalić 2013: 228). The Beočin cement plant could not avoid being damaged in the war either. Just before the liberation, some of the facilities essential for the production, were mined – modern switchgear and turbo generators were destroyed, which caused complete production to come to a halt. However, as in the rest of the country, post-war reconstruction was driven by zeal, strong optimism and work enthusiasm, so the restoration of the plant began as soon as the occupiers retreated from Beočin.

The new post-war period in the operation of the Beočin cement plant was characterised by a changed property and legal status of the plant, compared to the previous period, as well as rapid modernisation and transformation of BFC into a modern cement company (Gaćeša 2008: 93).

In 1944, the plant was nationalized; former management, under the patronage of the shareholders from Budapest, Zurich, Bern, Belgrade and Zagreb, was relieved of duty, while the new management, appointed by the Government, endeavoured to repair the damages; the results of their efforts were already visible in mid-1945, when the production was restored. In the following period, the cement plant directed its efforts towards achieving the objectives planned by the so called First Five-Year Plan, adopted by the Yugoslav state leaders in 1947, which included multiple growth of industrial production, with an emphasis on heavy industry as the basis of faster development of the rest of the economy.

In the late 1940s, there was a halt in production in most of the companies, and the state authorities saw the solution to this problem initially in the reduction and subsequently termination of the decision-making role of the state in the economic life, which could be achieved by transferring the management of the companies to the workers. The first Workers Council was elected on December 31, 1949 at the Cement Plant *Prvoborac* in Solin, while the workers' self-management was officially made legal in June 1950. The management of Beočin cement plant was handed over to the workers on September 10 of the same year, when the first Workers' Council was chosen (Čalić 2013: 228).



Izgradnja rotacione peći na mokri postupak
/ Rotary kiln construction (wet line)



Kran na izgrađenom depou uglja troske i gipsa
/ Crane on the built coal, slag and gypsum
open storage

INVESTICIONA IZGRADNJA U NAŠOJ FABRICI U 1963. GODINI

Stavljanjem u pogon i rotacione peći u Beočinu, oktobra 1962. godine, ukupni kapaciteti ove fabrike porasli su za 50%. Ovaj snažan porast stavio nas je pred zadatak sinhronizovanja svih ugrađenih proizvodnih jedinica, tako da se obezbedi maksimalno moguća proizvodnja.

U probnoj proizvodnji koja je trajala od oktobra 1962. godine do juna 1963. godine ostvareni su rezultati u proizvodnji na nivou ugrađenih kapaciteta. Svakako da je ovo izvanredno povoljan rezultat, koji treba ne samo uočiti već i istaći. Ali istovremeno dosadašnji rezultati u proizvodnji ukazuju na mogućnost da se boljim sinhronizovanjem kapaciteta ostvari povećanje proizvodnje iznad garantovanih kapaciteta za oko 90.000 tona. Da se ova mogućnost realizuje treba otkloniti splošna «uska grla».

Za otklanjanje «uskih grla» a u cilju povećanja proizvodnje za narednih 90.000 tona cementa, izrađen je investicioni program. Ovaj investicioni program Radnički savet ove fabrike je odobrio na svojoj sednici od 11. juna 1963. godine.

Za usklađenje kapaciteta, ovaj investicioni program predviđa da se izgradi:

1) **novi mlin cementa.** Ova fabrika raspolaže sa 4 mlina cementa koji nisu u mogućnosti da obezbede meljavu svog proizvedenog klinkera. Ovo se očevidno ispoljilo u 1963. godini, kada i pored visoke potražnje cementa u klinker halama stalno ima na lageru oko 45.000 tona klinkera, a to iznosi koliko i jednomesečna proizvodnja ove fabrike.

Normalno je da su u fabrikama cementa, kapaciteti mlina cementa za 50% veći od kapaciteta peći, što kod nas nije slučaj. Čak i posle ugradnje ovog V mlina cementa, naša fabrika, neće ostvariti takav odnos između mlina i peći.

Dva osnovna razloga koja zahtevaju ovakav odnos između mlina i peći:

a) Industrija cementa, da bi obezbedila rentabilnost poslovanja, mora raditi kroz celu godinu. Kupac njenih proizvoda je građevinarstvo, koje radi u proseku 270 dana. To znači da za oko 90 dana je otezan plasman cementa. Da ne bi odeljenja čina je otezan plasman cementa. Tada će otprema na eksploataciji sirovine, pripremi sirovina i peći, ma stajali kada je smanjena mogućnost plasmata cementa, to je potrebno da se u tim mesecima klinker silira, a njegova meljava obavi kada je potražnja cementa na tržištu moguća. Radi toga mlinovali moraju biti daleko iznad kapaciteta peći.

b) Na proizvodnju 1 tona cementa troši se cca 100 kWh elektro-energije; od toga mlinovali cementa troše oko 40%. Kod nas — kao i u svetu — postoje velika je razlika u ceni između dnevne i noćne elektroenergije. Nas košta 1 kWh dnevne elektroenergije 12 dinara, a noćne 5 dinara. Usled ovakvog odnosa u ceni energije za našu fabriku bi bilo najpovoljnije kada bi mogli obezbediti što veći utrošak noćne elektroenergije. Godišnji utrošak elektroenergije u našoj fabrici iznosi oko 45 mil-

iona kWh. Povećanjem kapaciteta u mlinovalima cementa stvara se mogućnost da oni rade u dve smene, i to u jednoj noćnoj i jednoj dnevnoj. Već i ovo značilo bi mogućnost veće potrošnje noćne elektroenergije, a time veliko smanjenje troškova po ovoj osnovi.

Polazeći od toga, pomenuti investicioni program predviđa ugradnju novog mlina cementa. Kapacitet ovoga mlina je kod:

— *jinode mlina 2.700 g/cm² (Blain) 40 tonajsat*
— *jinode mlina 3.500 g/cm² (Blain) 25 tonajsat*

2) **Izgradnja nove sušare troske.** Stara sušara troske je već poabana, a uz to njen kapacitet je nedovoljan da zadovolji potrebu proizvodnje starog dela fabrike. Radi toga je investicionim programom predviđena izgradnja nove sušare troske. Godišnji kapacitet ove sušare je 125.000 tona. On je dovoljan da zadovolji potrebe fabrike.

3) **Izgradnja pretovarne stanice za utovar cementa u rinfuzi u kamione.**

U ovome bitnu skretali smo pažnju čitaocima, na značaj otpreme cementa bez vrea u rinfuzi, kako za našu fabriku, tako i za građevinska preduzeća. Ovaj vid transporta sve više dobija primenu u našoj zemlji. Za prvih 9 meseci ove godine, na ovaj način industrija cementa Jugoslavije je otpremila 200 hiljada tona, a to znači 10% od ukupne otpreme. Beočin je za 9 meseci otpremio u rinfuzi 20 hiljada tona ili oko 5%. Interesovanje naših kupaca za veću otpremu u rinfuzi — kamionima cisternama je veliko, mi nismo mogli da zadovoljimo ove zahteve zbog pomanjkanja uređaja za ovu vrstu utovara cementa. Radi toga ovaj investicioni program je predvideo izgradnju pretovarne stanice za utovar cementa u rinfuzi. U tome cilju predviđa se izgradnja dva metalna silosa, svaki od 50 tona. Ovi silosi će se smestiti tako da kamion cisterne prilaze sa strane. Metalni silosi biće povezani odgovarajućim pužnicama sa postojećim silosima cementa. Ugradnjom uređaja za punjenje postiže se da se za pola sata napuni kamion-cisterna od 22 tone.

Ovim uređajima omogućuje se godišnja otprema cementa kamionima cisternama između 70 do 90.000 tona. A to znači da se u ovom vidom transporta omogućuje otprema blizu 20%, od ukupno proizvedenog cementa. Svakako ozbiljan početak. Masovnjia otprema cementa u rinfuzi obezbediće se tek izgradnjom kanala od Dunava do fabrike. Završetkom ovoga kanala stvorice se uslovi da se cement otprema u rinfuzi-slepovima. Tada će otprema godišnje moći da iznosi oko 300.000 tona, a to znači nešto više od 50% ukupne naše proizvodnje.

Ukupna ulaganja po ovome programu su dinara 791 milion. Na osnovu ovog investicionog programa i odgovarajućih idejnih projekata podnet je zahtev za odobrenje kredita. Zahtev je prihva-

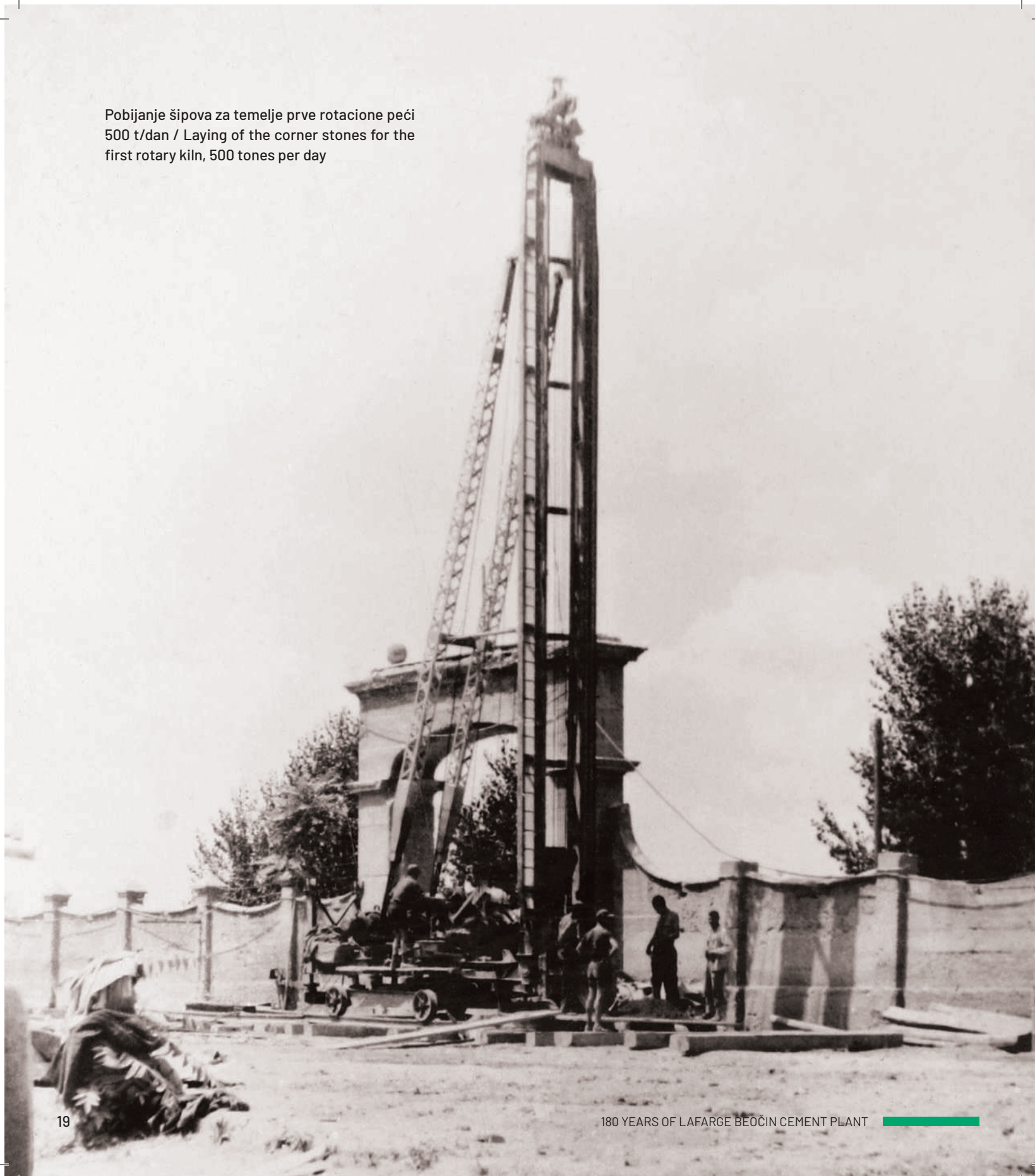
Značajan privredni rast prouzrokovan izrazitim porastom produktivnosti kao i transferom prihoda iz poljoprivrednog sektora u industriju, obeležio je pedesete godine XX veka u Jugoslaviji. Ovakvo stanje u državi odrazilo se i na rad beočinske cementare; dok je u doba posleratne obnove (1945–1951) fabrika redovno poslovala sa gubitkom, u period od 1952. do 1957. godine ostvarivala je dobit, što je svakako bila posledica redovnog investiranja, modernizacije i unapređenja procesa proizvodnje, kao i proširivanja kapaciteta. Tokom ovog perioda izgrađena je i hala sirovinskog brašna, modernizovane su vertikalne peći, podignuto je osam silosa cementa, kao i nova pakovaona i utovarna rampa; otvoren je i površinski kop *Srednje brdo*, a izgrađen je i novi toranj-hladnjak za vodu. Pored ulaganja u rekonstrukciju i modernizaciju fabrike, što je svakako doprinelo poboljšanju kvaliteta cementa, za vreme radničkog samoupravljanja ulagalo se i u poboljšanje radnih i životnih uslova radnika (Gačeša 2008: 141–151).

Cementara u Beočinu nastavila je da investira u svoju budućnost i u narednom periodu; 1962. godine puštena je u pogon prva rotaciona peć kapaciteta 500 tona klinkera na dan. Dve godine kasnije započela je izgradnja kanala u dužini od 1.500 m, namenjenog otpremi cementa Dunavom. Među značajnim dostignućima s kraja šezdesetih godina treba istaći izgradnju objekata i opreme za razvoz gasa dopremanog iz Elemira, formiranje trafo-stanica i naročito izgradnju druge rotacione peći, čime je dodatno povećan kapacitet proizvodnje i dostignut nivo od gotovo milion tona cementa godišnje (Beočinski dragulj 2009: 13).

Časopis "Cement" br. 5, 1963. godina



Pobijanje šipova za temelje prve rotacione peći
500 t/dan / Laying of the corner stones for the
first rotary kiln, 500 tones per day



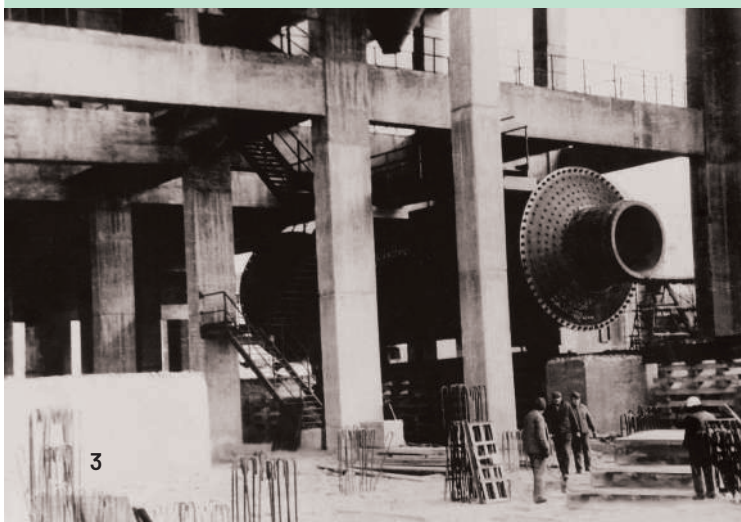


1) Pakovanje cementa / Cement packing

2) Punjenje cementa u vreće na rotacionoj pak mašini "Flux" / Filling the bags with cement on the rotary pack machine "Flux"

3) Montaža mlinova cementa kapaciteta 100 t/h / Cement mill installation, capacity 100 tones per hour

4) Utovar cementa u šlepove (snimljeno 1957.) / Loading the cement into the barges (a photo taken in 1957)



Zahvaljujući značajnim investicijama u modernizovanje fabrike, u njen tehnološki razvoj i napredak, a, takođe, uzimajući u obzir i sirovinsku bazu cementare, njenu lokaciju, tradiciju, kao i apsorpcionu moć gravitirajućeg tržišta, BFC je zauzimala vodeću ulogu u industriji cementa tadašnje Jugoslavije. Namera fabričkog rukovodstva, usklađena sa tadašnjim državnim planom razvoja Vojvodine, bila je da se ta zaslužena pozicija na tržištu učvrsti, te se nastavilo sa ulaganjima u proširenje proizvodnih kapaciteta. Sedamdesetih godina gradi se nova tehnološka linija po najvišim standardima tog doba, u okviru koje se proizvodnja klinkera obavljala savremenim suvim postupkom; kapacitet nove, treće rotacione peći, puštene u pogon 1977. godine, iznosio je čak 3.000 tona klinkera dnevno⁴ (Cement 1977: 25). Simultani rad tri tehnološke linije u proizvodnji klinkera obezbeđivao je godišnju produkciju cementa od 1,5 milion do rekordnih 1,77 miliona tona proizvedenih 1981. godine (Beočinski dragulj 2009: 13). Važno je pomenuti i početak proizvodnje hidrauličnog veziva *Beomal*, koje je tokom sedamdesetih nastalo kao plod razvoja u okrilju cementare.



4 U izgradnji nove tehnološke linije, koja je trajala 38 meseci, učestvovalo je 4.000 radnika, 20 renomiranih kompanija, a investirano je 2,38 milijardi dinara.

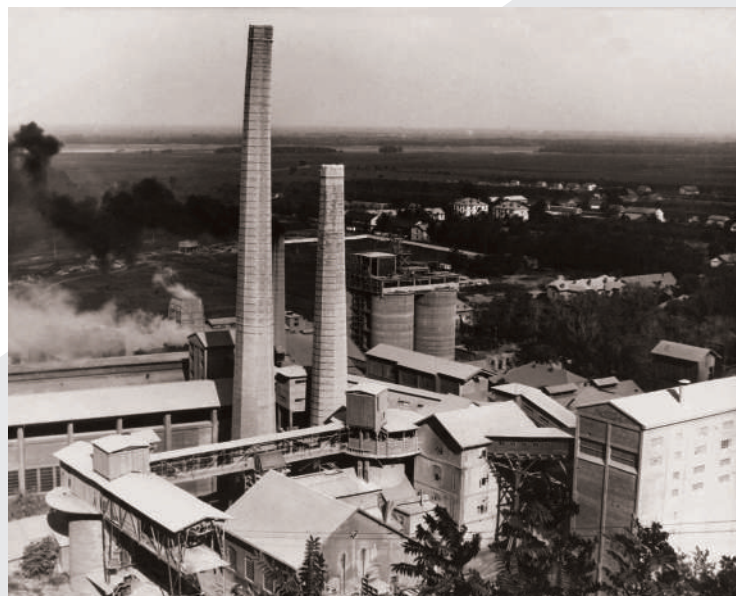
A significant economic growth brought about by a major increase in productivity and the transfer of profit from agriculture to industry, characterized Yugoslavia in the 1950s. These conditions in the state also had their effect on the Beočin cement plant; during the period of post-war restoration (1945–1951), the plant invariably suffered losses, but in the 1952–1957 period it started making certain profit, which was definitely the consequence of regular investments, modernisation and improvement of the manufacturing process as well as expansion of the capacity. During this period, a raw meal hall was constructed, vertical kilns were modernised, 8 cement silos were built, as well as a new packaging facility and a loading ramp; the open pit *Srednje brdo* was activated and a new water-cooling tower was erected. Apart from the investments in reconstruction and modernisation of the plant, which definitely contributed to the quality of cement, during the period of workers' self-management, investments were also made in order to improve working and living conditions of the employees (Gaćeša 2008: 141-151).

The Beočin cement plant continued to invest in its future in the following period as well; in 1962, the first rotary kiln with a capacity of 500 tons per day was put into operation. Two years later, they began the construction of a 1,500 m long canal, to facilitate cement distribution via the Danube. Among significant achievements in the late 1960s, the following projects should be emphasized: the construction of facilities and equipment for distribution of gas delivered from Elemir, the formation of sub-stations and especially the construction of the second rotary kiln, which additionally boosted production up to the level of almost a million tons of cement per year (Beočinski dragulj 2009: 13).

Novi silosi cementa i pakovaona. Svršetkom rata, 1945. godine, fabrika se obnavlja, proširuje se sirovinaska baza i izgrađuju se silosi cementa, uz stari tehnološki proces / New cement silos and the packing room. After the end of the war, in 1945, the factory was under reconstruction, the raw material base was being extended and the cement silos were built, along with the old production process



Beočinska fabrika cementa
1953. godine /
Beočin cement factory
1953





1) Proizvodnja klinkera u vertikalnim pećima (1969. godina) / Clinker production in vertical kilns (1969)

2) Rad portalnog krana na depou tehnološkog goriva i sirovina (1969. godina) / Portal crane work on the open storage of the technological fuel and raw material (1969)

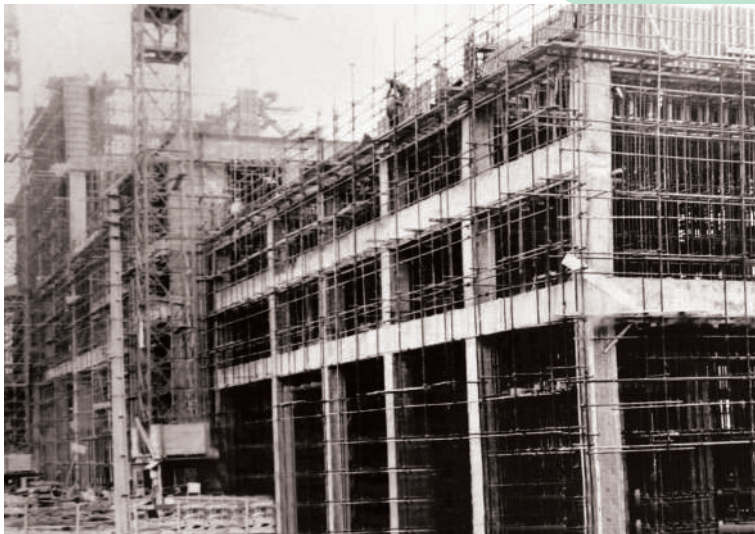
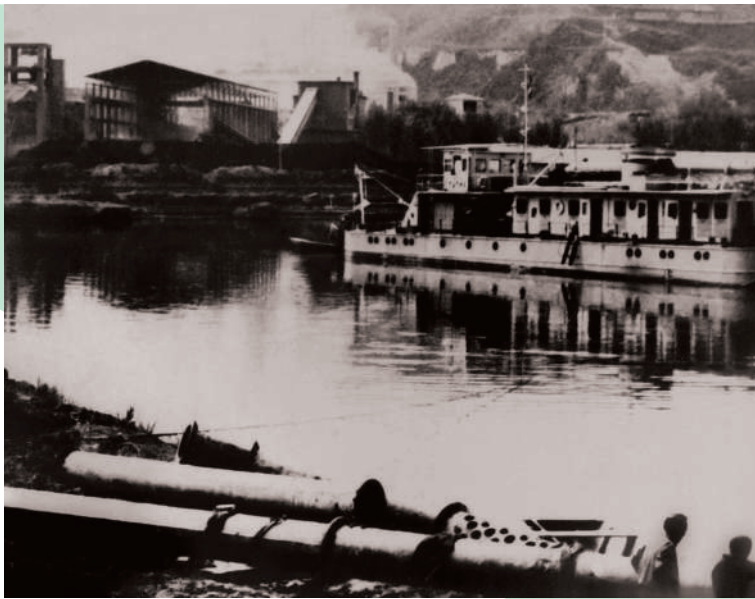
3) "Batarisanje" - razbijanje blokova krečnjaka na kamenolomu Srednje brdo (1969) / "Batarisanje" - limestone blocks crashing on the quarry "Srednje brdo"

Značajne ustavno-pravne promene u državi koje su ozvaničene donošenjem novog ustava 1974. godine, nisu mi-moišle ni beočinsku cementaru, koja je dve godine kasnije transformisana u Osnovnu organizaciju udruženog rada (OOUR).⁵ U narednim godinama fabrika je pratila opšti trend razvoja u cementnoj industriji.

Kraj osamdesetih i početak devedesetih godina prošlog veka, obeleženi krahom socijalističkog društveno-političkog i ekonomskog sistema na globalnom nivou, za jugoslovenske narode označili su početak krupnih promena, započetih raspadom države, te stvaranje klime opšte nestabilnosti, previranja i sukobljavanja. Tadašnje prilike odrazile su se i na funkcionisanje svih društvenih preduzeća, uključujući i cementaru u Beočinu.

BFC je devedesetih godina transformisana u deoničarsko društvo sa društvenim kapitalom kao dominantnim vidom svojine, te je pod nazivom *Deoničarsko društvo Beočinska fabrika cementa* u novonastalim istorijskim prilikama nastavila svoje poslovanje.

⁵ Novi ustav, donet 1974. godine, utvrdio je tzv. „radničkim“ amandmanima kategoriju udruženog rada i položaj čoveka u istoj. U svakom delu preduzeća u kojem se dohodak mogao samostalno iskazivati i gde je postojala određena tehnološka osamostaljenost u proizvodnji, osnovane su posebne radne asocijacije, tj. *osnovne organizacije udruženog rada* (OOUR) (Petranović 1988: 451; Bajec, 1981: 284).



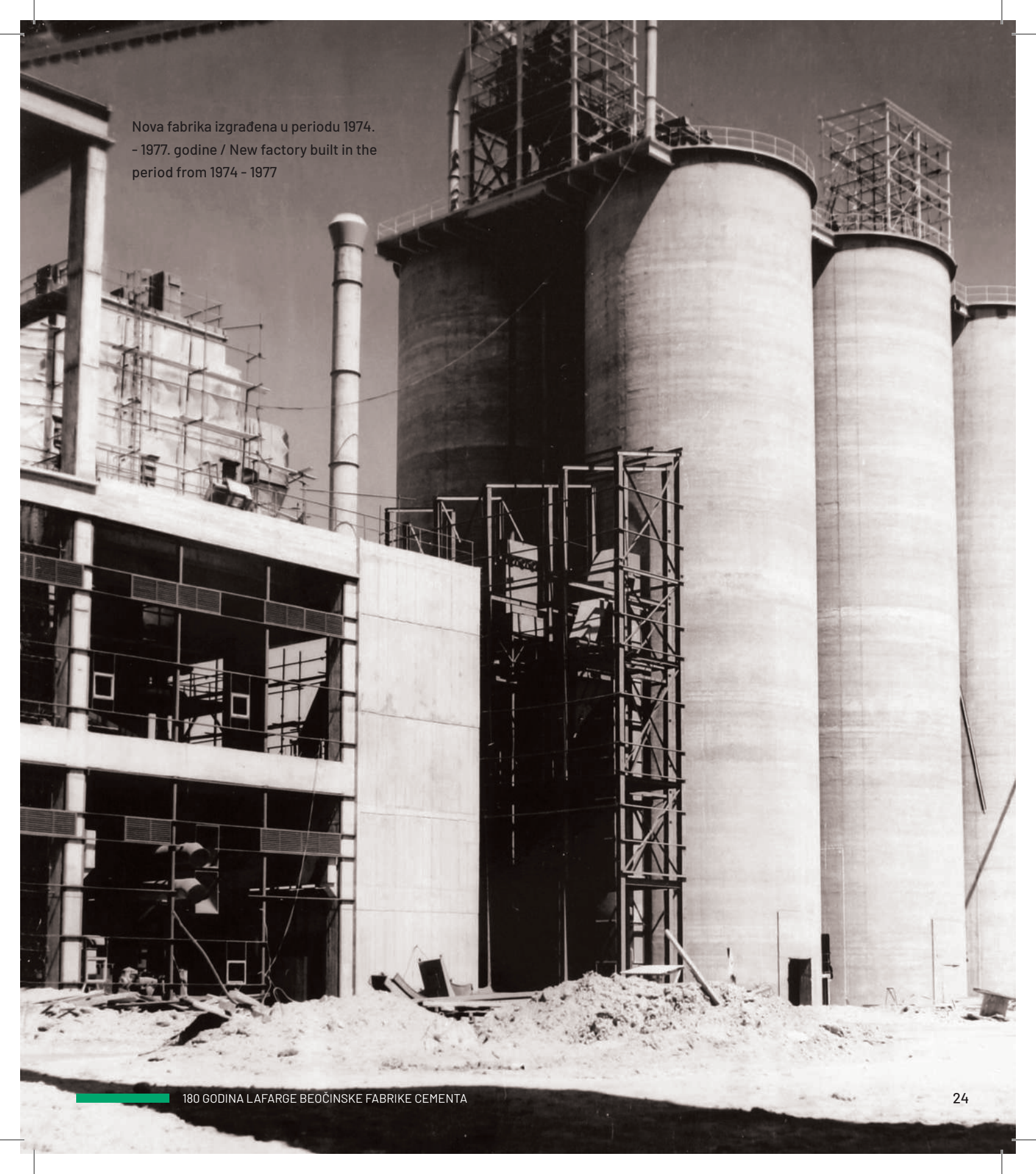
4) Prokopavanje kanala Dunav - fabrika
1965. godine / Digging of the tunnel
Danube - plant in 1965

5) Vagoni sa cementom za prodavnicu i
utovarnu stanicu na Dunavu 1960. /
Cement wagons for the shop and the
loading station on the Danube river
1960

6) Izgradnja hale pripreme sirovine
i nove rotacione peći 1975. godine
/ Erection of the large raw material
preparation hall and new rotary kiln
in 1975

Thanks to the significant investments in the modernisation of the plant, its technological development and advancement, and in view of the cement plant's raw material base, its location, tradition and absorption capacity of the market, BFC had a leading role in the cement industry of Yugoslavia at the time. The intention of the plant's management, in compliance with the state plans for the development of Vojvodina, was to fortify the well-deserved position on the market, so they continued with the investments in the increase of production capacity. In the 1970s, a new technological line was built according to the highest standards of that time, e.g. clinker was produced by a modern dry process; the capacity of the new, third rotary kiln, put into operation in 1977, was 3,000 tons of clinker per day⁴ (Cement 1977: 25). Simultaneous operation of three technological lines in the clinker production stepped up an an-

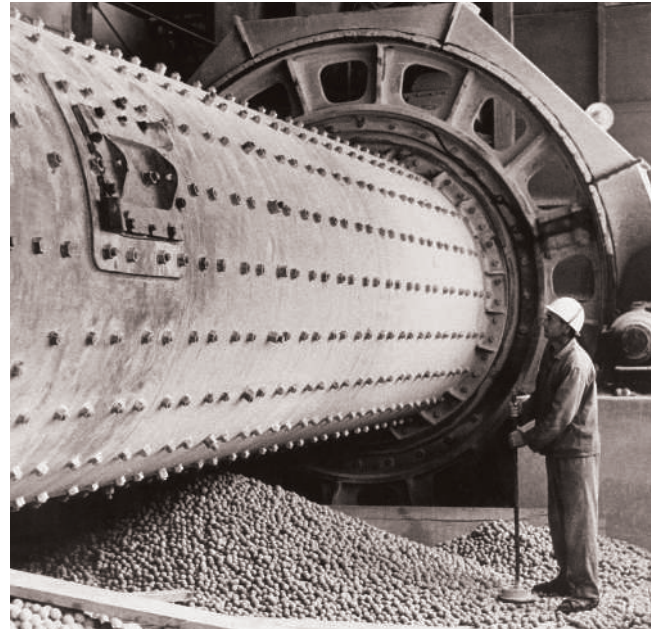
⁴ Construction of a new technological line, which lasted for 38 months, involved 4,000 workers, 20 renowned companies and the investments in the amount of 2.38 billion dinars.



Nova fabrika izgrađena u periodu 1974.
- 1977. godine / New factory built in the
period from 1974 - 1977



Svečanosti povodom postavljanja kamena temeljca za izgradnju nove tehnološke linije / Celebration in the name of laying of the corner stones for the erection of the new technological line



Mlin krečnjaka "Litostroj" u pripremi vertikalnih peći ugrađen 1970. godine / Limestone mill "Litostroj" in the vertical kilns preparation, installed in 1970

nual cement production from 1.5 million to the record 1.77 million tons produced in 1981 (Beočinski dragulj 2009: 13). It is also important to mention the start of production of a hydraulic adhesive *Beomal*, which was created during the 1970s as a result of development within the cement plant.

Important structural and legal changes in the state, which became official with the adoption of the new Constitution in 1974, affected the Beočin cement plant as well. Two years later, it was transformed into a basic association of organized labour (OOUR).⁵ In the following years, the plant followed the general development trend in the cement industry.

The late 1980s and early 1990s were marked by the crash of the socialist social, political and economic system on a global level and for the Yugoslav people they marked the start of significant changes, initialised by the break-up of the country and followed by an eruption of general instability, turmoil and conflict. The current circumstances were also reflected in the operation of all the socially owned companies, including the Beočin cement plant.

In the 1990s, BFC was transformed into a joint-stock company with a state capital as the dominant ownership type, so under the name *Beočin Cement Plant JSV* it continued to operate in the newly evolved historical circumstances.

5 The new Constitution, adopted in 1974, established, in the so called "workers" amendments, the category of organized labor and the position of an individual employee within it. In each part of the company which could independently show profit and where there was a certain technological independency in production, separate labor associations were established, i.e. basic association of organized labor (OOUR) (Petranović 1988: 451; Bajec, 1981: 284).



Lafarge BFC od 2002. godine

Početak novog milenijuma, kada su se formirali uslovi za inostrana ulaganja u srpsku privredu, otpočela je nova etapa u istoriji cementare. Fabriku je 2002. godine preuzela francuska kompanija Lafarge, globalni lider u proizvodnji građevinskog materijala, zajedno sa dva austrijska partnera, firmama Asamer i Vitedsdorfer (Wietersdorfer), da bi nepunu deceniju kasnije, 2011. godine, postala njen jedini vlasnik. Kompanija Lafarge se 2015. spojila sa drugim gigantom u istoj industriji, švajcarskim Holcimom, čime je formirana Grupa LafargeHolcim, čiji sastavni deo postaje i beočinska fabrika.

Privatizacija je cementari donela preko potrebna sredstva za modernizaciju, kao i priliku da, uz sopstvena znanja sticana kroz decenije poslovanja, takođe koristi i iskustva akumulirana širom sveta u okviru Grupe Lafarge, a potom i LafargeHolcim, koja su bila od izuzetnog značaja.

Najveća ulaganja od 2002. do danas⁶ odnosila su se na rekonstrukciju peći i linije za proizvodnju klinkera; izgrađena je, između ostalog, nova linija za paletizovan cement, kao i novo postrojenje za mlevenje čvrstih goriva male potrošnje energije, sa zatvorenim transportnim putevima i optimalnom emisijom prašine⁷; podignut je i novi silos klinkera, a mlinovi cementa su modernizovani postavljanjem vrećastih filtera. Tokom godina se radilo na razvoju i usavršavanju svih tipova cementa i njihovom usklađivanju sa zahtevima tržišta, a delatnost Lafarge BFC-a je proširena 2010. godine uključivanjem betona u ponudu, da bi se vremenom kompanija učvrstila na vodećoj poziciji na srpskom tržištu i kada je ovaj segment proizvodnje u pitanju. Betonske baze raspoređene na strateškim pozicijama (Beograd, Dići, Dudovica, Dolovo) omogućile su učešće Lafarge-a u nizu projekata od nacionalnog značaja vezanih za putnu infrastrukturu, a betonska baza Beška je podrška trenutno najvećem infrastrukturnom projektu u zemlji – rekonstrukciji pruge Beograd–Budimpešta.

⁶ Preuzimanjem BFC-a od strane kompanije Lafarge 2002. godine pokrenut je investicioni ciklus vredan 150 miliona evra, kojim je fabrika tehnički modernizovana.

⁷ do 10mg/Nm³.



Lafarge BFC from 2002

At the start of this millennium, when the legal framework for foreign investments in the Serbian economy became favourable, a new stage in the history of the cement plant began. In 2002, the plant was taken over by the French company *Lafarge*, a global leader in the production of construction materials, together with two Austrian partners, the *Asamer* and *Wietersdorfer* companies; less than a decade later, in 2011, Lafarge became the sole owner of the cement plant. In 2015, Lafarge merged with another giant in the same industry, Swiss *Holcim*, thus creating *Lafarge-Holcim Group*, which also incorporated the Beočin cement plant.

Privatization brought to the cement plant the necessary funds for modernisation, as well as an opportunity to use extremely important experiences accumulated around the world within the Lafarge Group and subsequently LafargeHolcim Group, in addition to its own expertise and know-how acquired over the years of business operation.

The largest investments from 2002 until today⁶ involved reconstruction of kilns and clinker production lines; a new line for palletized cement was constructed, among other things, as well as a new low-energy consumption facility for grounding of solid fuels, with closed transportation roads and optimal dust emission;⁷ a new clinker silo was also constructed, while the cement mills were modernised by the installation of bag filters. Over the years, they also worked on development and improvement of all cement types and their adjustment to the needs of the market, while Lafarge BFC's activities were expanded in 2010 with the introduction of concrete into the Plant's product range, so over time, the Company strengthened its leading position on the Serbian concrete market as well. Concrete bases located in strategic locations (Belgrade, Dići, Dudovica, Dolovo) enabled Lafarge to participate in a series of projects of national importance related to road infrastructure, while the concrete base Beška is at the moment supporting the currently largest infrastructure project in the country, reconstruction of the Belgrade–Budapest railway line.

6 Take-over of BFC by Lafarge Company in 2002 initialized an investment cycle worth 150 million euros, thanks to which the cement plant was technologically modernized.

7 Up to 10 mg/Nm³.



Očuvanje i unapređenje životne sredine u kojoj fabrika posluje, jedan je od prioriteta cementare, te se iz tog razloga jedna od prvih značajnih investicija odnosila na izgradnju vrećastog filtera rotacione peći, koja je garantovala emisiju suspendovanih čestica značajno ispod nivoa predviđenog propisima (ispod $20\text{mg}/\text{Nm}^3$). Takođe su u blizini fabrike, u samom Beočinu, postavljene dve merne stanice koje kontinuirano prate kvalitet vazduha. Dalja unapređenja bila su usmerena ka poboljšanju manipulacije klinkerom, kao najvećim izvorom emisije prašine; godine 2008. završena je izgradnja silosa klinkera kapaciteta 50.000 tona, čime je omogućeno skladištenje i rad sa klinkerom u zatvorenom prostoru uz značajno smanjenje emisije štetnih materija.

Kao pioniri u ko-procesiranju otpadnih materijala još od sedamdesetih godina XX veka, a nakon višedecenijskog usavršavanja inovativnih i po meri prilagođenih rešenja u vezi upravljanja otpadom, 2008. godine Lafarge BFC, po uzoru na brojne fabrike iz grupe, uz dozvolu nadležnih organa uvodi upotrebu alternativnih goriva, najpre otpadnih guma, a potom i ulja, komunalnog i industrijskog otpada, kao energenata u procesu proizvodnje cementa. Tako je 2010. godine iz sektora zaštite životne sredine osnovana ćerka kompanija, *Beo Eko Korak d.o.o.* koja se bavila snabdevanjem i pripremom alternativnih goriva za cementaru, da bi 2016. godine nastavila da postoji pod imenom *Geocycle*, jedinstvenim za sve poslovnice, koje u preko 50 zemalja širom sveta pružaju usluge u upravljanju različitim vrstama i tokovima otpada. S obzirom da savremeni način života na globalnom nivou velikom brzinom generiše otpad, raste svest o neophodnosti rešenja kojima ćemo očuvati životnu sredinu i za generacije koje dolaze. U tom cilju, upotreba alternativnih goriva značajno doprinosi očuvanju neobnovljivih izvora energije, smanjenju broja deponija, kao i umanjenju emisije gasova sa efektom staklene bašte.⁸ Iako se u pećima za proizvodnju klinkera razvijaju izuzetno visoke temperature, samo analiziran i sa procesom kompatibilan otpad može da se zbrine, bez negativnog uticaja na kvalitet proizvoda i životne

⁸ Dosadašnjim naporima upotreba fosilnih goriva je znatno smanjena, a samim tim i količina emitovanog CO_2 ; 2018. godine dostignuta je supstitucija od čak 40%.



Protection and improvement of the environment in which the cement plant operates are one of its priorities, so it is for a good reason that one of the first major investments was related to the installation of a bag filter on a rotary kiln, which guaranteed emission of particulate matter significantly below the level proscribed by regulations (less than $20\text{mg}/\text{Nm}^3$). Also, two stations for continuous air quality monitoring were placed in the vicinity of the cement plant, in the heart of Beočin. Further improvements were directed towards better manipulation of clinker, as the greatest dust emitter; the construction of a clinker silo with the capacity of 50,000 tons was completed in 2008, which enabled storage and handling of clinker in a closed space with a significant reduction of the emission of harmful substances.

As a pioneer in the co-processing of waste materials as far back as in the 1970s, and after decades of developing innovative and tailored solutions in the field of waste management, using the model of numerous factories within the Group and with a permission of the relevant authorities, in 2008 Lafarge BFC introduced the use of alternative fuels - first waste tyres and then oils, municipal and industrial waste - in cement production processes. That is how in 2010, out of the Environmental department, a daughter-company, *Beo Eko Korak d.o.o.*, was founded with the purpose of supplying and preparing alternative fuels for the cement plant; in 2016 it continued to operate under the name of *Geocycle*, providing waste management services through all the branch offices in over 50 countries around the world. Bearing in mind that the modern way of life on a global level is a fast generator of waste, there is a growing awareness of the necessity to find solutions which would protect the environment for the coming generations. To this aim, the use of alternative fuels significantly contributes to preservation of non-renewable energy sources, decrease in the number of landfills and emission of greenhouse gases.⁸ Even though the clinker kilns develop very high temperatures, only analysed and process-compatible waste can be used, without negative impact on the quality of the

⁸ The efforts so far have significantly decreased the use of fossil fuels, and with it the amount of emitted CO_2 as well; substitution of 40% was achieved in 2018.

sredine, o čemu se u beočinskoj cementari posebno vodi računa. Lafarge BFC je prva fabrika u AP Vojvodini koja je dobila IPPC dozvolu, potvrđujući na taj način svoju posvećenost zaštiti životne sredine.⁹

Dolaskom kompanije Lafarge 2002. godine, nastavljena je tradicija povezanosti i pružanja podrške zajednici u kojoj fabrika posluje. U skladu sa politikom odgovornog poslovanja, kompanija Lafarge BFC je tokom proteklog perioda investirala u razvoj infrastrukture i izgradnju lokalnih puteva i saobraćajnica, kao i rekonstrukciju luke, kako bi ispunila uslove za svrstavanje u kategoriju međunarodnih pristaništa. U značajne projekte ubraja se i izgradnja sportskog centra u Beočinu, novog gradskog trga, a svakako najznačajniji je projekat izgradnje industrijskog parka u Beočinu, kojim je potencijalnim investitorima stavljeno na raspolaganje 25 hektara fabričkog zemljišta, sa svom potrebnom infrastrukturom, čime je fabrika nastojala da kroz stvaranje novih radnih mesta doprinese daljem ekonomskom razvoju zajednice u kojoj posluje.¹⁰

Danas je cementara u Beočinu moderna fabrika, usklađena sa standardima *LafargeHolcim Grupe* u svim relevantnim oblastima – na polju efikasnosti, uticaja na životnu sredinu i bezbednosti na radu. Zahvaljujući velikim naporima koji su u fabrici ulagani od vremena privatizacije i svakako zahvaljujući značajnim sredstvima koja nisu uložena samo u njenu tehničku modernizaciju, *Lafarge BFC Beočin d.o.o.* slovi za vodećeg proizvođača građevinskog materijala – cementa i betona u Srbiji. S obzirom na svoju leadersku poziciju, kompanija ujedno prihvata i obavezu da učestvuje u rešavanju aktuelnih izazova koje nameće vreme u kojem posluje, te novi ciljevi i naponi u pravcu njihovog ostvarivanja tek predstoje.

9 Lafarge BFC je sertifikovala sisteme menadžmenta, u skladu sa međunarodnim ISO standardima i to za sistem upravljana kvalitetom prema ISO 9001:2015 i za sistem upravljanja životnom sredinom ISO 14001:2015.

10 U realizaciji ovih projekata, najznačajniji partner fabrike je lokalna zajednica, u čiji budžet je, u periodu od 2002. do danas, u cilju unapređenja uslova života i ekonomskog razvoja, fabrika uložila oko 1,9 milijardi dinara od čega je na ime donacija dato gotovo 700 miliona dinara. Za doprinos razvoju lokalne zajednice Lafarge BFC je 2012. dobio Nacionalnu nagradu za društveno odgovorno poslovanje *Virtus*.





product and the environment, which is something that the Beočin cement plant really focuses on. Lafarge BFC is the first factory in the AP Vojvodina that has an IPPC permit, which confirms its dedication to environment protection.⁹

With the arrival of the Lafarge Company in 2002, the tradition of supporting the community in which the plant operates continued. In accordance with the Business Responsibility Policy, in the previous period, Lafarge BFC invested in the development of infrastructure and construction of local roads, as well as the reconstruction of the port, which will qualify it for categorisation as an international port. Other important projects include construction of Sports Centre at Beočin, new city square, while definitely the most important project is the construction of Industrial Park at Beočin, which will offer the potential investors 25 hectares of land, with all the necessary infrastructure, as part of the Plant's efforts to contribute to the economic development of the community in which it is doing business, through creation of new jobs.¹⁰

Today, Beočin Cement Plant is a modern factory, in conformity with the standards of the LafargeHolcim Group, in all relevant areas – in efficiency, environmental impact and health and safety fields. Thanks to the great efforts invested in the plant after privatisation and definitely thanks to the funds invested not just in the technical modernisation of the plant, *Lafarge BFC Beočin d.o.o.* is considered to be the leading manufacturer of construction material – cement and concrete in Serbia. In keeping with its leadership position, the Company actively seeks solutions to the problems of the modern age, so new goals and efforts in this direction are yet to come.

⁹ Lafarge BFC has certified its management system, in accordance with the international ISO standards, including ISO 9001:2015 Quality Management System and ISO 14001:2015 Environment Management System.

¹⁰ In the realization of these projects, the Plant's most important partner was the local community and from 2002 until today, the Plant has invested around 1.9 billion RSD in its budget with the purpose of improving living conditions and economic development, while almost 700 million of that sum was donated. For its contribution to the development of the local community, in 2012, Lafarge BFC won the *Virtus Award* for socially responsible business.



Lafarge

Svoje prve korake kompanija Lafarge načinila je tridesetih godina XIX veka. Žozef Ogist Pava de Lafarge je 1833. godine, prema svedočenju hroničara, eksploatisao krečnjak iz jednog od rudnika na svom posedu u selu Lafarge na jugoistoku Francuske (lafarge – na francuskom „kovačnica“). Očev posao su 1848. nastavili sinovi Leon i Eduar, poznati kao braća Lafarge. „Ugovorom stoleća“ 1864. godine fabrika braće Lafarge se obavezala da za potrebe izgradnje stubova Sueckog kanala isporuči 200.000 tona hidrauličnog kreča, čime se afirmisala na svetskom nivou. Već 1870. fabrika se usmerava i na proizvodnju cementa od krečnjačkih fragmenata. Godine 1887. u okviru fabrike se uspostavlja i centralna laboratorija koja je vršila testiranja i kontrolu kvaliteta, čime je kompanija braće Lafarge zauzela pionirsku poziciju u oblasti razvoja i istraživanja na polju cementne industrije.



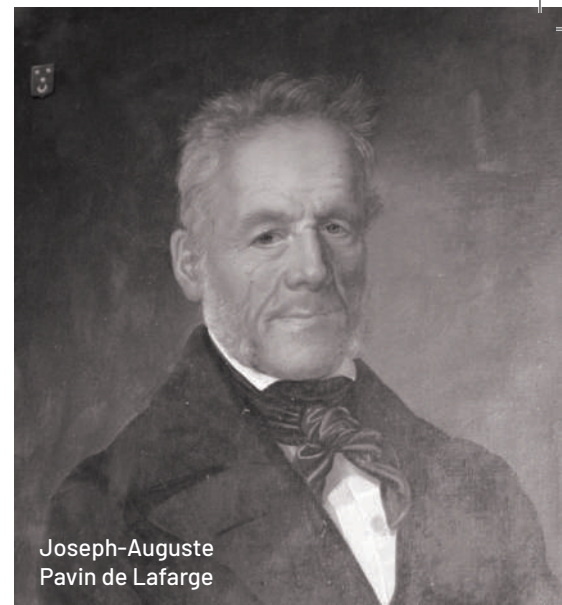
Holcim

Počeci kompanije Holcim vezuju se za ime Adolfa Gigi-a (Adolf Gygi) koji je 1912. godine osnovao fabriku cementa u švajcarskom gradu Holderbanku, da bi mu se u upravljanju cementarom dve godine kasnije pridružio industrijski vizionar Ernst Šmidhajni (Ernst Schmidheiny). U periodu između 1922. i 1931. godine, kompanija je investirala u cementnu industiju i u drugim evropskim državama, a takođe i u Egiptu, Libanu i Južnoj Africi. Godina 1942. se vezuje za nastanak velikog centra za istraživanje i testiranje u samom Holderbanku. Pedesetih godina XX veka beleži se globalna ekspanzija, kada se investira i u proizvodnju na tlu Kanade i Sjedinjenih Američkih Država.

Do početka novog milenijuma poslovanje kompanije iz Holderbanka proširilo se na tržište Latinske Amerike i Azije, pre svega na Kinu i Indiju. Godine 2001. naziv kompanije je promenjen u današnji Holcim.

Lafarge

Lafarge made its first corporate steps in the 1830s. According to the chroniclers, in 1833, Joseph-Auguste Pavin de Lafarge exploited the limestone from one of the quarries on his estate at a village of Lafarge in the southwestern France (lafarge – French, meaning “blacksmith”). In 1848, the father’s business was continued by his sons Leon and Eduard, known as brothers Lafarge. With the “Contract of the Century” from 1864, the brothers’ factory took upon itself the obligation of delivering 200,000 tons of hydraulic limestone for the construction of the piers in the Suez Canal, which made the factory famous on a global scale. As early as 1870, the factory also developed production of cement from limestone fragments. In 1887, it established a central testing and control laboratory within the factory, which is how the Lafarge brothers’ company took a pioneering position in the field of research and development in the field of cement industry.



Joseph-Auguste
Pavin de Lafarge

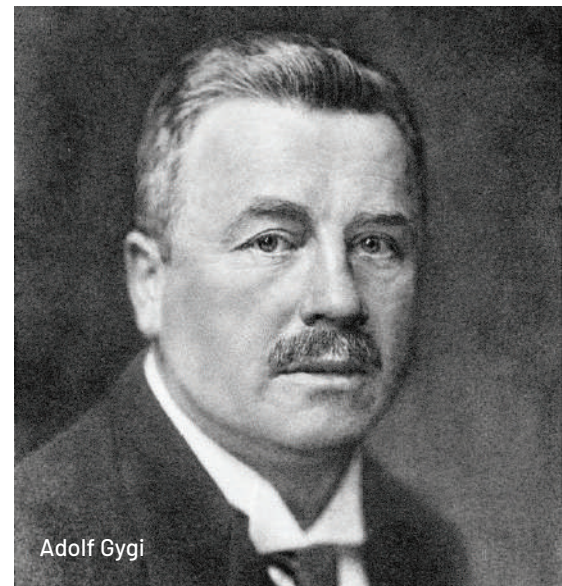
Holcim

The beginnings of the Holcim Company are tied to the opening of a cement plant in 1912 in the city of Holdenbank, Switzerland. It was founded by Adolf Gygi, who was joined, two years later, by an industrial visionary Ernst Schmidheiny. In the period between 1922 and 1931, the Company began investing in the cement industry of other European countries, as well as in Egypt, Lebanon and South Africa. The year 1942 marked the creation of a large research and testing centre in Holderbank.

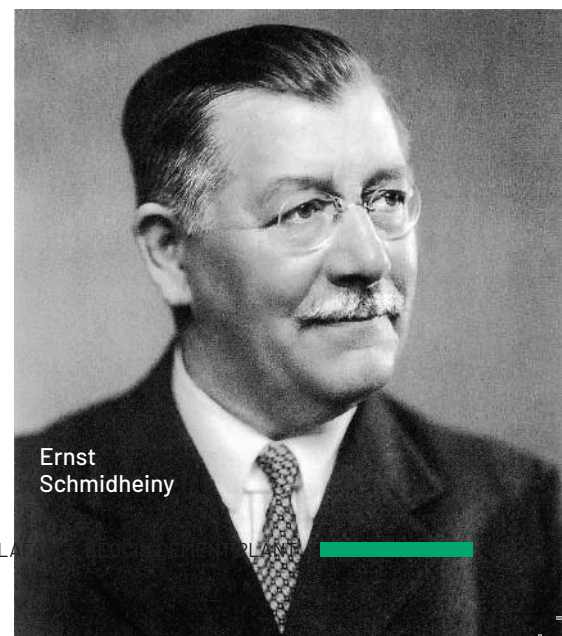
The 1950s are marked by a global expansion, when investments were made in production facilities in Canada and the USA.

By the beginning of the third millennium, the business of the original company from Holderbank expanded to Latin America and Asia mostly to China and India.

In 2001, the Company changed its name to *Holcim*.



Adolf Gygi



Ernst
Schmidheiny

3 TRAJNA VEZA SA ZAJEDNICOM

Beočinska fabrika kontinuirano proizvodi cement od sredine XIX veka. Ni ratovi, ni promene u nemirnim vremenima nisu obustavljale proizvodnju, ber ne zadugo. Svoje uspehe i svaki korak napred cementara je dugovala svojim radnicima - onima koji su nosili proizvodnju i borili se za napredak tokom gotovo dva veka duge istorije.

Fabrika je kroz decenije postojanja nastojala da uzvrat svojim zaposlenima i zajednici u kojoj posluje, pružajući podršku u rešavanju stambenih ali i u mnogih drugih pitanja radnika. Brojne aktivnosti fabričke uprave dovele su vremenom do porasta produktivnosti, unapređenja uslova rada, te ekonomskog osnaživanja cementare, što je vodilo ka poboljšanju životnih uslova stanovništva u njenom okruženju.

U cilju ostvarivanja kvalitetnog rada fabrike, postojala je potreba za stručnim kadrom, te je gotovo od osnivanja Beočinska fabrika prepoznala značaj ulaganja u obrazovanje. Zahvaljujući zalaganjima Ane Špiccer, kćerke vlasnika fabrike, Hajnriha Orenštajna, oko 1879. godine formirana je osnovna škola za decu fabričkih radnika i činovnika, a ubrzo je podignuta i skromna školska zgrada; 1907. je otvorena Šegrtska škola, a 1911. godine i prvo obdanište.

Večernja škola - obrazovanje odraslih u OŠ Beočin, radnici BFC / The evening school - education of the grown ups in the primary school in Beočin, BFC workers



Osnovna škola u Beočinu (1976. godina)
Primary school in Beočin (1976)





3 CONTINUOUS RELATIONSHIP WITH THE COMMUNITY

The Beočin Cement Plant has continuously produced cement ever since the beginning of the 19th century. Neither wars nor changes in tumultuous times stopped the production, at least not for long. Its achievements and progress have always been those of its workers – those who carried the production and strived for advancement over almost two centuries of its history.

Throughout its life, the Plant endeavoured to reciprocate by supporting both its employees and the community in resolving housing problems and various other issues. Numerous activities of the management led to a gradual increase in productivity, improvement of working conditions, along with economic strengthening of the Plant, which all led to the improvement of living conditions of the community.

In order to secure excellent operation of the Plant, there was a need for professional staff, so almost from the very start, the Beočin cement plant recognised the importance of investing in education. Thanks to the efforts of Ohrenstein's daughter Ana Spitzer, around 1879, the Plant established an elementary school for the employees' children, and soon after, they put up a modest school building; in 1907, an apprentice school was opened and in 1911 the first kindergarten as well.



Proslava prvog maja 1924. godine na Hladnoj vodi kod Manastira / 1st May celebration in 1924 in Hladna voda by the monastery



Industrijsko dobrovoljno vatrogasno društvo fabrike (1896. godina) / Plant Industrial voluntary fireman society (1896)

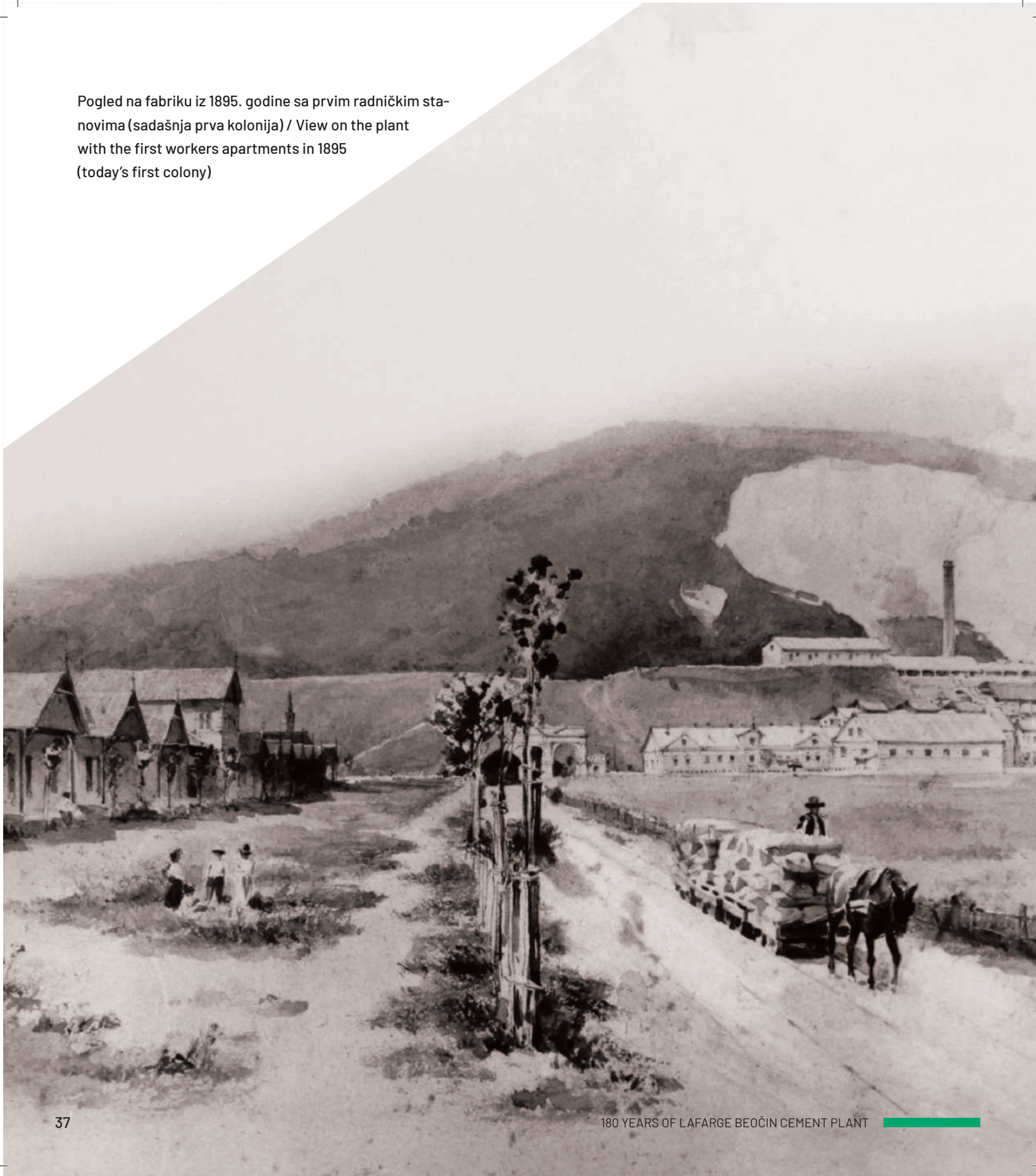
Tokom Prvog svetskog rata ustanovljeno je Omladinsko diletantsko društvo šegrta i otpočela je sa radom stručna produžna škola. Nakon rata, 1920. godine, škola je dobila naziv *Privatna narodna pučka škola beočinskih tvornica cementa u Beočinu*. Na osnovu naredbe Ministarstva prosvete, sve pučke škole izjednačene su sa nižom srednjom školom, te je škola u Beočinu dobila naziv *Privatna građanska škola - Beočin tvornica*, ali je krajem 1926. godine škola potpala pod državnu ingerenciju. Uprkos tome, veza fabrike i škole nastavila je da postoji, te su državne vlasti u određenoj meri nastojale da nastavu prilagode potrebama fabrike koja je, sa druge strane, nastavila da pomaže školu pre svega kroz humanitarni rad (Gaćeša, 2008: 34-35).

Pored osnivanja osnovne i produžne škole, posebno se ulagalo i u osnovno obrazovanje odraslih. Organizovanjem analfabetskih tečajeva insistiralo se na opismenjavanju zaposlenih, kao i podizanju kvalifikacione strukture održavanjem kurseva i praktične obuke za polukvalifikovane, kvalifikovane i visoko kvalifikovane radnike (Ćirilović, 1969: 55). Formiranjem Teritorijalnog centra za stručno obrazovanje 1963. godine, Beočinska fabrika je omogućila i programe za obučavanje na radnom mestu, dok su se stipendiranjem učenika i studenata relevantnih srednjih škola i fakulteta obezbeđivali i kvalitetni budući kadrovi.

Beočinska fabrika je pored ulaganja u obrazovanje svojih radnika, aktivno učestvovala i u rešavanju stambenih pitanja, te je još 1879. godine podignuta radnička kolonija u neposrednoj blizini cementare. Hajnrh Orenštajn je iste godine osnovao prvo vatrogasno društvo u Beočinu, dok je zgrada Vatrogasnog doma izgrađena 1894, a sve u cilju zaštite imovine u slučaju eventualnog požara.

Godine 1912. u Beočinu je prvi put formirana radnička organizacija i to kao podružnica Opšteg radničkog saveza.

Pogled na fabriku iz 1895. godine sa prvim radničkim stanovima (sadašnja prva kolonija) / View on the plant with the first workers apartments in 1895 (today's first colony)



365	Milan Kuga	1871	1891	Prav	Horonica --	Jura sin Jelac -- Gustan --
366	Dava Kucimer I	1891	1891	Rk	Jugoslavija Cerovic Hok	Jura sin Silona zena Fusa kci Kronka -- Regina --
367	Dragutin Bali	1895	1895	Rk	Jugoslavija Samac kadej Si Mironca F. Mironca	Stevan sin Mazija zena Mazija kci Buzica --
368	Fendel Keller	1879	1879	--	Jugoslavija Stari Dubog Avri Sad	Milica zena Buzica kci Matica --
369	Fruja Kendel I	1879	1879	--	Jugoslav Si Mironca --	Gura Rabusa zena Mironca kci

Matična knjiga radnika 1920

Nastavljeno je sa ulaganjima fabrike u izgradnju domova za radnike, pa su u ovo vreme izgrađene i tri činovničke kuće, kao i stambena zgrada za rudare.

Nakon Drugog svetskog rata, uprkos izmenjenom društveno - političkom okruženju, nastavilo se sa rešavanjem stambenog pitanja zaposlenih. Prvi koraci bili su usmereni ka popravci stare zgrade kolonije, da bi se gotovo istovremeno pristupilo i izgradnji novih stanova, te su u periodu od 1947. do 1968. godine izgrađena dva nova stambena naselja sa ukupno 268 stanova. Osim toga, fabrika je pružala pomoć svojim radnicima i u izgradnji domova u individualnom vlasništvu, kako u samom materijalu, tako i putem kreditiranja. Istovremeno, ulagalo se i u infrastrukturu za potrebe radničkog naselja, a takođe i u izgradnju fudbalskog igrališta, Doma kulture, Doma penzionera i osnovne škole (Radosavljević, 1969:52).

Tokom pedesetih godina u Jugoslaviji su se otvarala vrata za bavljenje turizmom, koji je već sredinom šezdesetih prepoznat kao nosilac društvenog preobražaja. Jugoslovenski hoteli i pansioni primali su turiste i iz istočnog bloka i sa Zapada, a posebno je u čarima jadranske obale i mnogobrojnih planina uživalo domaće stanovništvo. Širom države nicala su radnička odmarališta, koja su omogućavala radnicima preduzeća i fabrika pristupačan odmor na

Radničke kolonije iz 1928. godine /
Workers colonies from 1928.

During World War I, a Youth Amateur Association of Apprentices was established, as well as a vocational school of extended education. After the War, in 1920, the school was named *Private National People's School of Beočin Cement Plants at Beočin*. Based on the order of the Ministry of Education, all public schools were equalised with junior high schools, so the school at Beočin was named *Private Civil School – Beočin Plant*, but in late 1926, the School came under the state administration's jurisdiction. Despite that, the relationship between the plant and the school continued and the state authorities tried to adjust the curriculum, up to a certain level, to the needs of the plant, which, on the other hand, continued to support the school, most of all through humanitarian work (Gačeša, 2008: 34–35).

Apart from the establishment of the elementary and the extended education school, the Plant paid particular attention to the investment in adult education. By organizing literacy courses, they insisted on achieving literacy of their workers, as well as raised the qualification structure by holding classes and practical courses for semi-qualified, qualified and highly qualified workers (Ćirilović, 1969: 55). With the formation of the Territorial Centre for Vocational Education in 1963, the Beočin Cement Plant also facilitated on-the-job training programs. By granting scholarships to pupils and students of the relevant secondary schools and faculties, highly qualified future personnel was secured. (Drašković, 1963: 17).

Apart from investing in the education of its workers, the Beočin Cement Plant also actively participated in solving their housing problems, so as early as 1879, they built a workers' colony in the vicinity of the Plant. Also, that same year, Ohrenstein established the first firefighting society at Beočin, while the building of the Firefighters House was constructed in 1894, to protect property from fires.



Počela izgradnja nove škole

Najzad je mašta postala stvarnost. Davnašnja želja Beočinaca, da u svom mestu imaju novu veliku i lepu školsku zgradu, ovih dana počela je da se ostvaruje. Preko od novih višespratnica počela je izgradnja nove školske zgrade za osnovnu školu. Izgradnjom ove zgrade u potpunosti će se rešiti jedan akutan problem koji je Beočince mučio punih 18 godina. Nova škola će, pored 18 učionica veličine 60 m², imati veliku fiskulturnu salu, šest raznih kabineta, školsku radionicu, dačku kuhinju sa trpezarijom, prostorije za društvenu aktivnost učenika i sve potrebne nuz prostorije koje su potrebne za normalan rad. Nova škola je postavljena pod najpovoljnijim uglom u odnosu na vetrove i svetlost, tako da je i to velika prednost u odnosu na slične objekte kod kojih usled urbanističkih celina i drugih razloga ovo nije moguće postići. Nova škola će takođe, pored ostalog konfora, imati i centralno grejanje tako da će u njoj biti idealni uslovi za život i rad. Izgradnjom nove škole prestaće potrebe za daljim korišćenjem postojećih školskih zgrada sa kojima će se drugi prostorni problemi moći uspešno rešiti.

Radove na ovoj školi, za čiju će se izgradnju utrošiti oko 150 miliona dinara, izvodi naše lokalno Građevinsko preduzeće »Crveni Čol«. Ovo preduzeće se obavezalo da će novu školsku zgradu, ukoliko se na vreme obezbede potrebna novčana sredstva završiti i predati na upotrebu sredinom 1965. godine, tako da bi se nastava u školskoj 1965/66. održavala u novoj školskoj zgradi. Ovo bi svakako mnogo pogodovalo ne samo beočinskoj deci nego i deci iz Rakovca, Cerevića i Banoštora, koja u beočinskoj školi pohađaju više razrede osnovne škole, jer prostorije u kojima se sada održava nastava nezadovoljavaju ni najosnovnije higijenske i pedagoške uslove. Imajući to u vidu nadležni organi Opštinske skupštine i opštinskog društvenog fonda za školstvo, koji je investitor ove škole, čine znatne napore da na vreme obezbede potrebna novčana sredstva. Zahvaljujući ovim naporima do sada je iz budžeta Opštine, sredstava fonda i zajma kod Komunalne banke u Sremskoj Mitrovici obezbeđeno oko 50 miliona dinara, tako da će već ove godine građevinski radovi daleko odmaći. Međutim, pitanje obezbeđenja daljih 100 miliona dinara za dovršenje ove zgrade još nije rešeno. Obzirom da se radi o znatnim sredstvima koja u ovako kratkom periodu nije lako obezbediti, nadležni opštinski faktori očekuju znatnu materijalnu pomoć građana i radnih organizacija, sa teritorije Opštine, a posebno iz Beočina. Ako bi se brže obezbedila potrebna novčana sredstva, postoje objektivne mogućnosti da se rok za dovršenje nove školske zgrade znatno skрати i tako u najskorije vreme skine sa dnevnog reda ovaj već hronični problem. Zato se realno očekuje svesrdna pomoć svih građana i radnih organizacija u izvršenju ovog obimnog zadatka, tako da nova škola bude zajedničko delo lokalnih snaga.

Vladimir Ratković

Časopis "Cement" br.7, 1963.

Izlaz iz fabrike posle prve smene radnika (1969. godina)
/ Plant's exit after worker's first shift (1969)



In 1912, the first workers' organisation was established at Beočin, as a branch office of the General Workers Alliance. The plant continued to invest in the construction of homes for the workers, so in this period three houses for the administrative staff, as well as a residential building for the miners were constructed.

After World War II, despite changed social and political circumstances, housing issues of the employees continued to be solved. The first steps were directed towards repairment of the old building of the workers' colony, while almost simultaneously new apartments were built, so between 1947 and 1968 a new two new housing settlements were built encompassing 268 apartments. Apart from that, the Plant supported its workers in building their own, privately owned homes, by supplying building materials and also by financial loans. At the same time, investments were made in the infrastructure of the workers' settlement, as well as building a football pitch, Cultural Center, Retirees' Center and an elementary school (Radosavljević, 1969: 52).

The 1950s marked the beginnings of tourism in Yugoslavia, which was in the 1960s recognised as the basis for social transformation. Yugoslav hotels and boarding houses welcomed tourists from the Eastern Block and from the West, but the charm of the Adriatic coast and numerous mountains was widely enjoyed by the domestic population. Workers' resorts sprang up throughout the country and they enabled the factory workers and other employees to take affordable vacations at the seaside or in the mountains (Čalić, 2013: 264). In late 1950s, the Beočin cement plant con-

Na Andrevlju sa penzionerima (1975, godina) / On "Andrevlje" with the retired workers (1975)



moru ili planini (Čalić, 2013: 264). Beočinska cementara je još krajem pedesetih godina izgradila svoje odmaralište u Biogradu na Moru i na Andrevlju na Fruškoj Gori, što je omogućilo radnicima fabrike i njihovim porodicama letovanje i odmor po veoma povoljnim uslovima.

Sportska tradicija Fabrike započeta je još pre Prvog svetskog rata osnivanjem fudbalskog kluba pod imenom B.A.K, na inicijativu radničke omladine, da bi 1919. godine klub promenio ime u BŠK, a od 1933. godine dobio naziv *Cement*. Osim fudbala, posle Drugog svetskog rata, zabeležen je rad različitih sportskih organizacija kao što su odbojkaški, rukometni, stonoteniski i streljački klub, kao i klubova u kojima su se razvijale i negovale različite borilačke veštine poput džudo i boks kluba. Svake godine su se organizovale radničke sportske igre, sa takmičenjima u fudbalu, ali i drugim sportskim disciplinama.

U periodu nakon Drugog svetskog rata posebna pažnja se posvećivala i kulturnom životu. Ubrzo posle oslobođenja, radnici fabrike osnovali su Radničko kulturno-umetničko društvo *Brile*, u okviru koga su bile oformljene različite sekcije, kao što su tamburaška, dramska i folklorna.

Izgradnja prvog objekta - nove investicije. Restoran društvene ishrane, ambulanta medicine rada i elektro-računarski centar / Construction of the first building - new investments. Workers canteen, plant dispensary and the computer center



180 GODINA LAFARGE BEOČINSKE FABRIKE CEMENTA

Ulaz u novi vatrogasni dom (1969. godina) / Entrance of the new Fire house (1969)



42



structed its own resorts at Biograd na Moru and at Andrevlje in the Fruška Gora hillsides, which enabled the plant's employees and their families to enjoy vacations at reasonable rates.

Sports tradition of the plant began before World War I with the foundation of a football club called B.A.K., upon the initiative of the young workers; the club changed its name to BŠK in 1919 and in 1933 was again renamed to – *Cement*. Apart from football, after World War II, other sports were pursued in sports organisations, including volleyball, handball, table tennis and shooting. There were also sports clubs which cultivated various martial arts, such as boxing and judo. Workers' sports competitions were organised each year, first of all in football, but in other sports disciplines as well.

In the period after World War II, special attention was also paid to the cultural life. Soon after the liberation, the plant's workers founded a Workers' arts and culture society Brile, which had various sections, such as tamboura music, drama and folklore dancing sections. Also, thanks to the plant, Beočin got its Cultural Centre.

When the Beočin Cement Plant was taken over by Lafarge, in 2002, its active participation in the community life continued: investments were made in the construction of various infrastructural facilities, such as sports and business centre, city square, road infrastructure, as well as in the reconstruction of schools and religious objects. One of the most important projects was the construction of an industrial park at Beočin, whose aim was to create new jobs.

Lafarge BFC carried on a long tradition of investing in the youth and in education. There is a continuous support of elementary schools in the Beočin municipality, various activities are organized for children, while in the sphere of higher education different educational programs are financed in co-operation with the University of Novi Sad and faculties of the Belgrade University (Faculty of Organizational Sciences and Faculty of Civil Engineering).



Trg Mladosti u Beočinu /
City square

Sa preuzimanjem Beočinske fabrike od strane kompanije Lafarge 2002. godine cementara je nastavila aktivno učestvovanje u životu lokalne zajednice, kroz ulaganja u infrastrukturu, izgradnju sportsko-poslovnog centra, gradskog trga, te rekonstrukciju škola i obnovu verskih objekata, dok je jedan od najvažnijih projekata bila izgradnja industrijskog parka sa ciljem otvaranja novih radnih mesta.

Kompanija Lafarge BFC je nastavila i dugu tradiciju ulaganja u mlade i obrazovanje. Kontinuirano se pruža podrška osnovnim školama na teritoriji opštine Beočin, organizuju se različite aktivnosti namenjene deci, dok se u domenu visokog obrazovanja finansiraju različiti edukativni programi na Univerzitetu u Novom Sadu i beogradskim fakultetima (Fakultet organizacionih nauka, Arhitektonski i Građevinski fakultet). Obuka, razvoj i dalje usavršavanje zaposlenih prioritet su i od vremena privatizacije.

Bezbednost i zdravlje na radu (BZR) takođe su jedan od prioriteta u Lafarge BFC-u. Kontinuirano se unapređuju uslovi rada, uz striktno primenjivanje standarda. Posebna pažnja se poklanja preventivnoj identifikaciji rizičnih situacija i mesta, te promeni odnosa samih zaposlenih prema ovoj temi, koja je u fabrici sastavni deo dnevnih obaveza. Visoki standardi koji se u oblasti BZR-a primenjuju na sve radnike, obavezni su i za izvođače radova, odnosno kompanije i partnere sa kojima fabrika saraduje, čime se utiče na unapređenje kulture bezbednosti i zdravlja na radu u okvirima značajno širim od onih u kojima Beočinska fabrika posluje.

Lafarge BFC je prvi dobitnik nacionalne nagrade za najbezbedniju kompaniju u Srbiji, koja je ustanovljena 2012. godine i redovno se dodeljuje najzaslužnijima u ovoj oblasti.

On-the-job training, development and personal and overall growth continued to be high priorities after privatization as well.

The Plant continued to invest in the advancement of its employees through various training courses, which not only improved their individual skills, but also carried a promise of a better future of the plant.

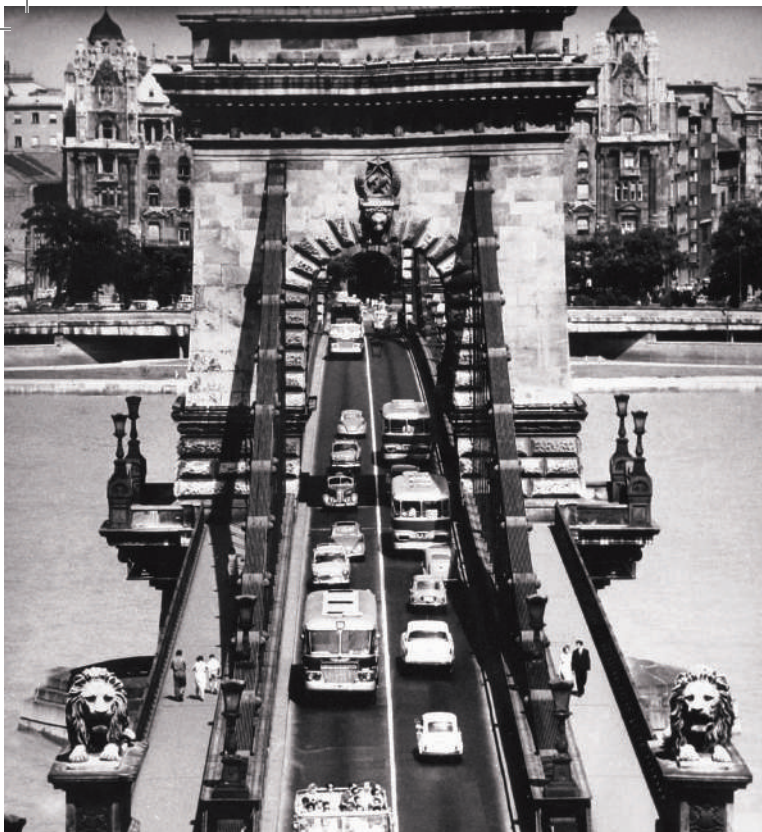
Safety and occupational health are also one of the priorities at Lafarge BFC. Working conditions are continuously improved, along with strict adherence to the relevant standards. Special attention is paid to preventive identification of high-risk situations and sites, as well as to changing the employees' attitudes towards this topic, which is an integral part of daily duties at the Plant.

High standards in this area, which are applied to the company's employees, also apply to the contractors, i.e. companies and partners that cooperate with the plant, which enhances the culture of occupational safety and health on a much broader basis than the community in which the Beočin Cement Plant operates.

Lafarge BFC is the first recipient of the Safest Company Award in Serbia, established in 2012 and presented to the worthiest companies in this field.

Sportski centar Beočin /
Sports Center Beočin





Sečenjijev lančani most / Széchenyi Chain Bridge



Hidroelektrana Đerdap / Hydropower Plant Đerdap

4 OBJEKTI IZGRAĐENI BEOČINSKIM CEMENTOM

Beočinska fabrika cementa, tokom svog dugogodišnjeg postojanja, obezbedila je na desetine miliona tona cementa kojim su izgrađeni mnogi značajni objekti kod nas i u svetu. Hidrocentrala Đerdap, Avalski toranj, Sava Centar, Most kod Beške, Most na Adi, Koridori 10 i 11, Pupinov most, Vetropark Čibuk, pruga Beograd–Budimpešta, samo su neki od objekata nastali od materijala proizvedenog u najstarijoj fabrici cementa na Balkanu.

Sečenjijev lančani most (mađ. Széchenyi Lánchíd, 1839), koji danas povezuje istočni i zapadni deo Budimpešte, predstavlja simbol ujedinjenja dva dunavska grada i ujedno obeležava početak eksploatacije i korišćenja beočinskog lapora. Gradnju mosta, započetu 1840. godine, inicirao je i finansirao mađarski političar i reformator, grof Istvan Sečenji, po kome most nosi ime. Impozantna građevina za tadašnje uslove, izgrađena je po nacrtu engleskog inženjera Tirnija Klarka Vilijama i njegovog kolege Adama Klarka, koji se smatra zaslužnim za "otkriće" beočinskog lapora.

Sa primenom beočinskog cementa na svetskom tržištu nastavilo se i kasnije. Naime, posle velike poplave Tise 1879. godine, **Segedin** je bio razrušen, te je za njegovu obnovu korišćen upravo cement iz Beočina. U tom periodu je dobijeno i svetsko priznanje na izložbi u Parizu, gde su dobijene zlatna i srebrna medalja za kvalitet. Takođe, neposredno nakon otkrića armiranog betona, devedesettih godina XIX veka, beočinski cement se našao i na tržištu SAD i Singapura (Popović, 1958: 19).



Hidroelektrana Đerdap / Hydropower Plant Đerdap

4 FACILITIES BUILT USING BEOČIN CEMENT

During its long history, the Beočin cement plant secured tens of millions of tons of cement used to construct numerous important constructions in our country and in the world. Hydropower Plant Đerdap, Avala Tower, Sava Centre, Beška bridge, Ada Bridge, Corridors 10 and 11, Pupin's Bridge, Wind Farm Čibuk, Rialway line BelgradeBudapest – these are just some of the constructions made using the material produced at the oldest cement plant in the Balkans.

Széchenyi Chain Bridge in Budapest (Hungarian *Széchenyi Lánchíd*, 1839), which now connects eastern and western part of Budapest, represents a symbol of unification of two cities on the Danube, and also marks the beginning of the exploitation and usage of the Beočin marlstone. The construction of the bridge, which began in 1840, was initiated and financed by Hungarian politician and reformer Count István Széchenyi, after whom the Bridge was later named. An imposing structure for that age, the bridge was constructed according to the design of English engineer William Tierney Clark and his deputy Adam Clark, who is credited with the “discovery” of the marlstone from Beočin.

After that, the application of the Beočin cement at the global market continued. After the great Tisza flood in 1879, **Szeged** was destroyed, and Beočin cement was used for its reconstruction. During this period, it also received world acclaim at the World Fair in Paris, where Beočin cement was awarded gold and silver medals for quality. Soon after the

Hidroelektrana Đerdap, jedan je od najvažnijih projekata XX veka na našim prostorima i ujedno je najveća hidrotehnička građevina na Dunavu. Za potrebe veoma zahtevnih radova na njenoj izgradnji proizvedena je specijalna vrsta cementa. Masivnost same brane uslovlila je primenu cementa koji bi prilikom betoniranja razvijao nisku toplotu i zadržavao povoljne čvrstoće. Stručnjaci beočinske fabrike preduzeli su obimne istraživačke radove u cilju dobijanja cementa traženih karakteristika i kvaliteta. Radovi na izgradnji hidroelektrane, u kojima je učestvovalo oko 5000 radnika, završeni su avgusta 1970. kada su u pogon pušteni prvi agregati.


Za izgradnju **Avalskog tornja** (1961-1965) korišćen je cement beočinske cementare, dok je za njegovu obnovu (2007-2009) fabrika proizvela posebnu, unapređenu vrstu cementa CEM I 42.5R; više od 1600 tona cementa je ugrađeno u toranj. Televizijski toranj na Avali pored simbolične ima i arhitekstonsku vrednost jer je jedan od retkih tornjeva koji nije direktno fundiran nego se oslanja na tri noge.

Most kod Beške izgrađen u okviru projekta Beograd- Novi Sad 1975. godine, podignut je od prednapregnutog betona. Posle više od tri decenije, paralelno sa ovim mostom beočinskim cementom je izgrađen most "blizanac", tj. novi most koji prati siluetu postojeće građevine. Novi most, složene konstrukcije, nalazi se na severnom kraku Koridora 10 i predstavlja jedan od najdužih mostova na Dunavu (2.205 m).

Most na Adi u Beogradu, specifičnog dizajna, sa visokim pilonom (200m) i kosim zategama, predstavlja jedno od najimpozantnijih građevinskih dostignuća u domenu mostogradnje. Otvoren je za saobraćaj 1. januara 2012. godine. Povezujući stari deo grada sa novim, odnosno opštine Čukaricu i Novi Beograd, predstavlja važan generator urbanog razvoja grada i šireg regiona.

Pupinov most
Pupin bridge





Avalski toranj
Avala Tower

Most na Adi
Ada Bridge



Most kod Beške
Beška Bridge

discovery of reinforced concrete, in the 1890s, Beočin cement also found its way to the USA and Singapore markets (Popović, 1958: 19).

The **Hydropower Plant Đerdap** was one of the most important projects in the 20th century in our country and also the largest hydro-technical facility on the Danube. A special type of cement was developed and manufactured for its construction. The massive dimensions of the dam called for the use of cement which would generate low heat in the cementing process and maintain optimum hardness. The experts of the Beočin plant carried out extensive research and development work in order to develop cement of the required technical characteristics and quality. The works that employed over 5,000 people were completed in 1970, when the first generators were put into operation.

Cement from Beočin cement plant was also used for the construction of the **Avala Tower** (1961–1965), while the Plant produced a special, improved type of cement, CEM I 42.5R, for its reconstruction (2007–2009). More than 1,600 tons of cement was built into the Tower. The TV Tower on Avala, apart from a symbolic, also has an architectural value, because it is one of the rare transmission towers that does not rest on a direct foundation, but stands on three legs.

The **Beška Bridge** was constructed in 1975, using pre-stressed concrete, as part of the Belgrade–Novi Sad highway project. After more than three decades, parallel to this bridge, another “twin” bridge, i.e. a new bridge that follows the silhouette of the existing one. The new bridge, with its complex structure, is located on the northern section of Corridor 10 and it represents one of the longest bridges on the Danube (2,205 m).

The **Ada Bridge** in Belgrade, of a striking design, with a 200 m-high pylon and slanting stay cables, represents one of the most impressive structural achievements in the field of bridge building of its time. Connecting the municipalities of Čukarica and Novi Beograd, it is an important generator of the urban development of the capital and its wider region.

5 LITERATURA REFERENCES

Bajec, M. i dr (1981), *Jugoslavija: 1941-1981*, Beograd: Eksport pres.

Beočinski dragulj – 170 godina Lafarge BFC (2009), Beočin: Fabrika cementa.

Bilić, J. (n.d.), *130 godina Beočinske fabrike cementa*, Beočin: Fabrika cementa.

Čalić, M.Ž. (2013), *Istorija Jugoslavije u 20. veku*, Beograd: Clio.

Gaćeša, N. (2008), *Istorija Fabrike cementa u Beočinu*, Novi Sad: Matica Srpska.

Drašković, S. (1963), Tendencija unapređenja stipendiranja u Beočinskoj fabrici cementa, *Beočinski Cement br. 3*, maj–jun, Novi Sad, str. 17–18.

Latifić, I. (1997), *Jugoslavija 1945-1990: razvoj privrede i društvenih delatnosti*, Beograd: Društvo za istinu o antifašističkoj narodnooslobodilačkoj borbi u Jugoslaviji (1941-1945).

Lebl, A. (1959), *Beočinska kaja*, Novinsko i izdavačko preduzeće “Progres”, Novi Sad.

Petranović, B. (1988), *Istorija Jugoslavije 1918-1988, treća knjiga*, Beograd: Nolit.

Popović, Đ (1958), Beočinska fabrika cementa i njeni problemi, *Privredna izgradnja br. 6-7, mesečnik ekonomista Vojvodine*, Novi Sad, str. 17–39.

Popović, Đ (1964), Proizvodnja nove vrste cementa za HE “Đerdap”, *Beočinski Cement br. 9*, septembar–oktobar, Novi Sad, str. 13

Terzić, N. (n.d.), *Beočinska fabrika cementa*, Sremska Mitrovica: Novinsko-izdavačka radna organizacija “Sremske novine”.