



## Duna-Dráva Cement Ltd. Corporate brochure











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#### **Duna-Dráva Cement Ltd.**

Duna-Dráva Cement Ltd., one of the market leader companies in the Hungarian building materials industry, operates 3 main business lines, such as cement, concrete and aggregates, and provides numerous services in concrete technology. Duna-Dráva Cement Ltd. has a producing capacity of 2,2 million tons per year, its annual consolidated revenue exceeded HUF 82 billion in 2020, and it employs more than 700 people.

DDC has two cement plants in Hungary: one in the town of Beremend (Southern Transdanubia), and the other in Vác (Northern part of Pest county). Offering technical counselling services, high quality products, modern environmentally friendly and innovative production technology, the company represents cutting-edge cement production standards in the Hungarian market. DDC is owned by two German companies: HeidelbergCement AG and SCHWENK Zement KG.

As a result of several years of proceedings, Readymix Hungária Ltd. merged into Duna-Dráva Cement Ltd. on the 1st of January 2019. The merger significantly increased - in fact doubled - the Company's concrete business line, and expanded its gravel mining and selling area with new mines as well. With the acquisition DDC, in addition to its key role earned in the cement manufacture market, further strengthened its position in the field of ready-mix concrete production. As a part of the process, the company has expanded its portfolio with a new business unit: paving stone manufacture.

'producing capacity of 2,2 million tons per year'







# How is cement produced from limestone?

Clinker is made by heating over 1450 °C a mixture of limestone and clay transported from the quarries. After leaving the rotary kiln clinker is grinded in the cement mill with steel balls. Some other ingredients are added to the mixture here: gypsum, hydraulic additional materials (for example soot and granulated slag). Final product is filled into bags or tankers.

'Clinker is made by heating over 1450 °C'

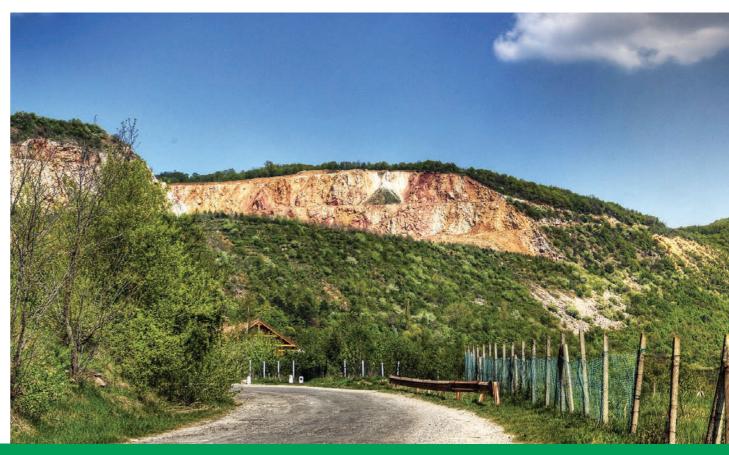
#### **Owners**

'production sites in around 60 countries on five continents' DDC is 50/50 percent owned by two building material industry companies based in Germany, HeidelbergCement AG and SCHWENK Zement KG.

HeidelbergCementAGisoneoftheworld's largest building materials companies, and it produces and sells mainly aggregates, cement and concrete. With the takeover of the Italian cement producer Italcementi, HeidelbergCement has now around 58,000 employees at more than 3,000 production sites in around 60 countries on five continents.

Established in 1847 and owned by a family, the activities and services of SCHWENK Zement KG cover several other building material industry sectors besides cement production.

The company operates several cement plants in Germany and has ready-mixed concrete business interests as well. SCHWENK Zement KG also has interests in Ohorongo Cement, which is Namibia's only cement-producing company.



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### Vác Plant

'Vác Plant has more than 50 and Beremend Plant has more than 100 years of cement manufacturing tradition' The plant in Vác was established as a green-field investment in 1963. The high-quality basic material used for production is the limestone of Naszály mountain, which originates from the Triassic period. Today Vác Plant is one of the most modern cement plants in Europe, having produced cement exceeding 36 million tons from more than 27 million tons of clinker in the past decades.

The traditionally high-quality clinker enables the production of a wide range of goods. Besides the high proportion of pure Portland cement types, heterogeneous or slag cement types, and the new type of composite-cement with aggregates added can meet a wide range of demands in the market.

The Vác Plant reached a new milestone in 2016 when we started a complex modernization process based on the maximum trust of the ownership structure. As a result we will be able to continue our producing activity with more modern conditions with the aim of protecting our environment.





## **Beremend Plant**

Beremend Plant has more than a hundred years of tradition. With one of the purest limestone in the country and the good quality of the clay available, conditions for cement production are ideal in this region. The cement industry first appeared here when Prince George Schaumburg-Lippe decided to set up a cement plant which started production already in 1910. The current Beremend Plant does not operate on the site of its predecessor founded a century ago. The new plant started the production in 1972 between Beremend and Nagyharsány.



By purchasing products labelled with these trademarks we create workplaces, and help the continuous development of the national economy at the same time. The right to use these trademarks also mean a guarantee for the customers that they can buy controlled, quality products. Since spring 2015 it is easy to discover the trademark logos on the redesigned bagged products, which help the customers to choose cement products created from Hungarian raw materials by Hungarian labour.

'these trademarks also mean a guarantee for the customers that they can buy controlled, quality products'

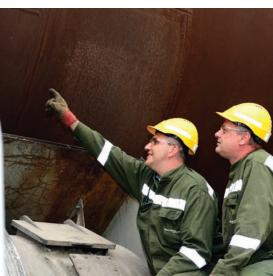
### Hungarian Cement – Let's Choose the National One!

'Products
labelled with
the Hungarian
Products
Trademark are
made from
100% Hungarian
raw materials'

DDC produces cement in Hungary, with Hungarian labour, from Hungarian raw materials. Due to these facts in the second half of 2014 seven of our products obtained the prestigious Hungarian Product Trademark, while four of our cement products obtained the National Product Trademark. All products of the Beremend Plant and four products of the Vác Plant are awarded by the Hungarian Product Trademark, while other four cement products which are only manufactured in Vác gained the National Product Trademark. Products labelled with the Hungarian Products Trademark are made from 100% Hungarian raw materials, the cement products labelled with the National Product Trademark are manufactured from domestic material in 96.8%.







#### Products of Duna-Dráva Cement Ltd.

Products	Vác Plant	Beremend Plant	
CEM I 52,5 N Portland Cement MSZ EN 197-1:2000	•		MAGYAR TERMÉK
CEM I 42,5 N Portland Cement MSZ EN 197-1:2000	•	•	MAGYAR TERMÉK
CEM II/A-S 42,5 N Portland Slag Cement MSZ EN 197-1:2000	•		HAZAI TERMÉK
CEM II/A-M (V-LL) 42,5 N Portland Compisite Cement MSZ EN 197-1:2000		•	MAGYAR TERMÉK
CEM I 32,5 N-LH Portland Cement MSZ EN 197-1:2000		•	MAGYAR TERMÉK
CEM II/B-S 42,5 N Portland Slag Cement MSZ EN 197-1:2000			HAZAI TERMÉK
CEM II/B-M (V-LL) 32,5 R Portland Compisite Cement MSZ EN 197-1:2000	•	•	MAGYAR TERMÉK
CEM II/B-M (V-LL) 32,5 N Portland Compisite Cement MSZ EN 197-1:2000	•	•	MAGYAR TERMÉK
CEM III/A 32,5 N-MSR Slag Cement MSZ 4737-1:2002 / MSZ EN 197-1:2000	•		HAZAI TERMÉK
CEM III/B 32,5 N-S Sulphate Resistant Slag Cement MSZ 4737-1:2002 / MSZ EN 197-1:2000	•		HAZAI TERMÉK
<b>CEM I 52,5 N-SR Portland Cement</b> MSZ 4737-1:2002 / MSZ EN 197-1:2000	•		MAGYAR TERMÉK

### **Aggregates Business Line**

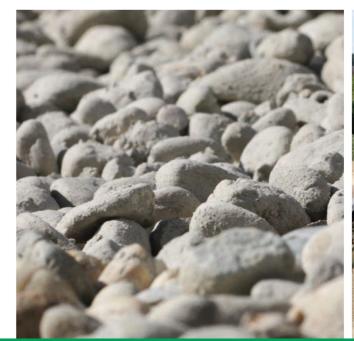
The Aggregates Business Line operates with the most modern machines and the best available technologies in the quarries and deposit stations. The secure background of DDC helps to grant the stable, good quality to our customers through our operation.

Our Aggregates Business Line currently operates four quarries and deposit stations in Hungary, from which we provide raw materials for concrete plants, asphalt plants, stone factories, road construction fillers and the general public.

Since 2002 we use a quality management system, which was implemented according to the ISO 9001:2000 international standard followed by the ISO 14001 environmental management system in 2011.

Both systems function as integral parts of the company management. The objective of these management systems is to continually secure and control our complete operation. Our primary goals are to satisfy customer quality needs in an economic way and to manage the use of natural resources in a sustainable way.

'our primary goal is to manage the use of natural resources in a sustainable way'





## **Concrete Business Line**

'produces
particular (for
example sulphate
resistant,
watertight
or abrasion
resistant
concrete)
and ordinary
products'

The Concrete Business Line of DDC, the unit which produces ready-mixed concrete, offers a wide variety of products with the highest quality and can serve its customers from almost any places of the country. In its concrete plants the business line produces particular (for example sulphate resistant, watertight or abrasion resistant concrete) and ordinary products as well with the best available controlling technologies applied. By favour of DDC the business line has a secure background and beside ready-mixed concrete production it has services such as concrete transport to construction sites and concrete pumping.

With our quality management system we are able to control our concrete production which extends to the ready-mixed concretes, to product development and to the field of sales. The MSZ EN ISO 9001:2015 system, certified by QUALI-CERT Ltd. is implemented by all the sites of the business line.

With the motive of being environmentally conscious and also to improve the system, we introduced the MSZ EN ISO 14001:2015 environmental management system in two of our concrete plants in 2011, and then in 2016 in all of our plants, and at the same time we certified our plants according to MSZ 28001:2008 (18001:2007) Occupational Health and Safety standard.

In cooperation with Beton Technológia Centrum Ltd. we continually monitor the process of production in our plants, which enables us to have a well-documented, internal control which corresponds to the technical directions. This continuous control of the production covers different mandatory processes such as sampling or quality tests, and helps us during the experimentation of new concrete recipes and the extension of our product portfolio.

'The ISO
9001:2015
system is
implemented
by all the sites
of the business
line'











#### Beton Technológia Centrum Ltd.

Beton Technologia Centrum Ltd. (BTC) offers a wide variety of services on the field of aggregate or concrete examination, and analysis for building materials companies and concrete plants. The company currently runs 3 accredited laboratories in Budapest, Dunaujvaros, and Debrecen.

The subsidiary company of DDC guarantees stable quality of DDC products with regular, prescribed samplings. In cooperation with DDC its accredited laboratories examine the attributes of cement directly in the concrete, and the experts are qualified to develop new concrete recipes optimized for special applications as well. BTC owns 12 lab cars, so it can carry out complete fresh concrete testing and sampling at any construction site in any construction site in the country.

# Special DDC cement product for a special project

The construction works of the radioactive waste storage facility near Bátaapáti will involve the building of four containers, with a total concrete demand of 12 000 m3. The construction of the container K-1 used DDC's CEM I 42,5 N and CEM III/A 32,5 N type cement products coming from the Beremend and Vác plants respectively. The cement demand of container K-2 will be fulfilled by DDC's new special cement, the concreting works started in late June 2016.

The implementation is carried out by the consortium of West Bau Hungária Ltd. and Mecsekérc Zrt. The CEM I 32,5 N-LH type product (which has especially small grinding fineness, and thus low calorification) made in the cement plant of Beremend was used to prepare C 30/37 and C 35/45 marked concretes with 355 and 370 kg/m3 cement dosage.

The unique concrete recipes were prepared at the Budapest University of Technology and Economics, Department Of Construction Materials And Technologies, with the leadership of Dr. Salem G. Nehme, associate professor. The quality control of fresh and hardened concretes during construction is executed by Beton Technológia Centrum Ltd., on behalf of Bátkontroll Ltd.



#### **Our references**

Duna-Dráva Cement Ltd. proved as supplier of several important infrastructural and communal developments that it can provide full range of concrete technology services in cooperation with the general contractor.

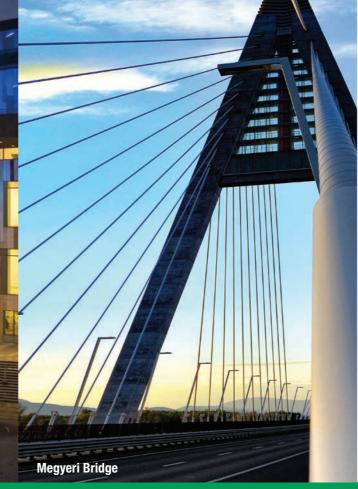
The company's wide range of activities involves cement manufacturing, consultation about adaptation technologies, production and delivery of ready-mixed concrete, ballast-digging, as well as the provision of a high-quality laboratory background. Constructions such as Palace of Arts in Budapest, the viaduct at Kőröshegy, the Megyeri bridge, the metro line 4 in Budapest, the M2 motorway, the OTP Headquarters, the HUNGEXPO Budapest, or the ELI-ALPS Laser Centre all mark the reliability, the consistently high quality of products and the flexible service provided by DDC.























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