



Industrial Footprint
Project

Specialized Meetings and Visits on

Energy Efficiency and Eco-Responsibility in

Sustainable Cement, Mining, and Associated Industries
October 24th-31st, 2019

Belgium, Germany, and the Netherlands



Summary of Technical Visits to Companies specialized in Sustainability and Eco-responsibility of the Cement and Associated Industries.

October 24th -31st, 2019

To accomplish the defined goals of Pezhvac Research and Innovation company, for familiarizing managers of private and governmental sector with the newest technologies and knowledge in the field of cement and associated industries, some technical visits to specialized companies in Belgium, Germany, and the Netherlands have been arranged during October 24th -31st, 2019.

In this business trip, a group of 20 Iranian top-executives and decision makers in cement and associated Industries has visited the below mentioned companies during the span mentioned above.



- European Cement Association (Cembureau)
- Port of Antwerp
- APPRO-TECHNO SPRL
- **♥** Verein Deutscher Zementwerke e.V. (VDZ)
- LOESCHE GmbH
- AUMUND GmbH
- Delft University of Technology
- In the following pages, you may find some detailed information of this technical visit:

Company	European Cement Association (Cembureau) EMBUREAU The European Cement Association	
Company's Location	Bruxelles, Belgium	
Appointment Location	CEMBUREAU Office	
Field of Activity	CEMBUREAU is the representative organization of the cement industry in Europe and its full members are the national cement industry associations and cement companies of the European Union (except for Malta and Slovakia) plus Norway, Switzerland and Turkey. The Association acts as spokesperson for the cement industry before the EU institutions and other public authorities, and communicates the industry's views on all issues and policy developments regarding technical, environmental, energy, employee health and safety and sustainability issues. In addition to the EU, permanent dialogue is maintained with other international organizations (e.g. OECD, IEA), the Cement Sustainability Initiative (CSI) and sister associations in other parts of the world.	





Discussion on Cement manufacturing process and eco-responsible cement production for decreasing the environmental impact.

Company	Port of Antwerp Antwerp	
Company's Location	Antwerp, Belgium	
Appointment Location	Port of Antwerp, Belgium	
Field of Activity	The Port of Antwerp is Europe's main steel port. The port's excellent accessibility, its state-of-the-art infrastructure, its many added value activities and the highly skilled workers ensure all steel cargo in Antwerp is handled reliably and carefully. With more than 220 breakbulk calls a month, a quick turnaround of goods is guaranteed, and the many specialized steel service centers in the port ensure tailor-made handling. In this port all steel products are handled with the greatest care using the most innovative technologies, perfectly packaged in accordance with international maritime standards. The steel service centers provide a range of added value activities, using the most modern (IT) technologies. Considerable investments are also made in the training of workers. They regularly follow courses in the handling of steel products. The London Metal Exchange (LME) has approved different service providers in the Port of Antwerp for the storage of, among others, zinc, aluminum, and lead. This approval means steel billets and non-ferrous metal, handled under the LME agreements, can be stored in Antwerp.	

Port of Antwerp as a Sustainable Port:

Port of Antwerp is a place of and for people and is planned to be the most sustainable port in Europe. Sustainable growth in harmony with society and the environment in which it operates. Its priorities are achieving a significant modal shift and the transition to a circular and low carbon economy. The Port Authority wants to set a good example and invest in energy-efficient buildings, its own fleet that emits less CO2, a sustainable mobility package tailored to our employees, a youth council to help think about our business, etc.









Company	Verein Deutscher Zementwerke e.V. (VDZ)		
Company's Location	Düsseldorf, Germany		
Appointment Location	VDZ Research Institute		
Field of Activity			









Meeting focus is the environmental challenges and relevant solutions for cement and other heavy industries including atmospheric emissions control and carbon capture in Germany and Europe, waste management and incineration, waste to energy plants, and WWT.

Company	LOESCHE GmbH	LOESCHE M	
Company's Location	Düsseldorf, Germany		
Appointment Location	LOESCHE headquarter		
Field of Activity	was founded in Berlin in operates from its head of subsidiaries, representatives at It was in 1928 that Loesche flow mills, which even to mills. Nowadays, Loesche was many plants used to dry-grigranulated slag, industrial mid Due to its grinding plants with for the cement industry and plants for hard and brown of the global market leader for grinding mills. It supplies individually planned and built This includes plants for transportation and deliver generators, filter and sautomation technology, plantabove and below ground, systems. The company has	th throughputs of 2 to 1000 t/h self-inert, central coal-grinding coal power stations, Loesche is for vertical mills and turnkey at turnkey plants, which are at for the required process steps. processing, material storage, cry, vertical mills, hot-gas reparator systems, complete as for all aspects of construction steel construction and piping EN ISO 9001 certification and res are compliant with national	





Loesche's areas of activities encompass cement, mining, and power industries.

Thus, its expertise and technologies particularly with respect to design and supply of new cement plant, cement and blast furnace slag, and more importantly energy-efficient grinding and reduced use of natural resources were focused upon.





Company	AUMUND GmbH	AUMUND
Company's Location	Rheinberg, Germany	
Appointment Location	AUMUND Meeting Venue and Manufacturing Sector	
Field of Activity	The manufacturing companies of its three principal brands, AUMUND Fördertechnik GmbH, Rheinberg/ Germany, SCHADE Lagertechnik GmbH, Gelsenkirchen/ Germany, and SAMSON Materials Handling Ltd., Ely/ UK, are joined by two service companies, AUMUND Group Field Service GmbH and AUMUND Logistic GmbH in Rheinberg to form the AUMUND Group. The AUMUND Group of companies operates globally in various industries. It is a specialist in the field of conveying and storage equipment for a wide range of bulk materials with different characteristics.	









The meeting and visit bases were innovative solutions for process optimization, modifications and plant conversions as well as solutions and facilities applicable to the industries of cement, metallurgy, power plants, mining & minerals, and ports & loading systems.

Company	Delft University of Technology	T UDelft
Company's Location	Delft, Netherlands	
Appointment Location	Delft University of Technology	
Field of Activity	TU Delft recognizes the imperative need to transition towards holistically sustainable systems, and this is underscored and omnipresent throughout research taking place within all the various faculties of the University. C2CA provides new green technology for distinct environmental benefits and increases environmental quality by reduction of CO2 emissions from cement factories and other heavy industries'. Correspondingly, the companies, industries, and organizations concerned with sustainability, environmental and innovation issues (SME) can gain tangible benefit from C2CA consulting services.	





Meeting was focused on the circularity of concrete as well as C2CA end-of-life concrete recycling technologies.



