

CUSTOMER TESTIMONIALS



▶ APPRECIATION FROM OUR CUSTOMERS & PARTNERS

At COBOD we conduct extensive research, development and collaboration with the globally leading academic institutions, material suppliers, and the most demanding customers in the industry. Constantly pushing the limits in terms of applications, size, speed, and automation by taking on new challenges, both in niches as well as in general construction.

We expand our competencies in architecture, design, engineering, and construction to be able to support our clients in executing state of the art automated and printed construction projects. We work on the basis of open source both for software

and materials and we welcome any chance we can to cooperate on making new solutions.

Our customers are found in Asia, the Middle East, Africa, Europe, Latin America, Canada, and the US. We understand that business is being done locally with large variations from country to country, and we respect the culture of each country we are dealing with. We are happy that our customers and partners appreciate the results and solutions we have achieved so far.



Henrik Lund-Nielsen
Founder & General Manager



GENERAL ELECTRIC BERGEN (NEW YORK) / USA



GE Renewable Energy is a \$15 billion business which combines one of the broadest portfolios in the renewable energy industry to provide end-to-end solutions for customers demanding reliable and affordable green power. COBOD 3D printed the first windmill tower base of 10m height for GE in 2019 it took 3 weeks. In 2020 a new tower base was 3D printed. The second time it took just 3 days.

“GE Renewable Energy has been collaborating with COBOD as part of a multi-year collaboration agreement regarding 3D printing of record tall concrete windmill towers for on-shore windfarms.

This project is extremely innovative and challenging, with many brand new solutions to be developed. The project has progressed very well, and we are positively surprised by the fast increase in productivity achieved by COBOD.

GE is used to being serviced well by its’ suppliers, but we have none the less been really impressed with the COBOD team, their exceptional innovative solutions, skills, service level and dedication.

Our project is far from complete yet, and we are expecting several new challenges as we progress, but with COBOD as our partner we feel confident, that we can overcome these and disrupt the entire way on-shore tall windmill towers are made.”



Matteo Bellucci

Advanced Manufacturing Leader



PERI is one of the global leaders within development, production and supply of formwork and scaffolding equipment. In 2020, with a BOD2 3D construction printer from COBOD, PERI not only 3D printed the first ever 3D printed building in Germany, a two story building in Nordrhein Westphalia, but also 3D printed the world's first on-site 3D printed three story commercial apartment building, in Bavaria with a BOD2 printer from COBOD.

"PERI met COBOD first time at the end of 2017. From the offset we were impressed by the technological skills and efforts to ensure continuous improvements, that the COBOD organization possesses. Our relationship developed further in 2018, when we decided to invest in the company and becoming a minority owner of COBOD."

Since then, we have purchased 3 printers from COBOD, and we have been delighted by the printers supplied as well as by the investment made. COBOD is a fantastic company and we are very pleased that we are the distribution partner of COBOD in the German speaking part of Europe and selected US states."

Dr. Fabian Meyer-Brötz

Dr. Fabian Meyer-Brötz
Head of 3D Construction Printing



HOLCIM

ZUG / SWITZERLAND



Holcim builds progress for people and the planet. As a global leader in innovative and sustainable building solutions, Holcim is enabling greener cities, smarter infrastructure, and improving living standards around the world. With sustainability at the core of its strategy, Holcim is becoming a net zero company, with its people and communities at the heart of its success.

In October 2022, Holcim announced its investment in COBOD to advance world-class 3D printing materials, robotics, and automation together. Holcim and COBOD have successfully collaborated on a range of innovative building projects, from 3D-printed wind-mill tower bases with GE to the world's first 3D-printed school in Malawi and Africa's largest 3D-printed affordable housing project in Kenya.



"Holcim has decided to invest in COBOD because we strongly believe that 3D concrete printing is the future. That will be a way to increase productivity in construction. It will be a way to optimize everything in the value chain."

Edelio Bermejo, Group Head of R&D

"In Holcim, we believe in industrial construction and digitalized construction, and we have seen, with COBOD, a partner which has a diverse and high-performance culture, which we believe is decisive to disrupt the construction industry in the future."

S. Wiedemann

Simon Wiedemann

Head of Solutions and Products



Evolving 3D printing construction through the development of new approaches that significantly reduces construction costs and time.

Utilizing an innovative admixture, CEMEX and COBOD developed a solution for 3D printing that enables the use of conventional concrete, allowing the consumption of local and readily available materials.

CEMEX is a global construction materials company that is building a better future through sustainable products and solutions. CEMEX is committed to achieving carbon neutrality through relentless innovation and industry-leading research and development.

“CEMEX & COBOD’s close collaboration, experience, and expertise have been vital to developing a novel material and machine solution and materials processing system for 3D concrete printing with universal, economically viable, and industrialized applications.”



Davide Zampini

Vice President Global R&D

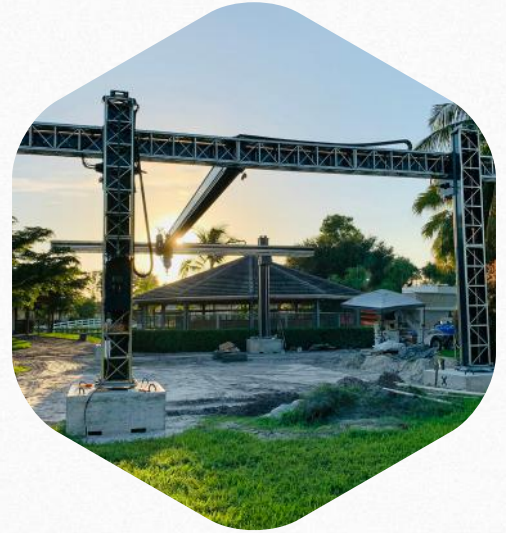


PRINTED FARMS

WELLINGTON / USA



Printed Farms Florida is on a mission to make 3D printing standard for use in small scale as well as large scale construction projects, in an effort to bring hurricane and flood resistant green buildings to Florida, the fastest growing State in USA. In the coming two years Printed Farms will focus on complementing the printers with other solutions to create an entire building system. Printed Farms especially believes in the potential for mass construction housing projects. As a first step on this journey, Printed Farms has completed its first project, an almost 700 sf building for agricultural tractors and equipment, and signed off by a structural engineer.



“When we last year decided to enter into the 3D construction printing business, we investigated the market for 3D construction printers thoroughly. On the basis of this, we decided that COBOD’s BOD2 3D construction printer was state of the art in the market and therefore would be the best for us. After we got the printer, we printed our first storage building and we very satisfied with the result and the printer that enabled it. COBOD’s technology turned out to be exactly as promising as we had hoped. Now we are actively taking the next steps to further promote the technology in the state to ensure that even more buildings in the future will be made using this revolutionizing technology of the future. We intent to order more printers from COBOD such that we can help solve Florida’s problems with insufficient and hurricane vulnerable housing.”

A handwritten signature in black ink, appearing to read "Fredrik Wannius".

Fredrik Wannius
Chief Executive Officer



14 TREES

LILONGWE / MALAWI



14Trees is a Lafarge Holcim and CDC Group joint venture dedicated to accelerating affordable housing in Africa. 14 Trees take construction innovations from the lab to the field, making green and affordable housing a reality for Africa. In 2020 14 Trees Ltd 3D printed the first two buildings in Africa, a demo house and a school, in Malawi with the help of a BOD2 printer from COBOD.

“We wanted to introduce the 3D construction printing technology in Africa to help execute projects much faster. When we decided to print the first two buildings on that continent, we ordered a 3D construction printer from COBOD. Obviously, we were expecting to have challenges and unexpected issues. And we did. But, not with the printer itself! The printer did what it was supposed to and got the job done fast.

In the process, also with the issues arisen outside COBOD’s control, COBOD was extraordinary in their efforts to ensure that the project became a success, which it did. Due to the success of the project, the interest from the market and the high level of support and service from COBOD, we are considering ordering more printers.”

Francois Perrot
Managing Director



KAMP C WESTERLO / BELGIUM

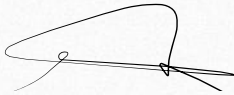
KAMP C
duurzaam bouwen

Kamp C is the center for sustainability and innovation for the Belgian Flanders region. Kamp C bought the first ever produced BOD2 printer from COBOD and got it delivered in January 2019.

In 2019, Kamp C 3D printed the first two story building in Europe, which was revealed in June 2020.

“Obviously with a complete new product line like the BOD2, you would expect the product to have certain child diseases. That was also the case with the BOD2 to a limited extent, but once we made COBOD aware of them, COBOD very quickly reacted and solved the issues to our full satisfaction.

The BOD2 printer has fully lived up to what COBOD promised it would, and it was more than instrumental in securing our success when we 3D printed our building, which not only was the first 3D printed building in Belgium, but also the first two story building in Europe. Since then we have been more than happy to promote this technology and the printer from COBOD towards the Belgium construction sector, which is in the process of adapting this technology of the future.”



Maarten Puls

Head of the Economy, Regional
policy and Europe department



POWER2BUILD

LUANDA / ANGOLA



Using 3D printing solutions to significantly reduce the housing shortage in Angola, and other countries in Africa, by providing solutions that allow to the building of affordable and high-quality housing in the region in a faster and more competitive way.

The last building was printed 4,5 times faster than the first one showing remarkable increase in productivity.

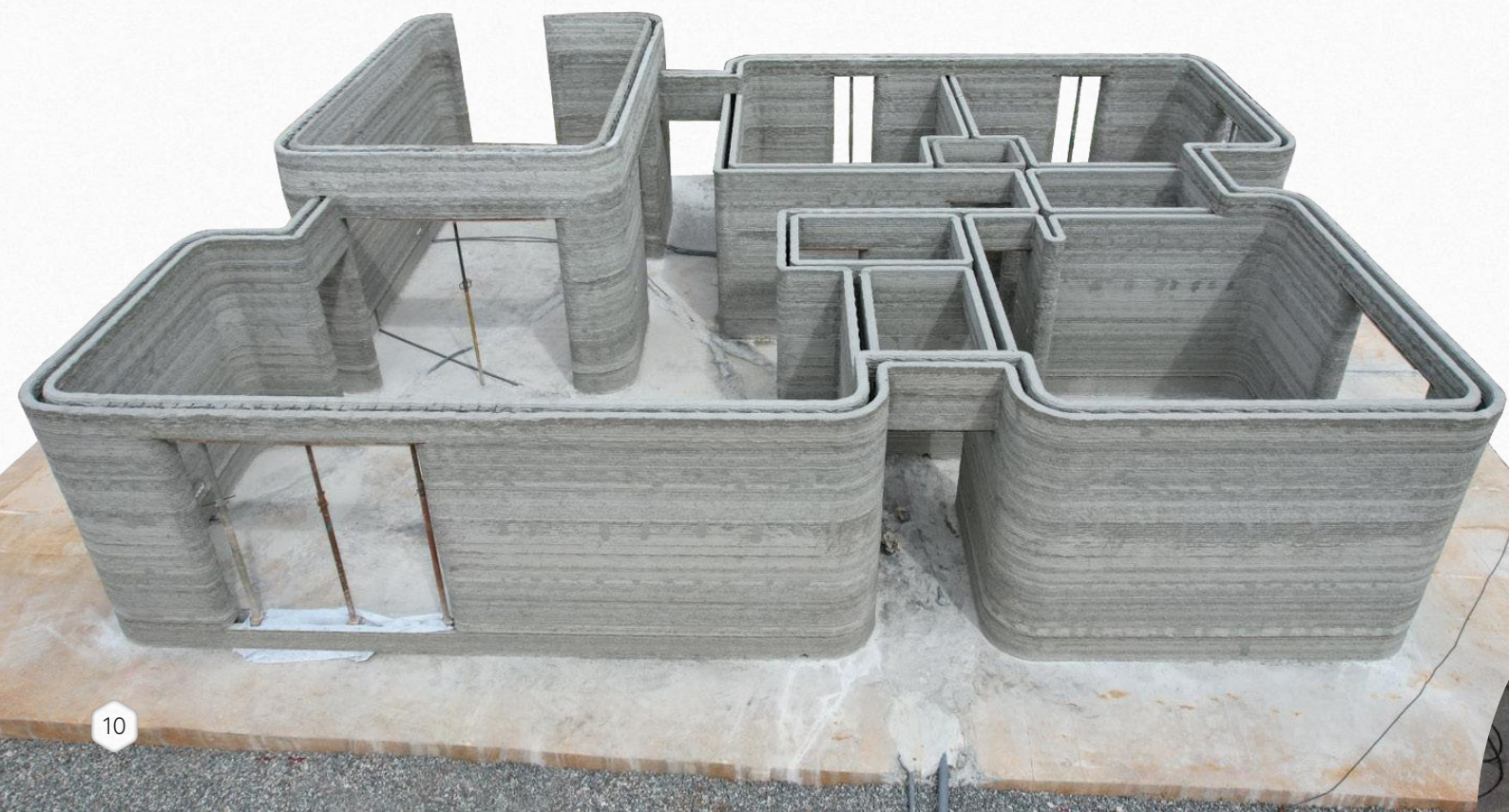
Power2Build printed Angola's first 3D printed building – a 53 m2 (570 sf.) house. This was an incredible milestone, but the 3D printed house served a bigger purpose. The project was the beginning of the concrete revolution, as the house was the world's first 3D printed concrete house.



Power2Build used the Dfab material solution, a ground-breaking concrete mix developed by COBOD and CEMEX, achieving cost savings of 90%. This was because 99% of the material was sourced locally, and only 1% was provided by COBOD. Power2Build was the first to print with this solution, pioneering the concrete revolution of 3DCP.

Ricardo Almeida

Founder & CEO



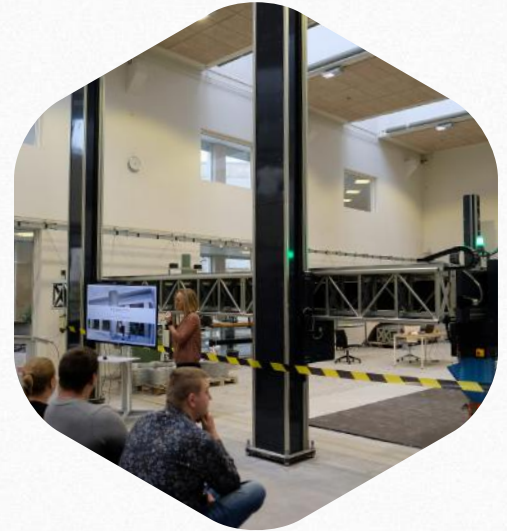
The Danish Technical University, also known as DTU, is recognized internationally as a leading university in the areas of the technical and the natural sciences, and is renowned for a business-oriented approach combined with a strong focus on sustainability.

In 2019, when DTU decided that the construction engineers of the future should master 3D construction printing as a significant technology in the future, DTU acquired the largest concrete printer in Northern Europe - a BOD2 from COBOD.

“Our study environment at DTU Ballerup Campus provides dedicated facilities for hands-on laboratory teaching, integrated projects with lecturers on development and prototyping, as well as development projects with SMEs. In the laboratories we explore and exploit, how digital technologies such as internet of things, 3D printing and robotics have the potential to increase productivity – also in the construction sector, and improve performance of the built environment.

Therefore, in October 2019 we were among the first educational institutions in Denmark to integrate a large scale 3D concrete printer in our labs. This was a BOD2 printer from COBOD. We chose COBOD as the supplier, as they were leading the development of providing large scale printers. Through working with the BOD2 printer our students gain first hand knowledge of additive technology and its potential and challenges for use and development by industry.”

Malene Kirstine Holst
Head of Department



Kuwait Institute for Training and Engineering Simulations ventures into 3D construction printing with COBOD.

COBOD is one of the leaders for introducing 3D robotics and automation in the field of construction and has successfully been able to lay down the foundation in different parts of the world.

We strongly believe that our onboarding with COBOD as representatives and partners would help us overcome the barriers and take the construction market to the next level with what we could offer together.

ABYAN was founded with the sole purpose of introducing and promoting advanced techniques and technologies to abridge the Gulf Cooperation Council with the state-of-the-art technology and fill in these scientific and technological gaps wherever, however possible.

Ahmad Al-Naseem
CEO, Co-Founder



SIAM CEMENT GROUP BANGKOK / THAILAND



SCG is the leader in the production of cement and construction in Southeast Asia. SCG is the region's exclusive distributor of 3D construction printers.

The plan is to print a community building in Bangsue, Thailand, Where Siam Cement Group's HQ is located. The building will be used as a flagship to show the world the might of 3D construction. Today's construction industry faces challenging trends in sustainability, recycling, and labor shortages, all impacting people's living quality.

The BOD2 has been helping reduce waste and decrease construction times with foolproof simulation with minimal numbers of laborers. With the help of SCG's 3D concrete printing solution, 3DCP performance is elevated by maximizing printers and materials' efficiency and resource usage.

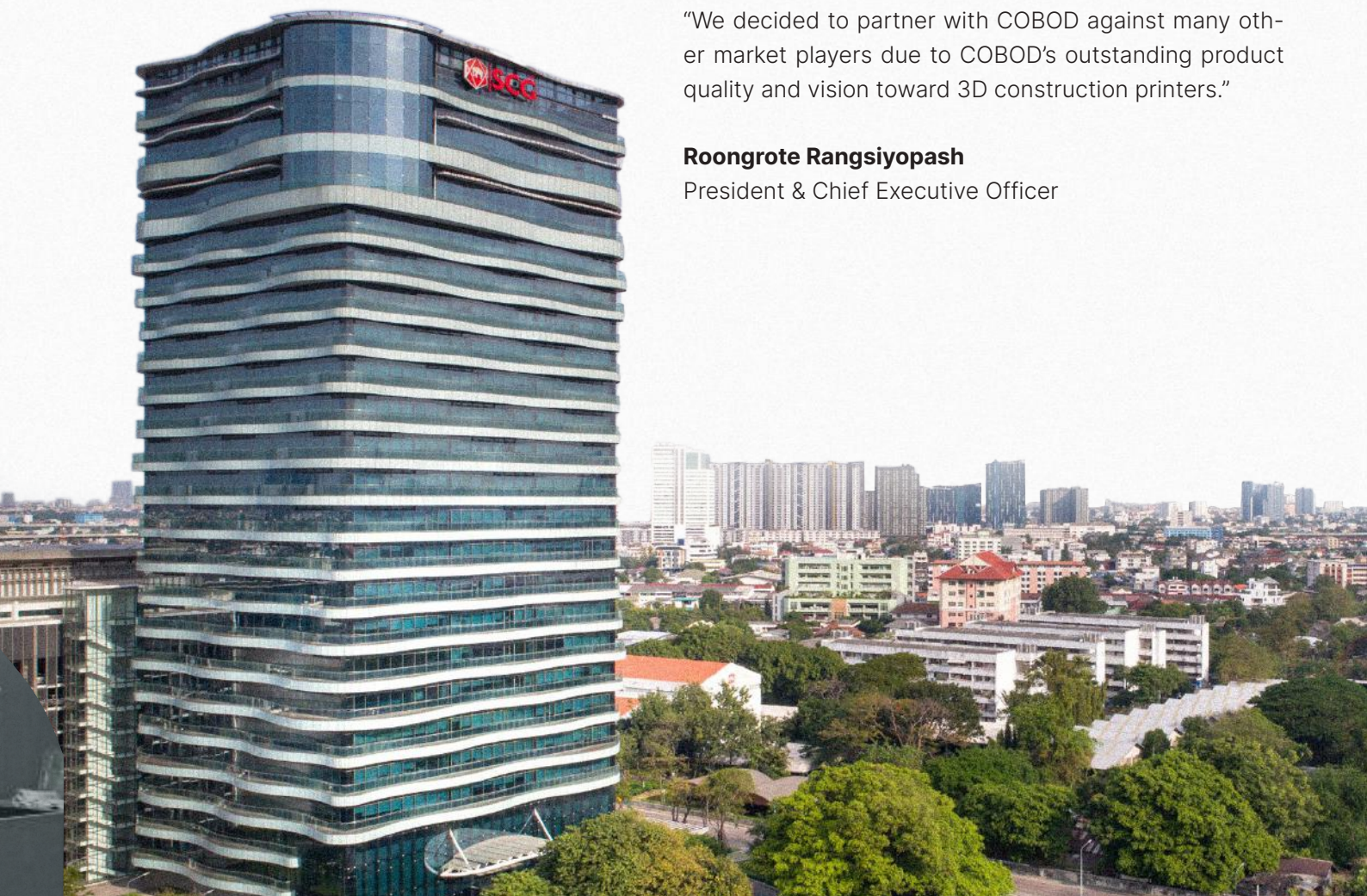
SCG International provides a full range of products and solutions from energy, building, construction, industrial supply, and business-to-business market. The company also offers added-value services and solutions to fulfill customer requirements with its worldwide network in 50 countries.



"We decided to partner with COBOD against many other market players due to COBOD's outstanding product quality and vision toward 3D construction printers."

Roongrote Rangsiyopash

President & Chief Executive Officer



DAR AL ARKAN RIYADH / SAUDI ARABIA

DAR
AL ARKAN
دار الأركان

Top Saudi real estate developer Dar Al Arkan partnered with COBOD in 2021 and announced its plans to use 3D Construction Printing technology for its projects in the Saudi Kingdom.

COBOD's technology will be applied to significantly cut construction time, reduce manual work labor, decrease wasted on the construction site, and ultimately, ensure lower costs and affordability for the customers.

Shams Ar Riyadh is a unique 'city-within-a-city' and the first of its kind in the Kingdom of Saudi Arabia. The project comprises of both commercial and residential spaces, incorporating world-class facilities for an affluent lifestyle. Dar Al Arkan aims to complete its first house using the BOD2 printer in the Shams Ar Riyadh project.



Wael Al Hagan
Project Manager



GUTECH

MUSCAT / OMAN



GUtech mission is to provide a diverse student body with the education required to become highly qualified and socially responsible graduates, guided by German excellence in science and technology and with a firm grounding in Oman's culture and heritage.

In December 2021, GUtech in Oman celebrated the completion of the 3D printing of the walls of the largest 3D printed building in the world made with real concrete.

The house consists of 190 m² (2,100 SF) and is typical for a social housing unit in Oman. It has 3 bedrooms, three bathrooms, a living room, kitchen, and guest reception area. The house was printed in two stages. While the materials recipe was adjusted and training of the Omani crew took place during the printing of the first part of the house.



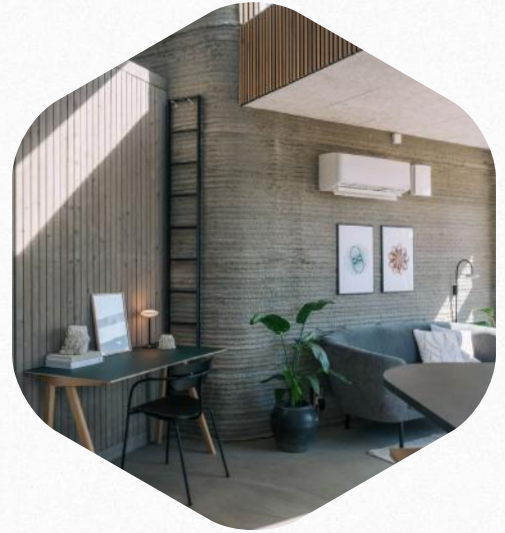
The world's largest 3D printed real concrete building was printed with the low-cost D.fab concrete solution developed in cooperation between CEMEX and COBOD. In the case of Oman, more than 99.5% of the materials used were local, with less than 0.5% coming from Europe in the form of the D.fab additives. In Oman, the cost of materials for 3D printing the walls of the 190 m² (2,100 SF) house was less than 1,600 euros. According to COBOD, if a printable dry mix mortar had been used, the cost of the materials would be more than 20,000 euros, and it was such significant cost reductions that COBOD and CEMEX were aiming for with their cooperation.

Mohammed ALMushaifri
Senior Network Engineer



As the first 3D-printing construction company in Denmark, 3DCP GROUP strives to implement state-of-the-art 3D construction printing technology firsthand.

The aim is to build better, faster, greener, and reduce strenuous work in the construction process. 3DCP Group is an association of engineers, building designers, architects and print experts. Behind us, we have more than 100 years of combined experience from the conventional construction industry. In 2021 we printed our prototype using the CEMEX D.fab solution as one of the first-ever to do so. The project is our vision of future student housing and is a 40 sqm tiny house.



3D printing removes many of the limitations that one experiences today in conventional construction. For the printer, it is as easy to make a square wall as a curved one or a corrugated one. In other words, it is not limited by the traditional box geometry that conventional building methods are in bricks, concrete elements, or slabs. We believe 3D-print has a significant spot in the future of construction, and we are happy and proud to be part of it and to be partnered up with COBOD. There is no doubt that COBOD is the industry leader in the 3DCP industry, which, along with their strategic location, is why we put our trust in COBOD to be our partner now and in the future.

Mikkel Brich
Founder & CEO



HTL TECH

DUBLIN / IRELAND

HTL

TECH

The strategic partners and the exclusive distributors of COBOD International's 3D Construction Printing Technology in Ireland and the UK.

HTL is currently in the advanced stage of a social housing scheme and community facility for a non-profit organization. 3DCP is a very welcome and credible modern construction method. HTL believes that applying this industrialized technology in the construction industry will help facilitate the rapid delivery of high-quality, affordable, and sustainable housing reliably and consistently.

The HTL operational team focuses on developing and delivering 3DCP to facilitate more affordable, efficient, reliable, and sustainable construction processes. These objectives are addressed through developing regulatory compliant 3DCP applications and direct delivery of live projects.

"We researched extensively and can honestly say that there is no comparable company in the market for delivering 3DCP equipment. We have found COBOD to be extremely honest, reliable, and always willing to go the extra mile. We are proud to work with such a company."

Justin Kinsella
BSc Arch B Arch



CEMENTOS PROGRESO

GUATEMALA / GUATEMALA



For more than a century, Cementos Progreso has been committed to the production and marketing of cement, concrete, lime, and other building materials and solutions in Guatemala.

The company has been recognized for its high-quality standards and innovative approach. In 2021, CEMPRO decided to move a step further into 3D concrete printing and became COBOD's first Latin American partner. The collaboration is a major milestone that paves the way for the application of new building technology in the region.

Cementos Progreso's Research and Development team has been working tirelessly for over three years to research, develop and implement a 3D printable cementitious material.

They are leading the way on the application of 3D printing construction in Guatemala, aiming to contribute to the reduction of the huge housing deficit in the country. Manuel Ovalle, industrial designer: "We are surprised about the possibilities that additive manufacturing opens. With this technology we can build new things and transform the reality in which we live".

"We find in COBOD the necessary support on the technical side, but also regarding the printing material, and we feel confident that the equipment is robustly manufactured. We could watch with our own eyes the buildings that have been printed with this technology. That gives us the certainty that we have an important ally in implementing this technology in our country".



Plinio E. Herrera Rodas
Manager Concrete R&D

FORTEX MELBOURNE / AUSTRALIA

As Australia's exclusive COBOD distributor, Fortex aims to lead the conversation and democratize 3D construction in the Australian market.

This means improving outcomes for both operators and the end consumer by providing products that challenge the modulus operandi to improve construction efficiency and sustainability.

At Fortex we know that 3D printing and automation plays a big role in the solution, and we want to make this world-class technology accessible to all.

"Fortex is proud to be laying the foundation for a new construction paradigm in Australia with COBOD 3D construction printers. The first printer in Australia will be the BOD2 model 5-9-2 which will allow us to build better homes faster, providing improved outcomes for both building companies and consumers alike."



David Lederer

David Lederer

Chief Executive Officer



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