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Articles



ROBOTICS

2020 may be the year where robotics makes a bigger impact in the construction industry. Somewhat linked to the impact of 3D printing above, robotics is also seeing impressive infiltration into the industry.

In fact, one report by the World Economic Forum predicted that 2020 could be the year of the robot in the construction industry.



From robotic bricklayers to laying roads, robots are increasingly finding their place amongst the workforce on construction sites. This is interesting as traditionally the construction industry has seen very little automation, relying largely on manual labor.

By adding robots to the workforce, construction companies are seeing improved construction times and improved quality of builds. Robots are also being used to help demolish buildings too.

While currently slower than human demolition crews, they are far safer and cheaper for bringing down concrete structures at the end of its life cycle. Robots are also being developed to help with certain building maintenance like window cleaning.

- P.N. Unnath Kumar
178T1A0149

SUSTAINABILITY

Several decades now, building regulations have been placing more and more burden on building design to reduce their environmental impact and sustainability. This is a trend that will only become more strict heading into 2020 and beyond.



Optimized energy efficiency and a drive for low to zero carbon emissions have driven innovation in building construction and service design for years. In response, new, better thermal performance materials are being developed that promise to make the buildings of the future incredibly well insulated for a fraction of the cost of current solutions.

One example from a few years ago was the development of a concrete roof that can generate and store energy. Innovations like this should make buildings of the future cheaper to live in and reduce their impact on the environment.

Reducing waste or recycling old materials is another area where sustainability is helping drive innovation in the construction industry. For example, last year one architecture firm announced its plans for a new method of recycling construction waste into ton new reusable building materials.



- D. Naresh Varma
178T1A0113

World's Largest Crane Set to Begin Work on its First Project

Late 2018 year, crane manufacturer, Sarens, announced that their brand new – and enormous – crane, was ready to be sent off to its first job. After several months of prep, the Sarens SGC-250 has finally made it onto its intended jobsite and is ready to lift.



The SGC-250 stands an astonishing 820 feet at its tallest point, has a maximum lift capacity of 5500 US tons and a swing radius of over 900 feet. The behemoth will be a key component in the construction of the Hinkley Point C nuclear power station in South West England.

Nicknamed “Big Carl” after the father of Sarens company, Carl Sarens, the crane is expected to lift over 600 pre-fabricated panels over 4 years of construction, according to the company.

After being completed in Belgium, the crane was then broken up into 280 modules, according to the Construction Enquirer, and shipped to a nearby dock. It took a total of 10 weeks and at least 5 other cranes to safely rig the crane after it reached the site.

Big Carl's first lift is expected to be in mid-September and one of the project's significant lifts is scheduled in Spring of 2020.

You can check the crane on site in the link given below:

<https://youtu.be/pFIU4S6iuJY>

-Viswendra Uppala
198T5A0135

Modular and Prefabricated Construction

Modular and prefabricated solutions are nothing new to the construction industry. For example, the end of the Second World War saw something of a 'Cambrian Explosion' in prefab design in war-torn cities across the UK.

While it has fallen out of favor over the last few decades, prefabs have been making something of a comeback in recent years. The promise of faster on-site assembly and higher quality, standardized builds are seen by some as the solution to tackle perceived housing crises around the world.

"Advances in high-tech design and construction mean increasing numbers of components can be manufactured off-site. That means buildings can go up more quickly and quietly, with fewer materials wasted – an enticing prospect given London's housing crisis.

To accommodate modular house-building, developers are building their own factories, and architects are getting ever more ambitious in their designs. Here are five of our favorite London modular housing designs." - The Spaces.



B Niharika



NSS

SERVICE TO THE NATION



The Indian Red Cross Society (IRCS), Andhra Pradesh has attempted and achieved Guinness World Record for the “**Most People to Sign Up To Donate Blood in 8 Hours**” on 14/02/2020 at Fr. Devayya Memorial Auditorium in Andhra Loyola College, Vijayawada from 11.00AM to 07.00PM.

The program is presided by Honorable Governor of AP and President of IRCS AP Manyashri Biswabhusan Harichan to promote awareness on the importance of donating blood voluntarily. About 500 students from the institution has taken part in this event by signing their consent to donate blood. The students found motivation to donate blood through this program and helped achieve the World Record. Students and the Institution were appreciated for participating through certificates for the selfless contribution.



The managing committee of Sri Ramalingeswara Swamy Devasthanam, Yanamalakuduru celebrated Mahashivarathri Festival on 21/02/2020, for which a large number of pilgrims turned up. About 30 NSS Volunteers from our college has taken part in the smooth conduct of the festival. The volunteers are involved with distribution of food and water, maintaining the que lines and also helped in traffic control in the temple premises. The temple management has appreciated the selfless service of the volunteers to the pilgrims.



FAREWELL DAY CELEBRATIONS

Civil Engineering department III year students organized Farewell party “NEVER SAY GOODBYE” on 13th March 2020 in the civil seminar hall where students of III-year bid farewell to the outgoing students of IV year with great enthusiasm and off course nostalgia.

