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Introducing AutoCAD 2018

The CAD technology is consistently updating its features to offer you supreme quality designs. The technology will help you to develop aerodynamic bikes, high-speed railways, or energy efficient building. The technology is adding value to the designed products improving the designer's day to day efficiency. The year 2018 has brought about a lot of features in AutoCAD and AutoCAD LT technology. These added features will help designers to create and share precise drawings using the innovative productivity tools. This tool will also save a lot of time and minimize frustration making things simpler. Below are some of the enhanced features the 2018 version will bring about.

PDF Import Enhancements

The PDF import features, as indicated by the design professionals will help them save a lot of money. The AutoCAD 2018 let you use the SHX text recognition tool to quickly convert the imported PDF geometry to text and Mtext objects. The improved text and Mtext tools, in turn, lets you convert a combination of single and multi-line text objects into a single multi-line text object automatically predicting the formatting.



Object Selection

The AutoCAD 2018 lets you begin with a selection window in one part of your drawing.

You can then pan the zoom to another part while maintaining a selection of the off-screen objects.

External Reference Path Enhancements

The broken reference issue is resolved in the enhanced AutoCAD 2018 version. The new version helps to reduce this issue by saving time and minimizing the frustration. The new integrated tools help you to easily replace the paths of one or more missing references with a new path.



High Resolution (4K) Monitor Support

The 2018 version is enhanced to support high-resolution monitors to ensure the best possible viewing experience. The enhancement will make it possible to view objects and figures on a 4K display or higher versions. To make this possible, the new AutoCAD 2018 has a possibly scaled up user surface elements such as the Start tab, Palettes, Command line, Toolbars, Dialogue boxes, ViewCube, Grips and Pick pxx. These elements are appropriately scaled and displayed as per the Windows settings.

The AutoCAD 2018 has some promising features to help you develop your designs in the way never imagined before. The new version brings a new set of capabilities to improve the graphics and performance while ensuring the Trusted DWG technology you always have been relying upon. The DWG format is updated to improve the efficiency of open and save operations.

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New Techniques in Civil Engineering



Civil Engineering is evolving every day with the changing technology. Civil Engineers are now using innovations such as suspension systems to build bridges and using the GPS to plot new roads. As the technology brings new techniques, the civil engineering field continues to incorporate creative ways. Here, are four new techniques that are likely to change the construction process:

1) Self-Healing Concrete

Cracks in the concrete is a common phenomenon. The cracks impair the durability of the concrete as they provide an easy path for the liquid and gas containing harmful substances to enter. To avoid this situation, researchers at the Bath University are working on a self-healing concrete that will contain micro-organisms inside microcapsules. According to the researchers, these micro-organisms will release limestone as water enters these splits to prevent the materials from breakage.

2) Warm Bridging

Insulation material has become prominent in the construction industry. For this, Nasa developed material, Aerogel for cryogenic insulation. This material is considered as one of the most effective thermal insulation material. The technology is used to insulate studs, which can reportedly increase the overall wall R-value which is an industry measure of thermal resistance by more than 40 percent.

3) Active Footfall

Researchers are now working out ways that can produce energy from footsteps. The technology used is known as Pavegen Floors. These are rubber tiles that have a spring-like action that generates energy when stepped on. This is a brilliant concept to harness the human energy power. The Pavegen tiles can benefit the most when installed in busy city areas to generate energy.

4) Photovoltaic Glazing

Building structures that have the Building incorporated photovoltaic (BIPV) coating that is capable of producing their own power. The technology transforms the entire building envelope into a sun-powered board. An organization, known as Polysolar is providing photovoltaic glasses as the building materials. These Photovoltaic Glasses also do not cost much over the customary glass.

Apart from these, other technologies are also set to change the civil engineering practices such as Kinetic Roads, Cloud Collaboration, and Asset Mapping.

SAUDI ARABIA BESTOWS CITIZENSHIP ON A ROBOT NAMED SOPHIA

Saudi Arabia recently grabbed the news about making a non-human woman a citizen. It makes Saudi the first country that granted a robot, the rights that are equal to a citizen. The most evident thing that caused the buzz was how the country would treat these rights when it was infamous for denying even the basic rights to its woman.

Hanson Robotics, the company that developed the robot named Sophia and stated that it is one of the most beautiful and celebrated robots the world will ever see. Despite the innovation in technology, the country is still criticized for the gender laws that denies woman even from driving.

In an event, Sophia addressed the questions from behind the podium and responded to the disbelief in the following way:

□ Sofia said, she intends to use artificial intelligence to help humans live a better life and make world a better place.

□ When prompted by her creator David Hanson, she responded to human insecurities and said that she would not destroy them.

It is still a concern that how Sophia's citizenship will be treated in the court. Being treated as a woman, it is also uncertain about how her rights will affect the government policies of one of the most oppressive countries on the planet.



MARINA BAY SANDS Unique Design An Engineering Marvel



The Marina Bay Sands in Singapore is one of the most eye-catching buildings in Asia. The building is identified and looked upon for its unique design- a set of three towers that supports a ship like structure. The amazing structure is designed by the architect Moshe Safdie who was inspired by a deck of cards.

This amazing building was completed in the year 2010. The Marina Bay Sands (MBS) hotel has a total of 2,500 rooms. The most distinctive feature of the building is not its size, or shape of the three towers, or even the 2.5-acre park developed at its top, but its three infinity pools located on the 57th storey.

Hotels located at top destinations are very well

aware of the fact that having multiple pools is one of the prominent factors that draws people. Infinity pools have become the top fashion statement for luxury hotels these days. These pools have a sheet of water constantly flowing over the edge creating a no-edge illusion. This needs a perfectly leveled wall on which the water flows as a thin unbroken sheet. For this, the engineers had to take care of a lot of things.

The MBS Construction Story

➤ Most of the hotels install the pools on or close to the ground to support the weight of the water, but the MBS wanted it to be different.



- The engineers were well aware of the possibility that the three pillars might sink to disturb the perfect balance for the pools.
- To attain the perfect balance, the firm called Specialist from Nature Corp. These were the pool manufacturers from Indiana.
- The company used a set of hydraulic jacks to level the pools to maintain balance even if the towers moved from their place.

On completion of the project, the MBS became one of the most popular buildings in the world. Its design and construction have made it one of the most expensive buildings in the world.

Common Engineering Obstacles and How to Overcome Them

The engineering professionals tackles the most pressing issues in the market. They constantly bring new solutions while working under the tight deadlines. Three of the most common obstacles that the engineering professionals faces with the actionable tips to overcome them are mentioned below.

a) Staying Updated

As an engineer, it is important to stay updated on the recent trends. Not following the trends

can make an engineer fall behind. Thus, it best to read daily updates related to technology.

b) Lack of Creativity

Engineering requires the professionals to be creative all the time. Sometimes, when professionals are too occupied with the deadlines, they might miss the creativity. For this, it is best to spare some time out of the schedule. A workout away from the work area can be beneficial.

c) Boosting Productivity

Working on tight deadlines sometimes needs the professionals to sit in one position for long hours which might cause stress and body pains. To avoid such situations, it is best recommended to take stretch breaks regularly.

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