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Shaping Tomorrow's Built Environment Today

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ARTICLES FOR NEWSLETTER MARCH 2018.

Upcoming Future Trends in the HVAC Industry.

So, what trends are going to be shaping the future of the HVAC industry in the coming years? We're going to go through some of these trends in the following article. So, settle down and get ready to learn some more about this ever-changing industry.

1. The Environment

You can think of the environment as one of those factors that influences absolutely every industry out there. And the HVAC industry is no exception to that rule. The environmental changes our world is undergoing today is going to have huge implications on the HVAC industry in the short and long term. When it comes to the new technologies that will impact the HVAC industry, these are going to be energy efficient and will save tons of energy based on climate change policies set out by governments. That means that energy will be on the minds of every single HVAC manufacturer out there when they are coming out with new models.

2. User-Friendly Controls

When it comes to the HVAC industry, the future is also smart and easy-to-control. Homeowners don't just want to have an HVAC running in their homes on its own. They want to be able to control it with smart thermostats and a host of other technologies. Homeowners want an easy-to-control system that will learn from their everyday use and

5. Variable Refrigerant Flow Systems

These types of systems are absolutely going to be the future of HVAC systems. VRF systems (as they are known) use an outside condensing coil that's connected to fan coil units in the home or building. Every part of this system is able to be controlled individually, allowing for tons of energy saving whenever you need it. This is going to keep the HVAC industry on their toes as this technology begins to spread around the world.

WHAT'S NEW IN HVAC CHILLER TECHNOLOGY.

HVAC Chiller product design is reaching new federal mandates for Energy efficiency. These regulations have changed the way manufacturers service their products as well as their design.

York's YMC2 Centrifugal Magnetic Drive Chiller

Water Chilers are the strength behind HVAC cooling systems. Chilled water is distributed to coils in air conditioning systems. Then, the water is re-circulated back to the chiller where it is cooled again. The cooling coils transfer heat to the chilled water from the air, which cools and typically dehumidifies the air stream.

New designs have brought about more efficient models that have more precise load or capacity control. Trane now supplies a line of chiller products including air-cooled, water-cooled and compressor chillers. These include the Trane SintesisTM air-

take over for them whenever necessary.

This also includes the burgeoning use of our smartphones to control our thermostats back at home. Technology has come so far that homeowners can control every aspect of their home from a click of a button on their smartphone and HVACs are definitely no exception to that rule.

3. DEVap Air Conditioning

Next up, we have a trend that's going to have a huge effect on the amount of air conditioning we use. The development of the DEVap air conditioning unit (desiccant-enhanced evaporative air conditioning unit) is said to reduce the energy usage of HVACs by 40 to 90 percent. Right now, most of this technology is only used for commercial purposes, but as we have seen in the past, this technology will quickly make its way into our homes, saving us tons on our energy bills.

4. Zero Energy Buildings

Many companies are now looking at building zero energy buildings. This means these buildings are going to create energy for the communities around them, rather than consume large amounts of energy to power their lights and electronics. For example, some of this power is going to be created by geothermal heating, solar powered systems, and white roofing. This is going to have a lot of impacts on the usage of HVAC systems and how companies start using more systems that are super energy efficient.

cooled chiller and the Trane StealthTM air-cooled helical rotary chillers.

As a part of the Ingersoll Rand EcoWiseTM portfolio of products, Sintesis chillers are an example of this innovation. They leverage largely efficient system operation and low global warming potential (GWP) to use a smaller amount of energy in order to keep your building cool and keep greenhouse gas (GHG) emissions minimal. The Sintesis chillers use changeable speed technology on condenser fans, full and part-time units, and the compressor—all within a compact size that takes up very little space.

The ClimaCool Corp. also supplies air and water-cooled modular chillers. These can withstand cooling, heat recovery, and even cooling and heating at the same time for simultaneous cooling and heating applications. These products allow for a significant amount of energy savings in part by using heat exchangers that are more efficient as well as other compressor technology advancements.

Some companies, like Johnson Controls Inc., have more than just smaller scale chillers and even have 6,000-ton water-cooled centrifugal chillers.

Trailblazer® Air Cooled Scroll Chiller

The new-generation Pathfinder® and Trailblazer® air-cooled chillers from Daikin Applied are the solution for school administrators, facility managers, business owners and industrial operations managers in search of quiet operation and low maintenance. For any small inside area with a limited water supply, these chillers are the perfect solution.

CHAPTER EVENTS.

1.Twenty Eight students from St. Josephs Engineering college inducted into Chennai students chapter

2. Dr.saravanan Recognised at hall of fame for being Jury.

3. Low Temparature Refrigeration Technology programe at IIT , Chennai. (Photos)