Journey to Innovation

By Ashish Chaturvedy, Marketing Manager, DUCAB, a subsidiary of SENAAT, one of the UAE's largest industrial investment holding companies, serving as a Co-Host Sponsors for World Energy Congress.

By its nature, the cable industry has little room to innovate with specifications and standards that are applied globally. It's rare to find a utility company, that wants to request an entirely new specification from what's currently available in the market, especially when it comes to electrical solutions. Trust is placed in tried, tested and certified cables that have proven reliability over years, even decades. This leaves little wiggle-room for changing designs and specifications, but, as Ducab has proven several times over, that doesn't mean it isn't possible to innovate. We've learnt to be innovative with by looking at new industries for opportunities to meet their needs. The clean energy sector is an ideal example of this.

The best place for the energy cable industry to develop modern solutions is to try other sectors, such as clean (including nuclear), renewable energy and smart city applications. Markets such as power and transmission have a large number of players, intense competition, and ever-diminishing margins. When you want to be seen as an innovator, you need to approach the market in a new way. This is why our strategic plan over the next 10-15 years is to invest in new technology, backward integration, and continued expansion into new sectors.

Our NuBICC cables are the ideal example of exploring new avenues. When the UAE announced its intentions to develop nuclear energy, we considered it to be our duty to develop a line of cables that would enable the project to use 'Made in the UAE' cables in its construction and consequent delivery of power to communities.

NuBICC was developed based on market need, and drawing on 40 years of our cable-making experience. New build nuclear power plants require 60++ years of operating life, safe and reliable cables to generate the cleanest and most efficient form of electrical energy. We needed to combine this necessity with our existing expertise – resulting in the creation of the world's first certified 60++ year sustainable halogen free Non Class 1E nuclear grade cables. The Ducab NuBICC range was designed with an extended operating life, with High, Medium and Low Voltage cables that can perform 24x7, 365 days of the year, and that are dependable during emergency situations. They are suitable for the harshest environments and can withstand heat and humidity such as we experience in the Middle East, and they have successfully passed various standards tests, including Long Term Thermal aging, exposure to radiation, and IEEE 1202 Vertical Tray Flame Test.

As a result of expertise and innovation, we were able to create a custom range of cables for the UAE's fledgling nuclear industry, enabling the use of locally-made products and thereby reducing import fees while channelling revenues into the nation's industrial sector.

This isn't the first time we've developed cables to meet the needs of specific sectors, and it won't be the last – but it just goes to show that even in an industry such as ours, in which there is little room for change, innovation can still happen.