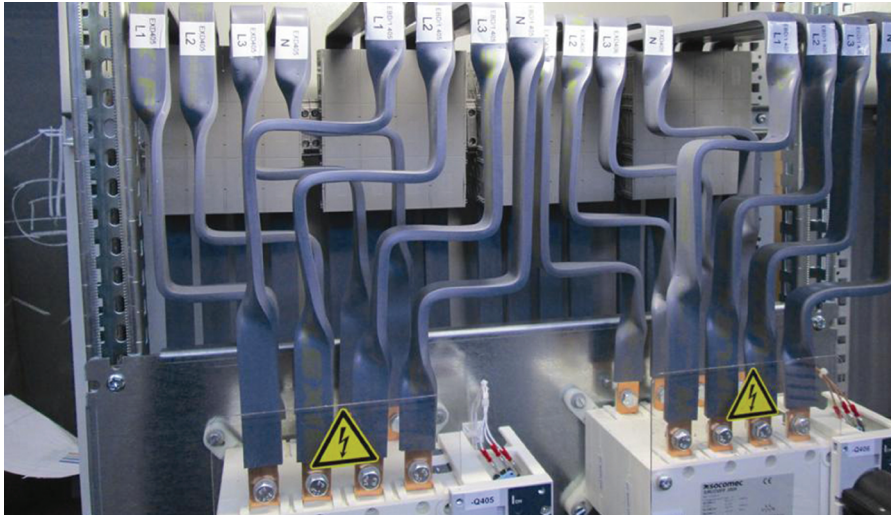


White Paper On The Benefits Of The New Insulation

NVENT ERIFLEX FLEXIBAR ADVANCED



Some photographs in the Flexibar Advanced section may actually be using Flexibar

FLEXIBAR ADVANCED UNIQUE - SAFER - FLEXIBLE

In February 2003, a tragic fire in the Daegu Metropolitan Subway in Daegu, South Korea involving two trains at the Jungangno Station resulted in the death of 192 people and the injury of 151 more. After investigations, it was determined that the fire produced highly toxic fumes and heavy black smoke that suffocated victims and prevented firefighters from making a quick rescue. Toxic smoke is the highest concern in enclosed spaces where means of escape by persons are limited; next to: such as tunnels, car parks, and commercial centers.

Due to concerns about the toxicity of components used in electrical applications, the industry has been seeking solutions that would help mitigate this danger in the future. As a result, the nVent ERIFLEX team developed a new insulation on its flexible busbar that reduces the quantity of toxic smoke, the emission of corrosive fumes and the opacity of smoke in the case of a fire.

The main challenge faced by the nVent ERIFLEX team was to design a new insulation material that addressed the low smoke, halogen-free and flame retardant material concerns without compromising the power conduction and the superior flexibility and quality of Flexibar. A solution with this unique combination would improve the reliability of the electrical installation while expanding safety for equipment and people.

After extensive research, nVent ERIFLEX is proud to establish a new gold standard in terms of insulation for flexible busbar called **Flexibar Advanced**. The new product is **low smoke**, **halogen-free** and **flame retardant** all while maintaining the level of flexibility and reliability that our partners have come to expect from flexibar.

What are the advantages of low smoke feature?

Compared to standard PVC insulation, Flexibar Advanced doesn't generate corrosive gases and produces a relatively **low smoke** opacity in accordance with EN-ISO5659-2. The low smoke characteristic improves the visibility conditions for people to be able to easily locate the emergency exit and also allows rescue workers to assess an emergency situation more clearly.

Flexibar Advanced means greater safety for individuals, less damage for your electrical equipment and less environmental impact.





What does halogen-free mean?

The halogen-free feature enables a reduction in the quantity of toxic smoke. Flexibar Advanced does not contain any halogens (according to IEC 60754-1), minimizing toxicity and making it the ideal product for use in enclosed spaces such as data centers, rail and other spaces where people are welcome such as hospitals and schools. This also facilitates the use of Flexibar Advanced in specific applications such as submarines, switchboards and other enclosed environments that require a low emissions solution.

What are the benefits for flame retardant?

In addition to its Halogen-Free feature, Flexibar Advanced is also compliant with the UL 94-V0 testing standard. **The flame retardant** portion of the test illustrates the self-extinguishing feature and reducing the risk of the spread of fire and less damage to your electrical installation.

About nVent Electrical:

nVent Electrical is a global leader of systems and solutions that safeguard industrial controls, electrical components, communications hardware, electronic devices, pipelines, processes and buildings. Its premier brands CADDY, ERICO, ERIFLEX, HOFFMAN, LENTON, RAYCHEM, SCHROFF, and TRACER provide a comprehensive range of standard, modified and custom engineered solutions for energy, industrial, infrastructure, commercial, communications, medical, security and defense applications.

nVent ERIFLEX brand offers engineered solutions for low-voltage power and grounding connections for industrial and commercial enclosures, automotive, transportation, machinery, oil and gas, chemical, defense, aerospace, and food and beverage applications. For further information please visit :

<https://www.erico.com/eriflex.asp>

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Our powerful portfolio of brands:

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