WIRE AND CABLE MAKER PROFITABLY PENETRATES NEW MARKET WITH POLYONE SOLUTION

CASE STUDY: ECCOH™ FIRE RETARDANT AND LOW SMOKE SOLUTIONS
THE CHALLENGE

Highly loaded electrical cables are typically the culprits behind fires in most subway and metro rail systems. Adopting flame-retardant materials for cable insulation and jacketing has become the most effective way to reduce the frequency of fires and control their spread in these rail systems. Metro rail represented a new market for this manufacturer, and it turned to PolyOne for material solutions that would help it compete effectively while enabling its new cables to meet fire safety standards.

Solutions must meet China’s stringent railway safety requirements:
- IEC 332-1, the testing standard adopted by China’s railway industry for single insulated cables under fire conditions;
- EN 50305 ITC for smoke, gas and toxicity performance;
- DIN 5510-2, a preventive fire protection testing standard for railway vehicles that is widely applied in European countries.

THE SOLUTION

ECCOHTM 5549/1 LSFOH (low smoke and fume, zero halogen) was recommended by PolyOne sales and technical professionals after reviewing customer cable design and requirements. The PolyOne team also led in-house testing and reviewed results with the manufacturer’s production, technical and business development teams. Testing showed that ECCOHTM 5549/1 provided the best balance of performance and safety for cable jacketing, and achieved the IEC standard for railway cables in China.

THE IMPACT

Utilizing this material helped the manufacturer secure its first three metro projects. Soon after, the company was able to win additional metro projects for new districts in China as well as in Europe. According to the manufacturer’s team, PolyOne technical support was essential in helping to win these projects.

- Competitive advantage – As a reliable supplier with industry knowledge and specialty formulation expertise, PolyOne enabled the manufacturer to win market share by responding quickly with a solution that meets the stringent requirements of this application.
- Increased profitability – The manufacturer was able to expand into a new market using the PolyOne solution, and these new projects contributed over $4 million to their total revenue over a two-year period.
- Accelerated speed to market – With support from its North America and Asia teams, PolyOne worked closely with the manufacturer throughout the project, from material selection, cable production, and in-house performance testing to final approvals. This dedicated local PolyOne support removed several months from the manufacturer’s product development process, thus decreasing its time to market.

To learn more about ECCOHTM solutions, contact PolyOne at +86 (0) 21 6028 4888 or visit www.polyone.com.

PolyOne offers specialized solutions that are targeted at helping wire and cable customers meet performance and sustainability goals, improve manufacturing efficiency and maximize value in every way possible.