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Complete Composite Systems (CCS)



Trackside cable troughing is made easy thanks to the flexible ARCOSYSTEM®.

Installing cable troughing alongside a railway line is often made more challenging due to an obstacle-laden route or inconvenient trackside access. However, with ARCOSYSTEM® — Complete Composite Systems’s versatile elevated cable management product — any installation job runs much smoother.

Manufactured from pultruded fibre-reinforced polymers (FRP), the lightweight composite troughing allows for height and directional adjustments to be made with ease when running it along complex routes.

Designed to be adaptable so it can be successfully installed in a variety of challenging settings and circumstances, ARCOSYSTEM® can be post-mounted, wall-hung or attached to an assortment of lineside structures such as bridges

or even roadside barriers.

Secured by bespoke laser-cut steel bracketry, ARCOSYSTEM® can also span six metres between supports, allowing for swift and cost-effective installation compared to ground-based alternatives.

Navigating Bridges? No Problem!

ARCOSYSTEM® was recently chosen to be the cable management

system for a batch of tricky jobs running across a number of bridges around the city of Darmstadt, near Frankfurt in Germany.

The cluster of projects presented several practical installation issues to solve, including having to mount the cable troughing atop a long run of ballast boards and designing a ‘river jump’ of more than ten metres. As can be seen in the images, the adjustable ARCOSYSTEM® proved it can be successfully attached to different styles of bridges in a diverse range of locations.

Another project required cable troughing to be fitted across a towering viaduct in the German ski resort of Willingen-Upland. With no room to lay down concrete and a limited working area for operatives along the bridge, our specialist narrower elevated version of ARCOSYSTEM® was the ideal solution for a space-constricted job in a soaring setting.

Innovative Solution

In a further example, the dexterity of ARCOSYSTEM® was put to the test during a recent project in the German town of Gössnitz.

The job required the installation of a lengthy run of ARCOSYSTEM® trackside. Gössnitz, located 40 miles south of Leipzig, is at the junction of three railway lines and is known for having one of the longest platforms in the country at 608 metres. Gaining convenient trackside access for the job was extremely difficult, and after thorough planning it was decided that the best strategy would be to fasten the cable troughing to a line of balustrades





serving as roadside barriers as the route led to the railway station in town. The images of the job show just how adaptable ARCOSYSTEM® can be, and how the bespoke range of brackets can secure the troughing to a variety of surfaces.

Robust and Secure

Being constructed from durable materials, ARCOSYSTEM® is resistant to water, fire, corrosion, UV rays and a wide range of chemicals, offering long-term reliability in all weathers. Its constant working temperature range of -40°C to +80°C allows it to withstand intense heat or extreme freeze-thaw cycles.

Electrically insulating, the twin-walled design of the troughing enables the system to resist lateral forces from embankment subsidence, high snow loads and wind effects from high-speed trains.

ARCOSYSTEM® carries cable loads of up to 90kg/m. With four different trough sizes available, it safely contains the likes of power, signal and high-voltage cables, with a new shallower cell — branded SizeZERO® — specially designed to protect thin fibreoptic data cables, helping to boost trackside digital communications.

Contact the **experienced technical experts** at Complete Composite Systems, the product's exclusive UK distributor, for enquiries and advice on how ARCOSYSTEM® can safely contain the cabling for your rail application:



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The exclusive UK stockist of TECHNO-CRETE® is Scott Parnell:



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ARCOSYSTEM® is manufactured by CCS's Swiss partners, **Castioni Kabelführungssysteme GmbH**



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