

ArcelorMittal Fibres

Reinforced concrete solutions



## One of the largest hydroelectric projects developed in Europe in the last 25 years

In the north of Portugal, almost halfway between Porto and Ourense, the Tâmega River hydropower complex is being developed on the Tâmega River, by Spanish power company Iberdrola Generación.

Three dams and three hydroelectric plants are being constructed and are one of the largest constructions of this type in Europe in the last 25 years with a total investment cost of €1.5 billion.

The Tâmega River hydroelectric complex will comprise of three dams named Gouvães, Daivões and Alto Tâmega, and will have a combined power of 1,158 megawatts (MW). Once fully operational, Iberdrola estimate a total of 1,766 gigawatt hours (GWh) of electricity will be produced each year; the equivalent of 440,000 Portuguese household's consumption. This supply of clean energy will avoid emissions into the atmosphere of approx. 1.2m tonnes of CO<sub>2</sub> and reduce consumption of oil by 160,000 tonnes.

Over 500t of our high performance steel fibres have been supplied to this project. Our HE55/35 and FE60/36 fibres have been used for reinforcing the underground galleries through shotcreting methods, and to construct a robust encasement to protect and cover the steel pipes used to transfer the water.

The construction of the three new dams and hydroelectric plants is developing at a good pace and in line with the timetable set out at the beginning of the project. With two thirds of the work already completed, the complex should be fully complete in 2023 - nine years after initial construction began.