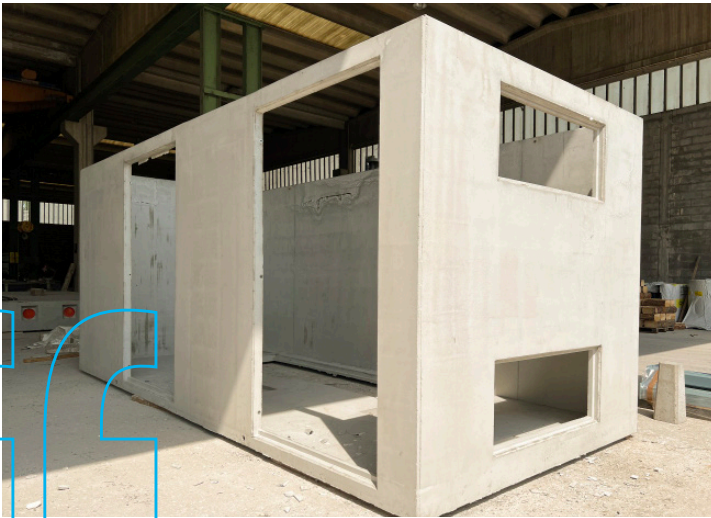


Electric Cabins



An electric cabinet is a specialized precast concrete element designed to house and protect electrical equipment and infrastructure. They provide a secure enclosure for various electrical components such as control panels, switches, and wiring. Steel fiber reinforcement enhances the durability and strength of these cabinets, making them resilient against external forces and environmental factors, thus extending their service life and reliability.

The challenge

Electric cabinet precasters were facing three specific challenges. Firstly, prefabricated concrete electric cabinets are traditionally reinforced with rebar and steel mesh. Both of these reinforcement materials lead to congestion and reduce the available space inside the cabinet. Secondly, the use of rebar and mesh is extremely labor-intensive and time-consuming. In a highly competitive market, precasters were keen to increase productivity and reduce labor costs. Thirdly, they wanted to enhance their sustainability credentials by cutting CO2 emissions of their manufacturing processes.

The solution

Precasters are increasingly recognizing the benefits of integrating steel fiber technology into their precast elements. The demand for enhanced durability, longevity, and structural integrity in electric cabinets has surged. Our Dramix® steel fiber reinforcement solutions have been used for decades for electrical cabinets. After running a number of trials, it became apparent that Dramix® was able to totally replace the steel mesh and most of the rebar traditionally used to reinforce their electrical cabinets.

Our electric cabinet precast customers have made around 15% labor savings and cut 20% off the time needed to make an electrical cabinet. Moreover, each cabinet is now made with 18% fewer CO2 emissions. This is because steel fiber reduces the amount of concrete and steel used per cabinet, and also makes it lighter and easier to transport.

[construction.bekaert.com/precast](https://www.construction.bekaert.com/precast)

Project Specifications

Project type: Precast electric cabinets
Application: Electrical substations and cabinets