

CO² MINERALIZATION TECHNOLOGY



overview

CarbonCure is a winner of the NRG COSIA Carbon XPRIZE for their breakthrough technology of CO² conversion into valuable concrete products. CarbonCure's carbon dioxide (CO²) utilization technology combines captured CO² into concrete manufacturing thereby reducing the carbon footprint of the process. Once injected, the CO² undergoes a mineralization process and becomes permanently embedded, resulting in economic and climate benefits for concrete producers.



project scope

NeuronicWorks was tasked in designing and developing a fully functional, assembled and tested system for controlling the concrete manufacturing process.



Our team's contribution ranged from Firmware design to Industrial and Mechanical Design, offering pre-certification support for the entire system. We completed a review and update of the existing hardware, and we utilized a bare metal approach for firmware development, ensuring the system was set up for OTA updates and communication with cloud backend for a seamless operation.



CO₂ reduction equipment for industrial manufacturing.

