



Case Study:

Alternative Energy

400 kW Fuel Cell Enclosure



A world leading producer of fuel cells for on-site power, transportation, aerospace and defense applications chose PEKO to develop and manufacture their 400 kW fuel cell enclosure. The enclosure design required special attention to detail, as it had to meet strict requirements due to environmental conditions (i.e., withstanding 120 mph winds, a snow load of 2.9 kPa, extreme hot, extreme cold, rain, humidity).

PEKO's engineers were able to meet precise and challenging strength and dimensional specifications. With an in-house engineering team well versed in cost control, many iterations of **finite element analysis** of the doors, panels, roof sections, stiffeners and frames were applied to optimize strength vs. cost and weight. With the aid of PEKO's in-house machining, sheet metal and assembly capabilities, the customer was at ease knowing PEKO had enormous presence in the enclosure's **top-to-bottom manufacture**. PEKO provided a "one stop shop" environment for the customer to accomplish cost and functional goals for their critical product needs.

