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- Engineering
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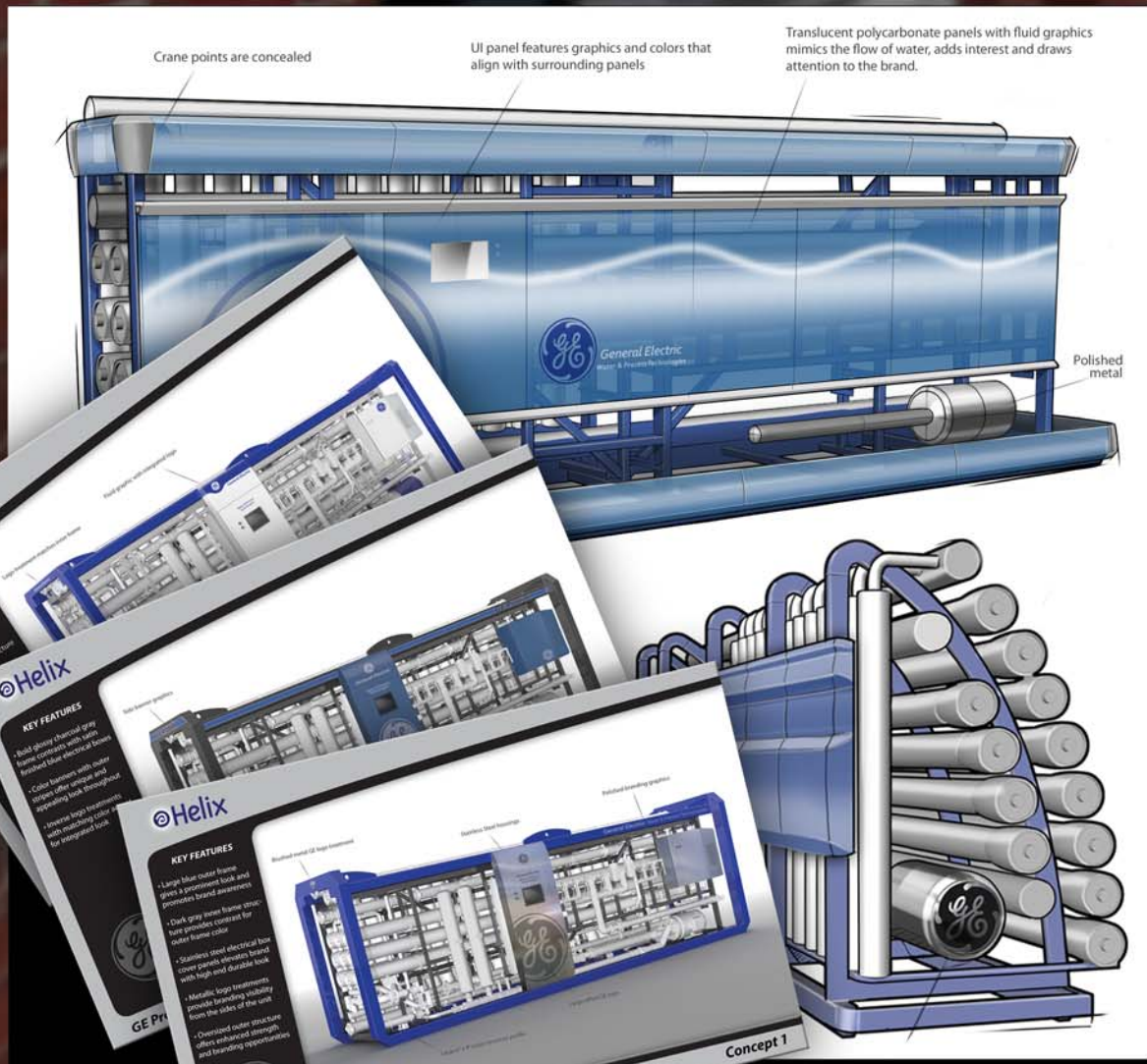
Generating a next generation platform look and feel in the industrial space...



For more than 125 years, GE has been celebrated for its performance and imaginative spirit. Looking to differentiate itself in the increasingly competitive industrial water treatment space, GE's Water & Process Technologies business hired Helix Design to generate a new visual identity for their next generation Municipal Reverse Osmosis/ Nanofiltration (MUNI) System that would tie together all of the business unit's related skid-based products. While Helix has developed a number of products for industrial applications, the scale of the GE devices and the heavily-constrained material & process requirements made this challenging project particularly appealing to our team.

GE's Water & Process Technologies unit had grown over time through acquisition, and filtration systems were factory assembled at three different North American locations using long-established welded box frame fabrication techniques. One of the key constraints of the project was for the Helix Design team to generate concepts that aligned with these tried-and-true manufacturing methods. Before our concept generation efforts began, we sent Helix team members to tour a Water & Process Technologies manufacturing facility to gain a better understanding of how devices were put together and to appreciate the scale of the tractor trailer-sized machines. Once our team felt comfortable with the constraints and challenges of the project, we began to generate computer sketches of concepts in terms of appearance, aesthetic vs. cost considerations, access to hardware for service/repair, color, and material selections.

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...using full-scale mock-ups to reduce risk and confirm final design intent...

Mock-up materials and finishes used to mimic final design intent...

At the midpoint of our concept generation efforts we presented a range of MUNI System concepts to GE that ranged from conservative to paradigm-shifting. After careful consideration, GE chose a design direction that they felt best met the project goals while still projecting a unique GE look and feel that would be recognizable from a distance (or across a municipal water treatment facility, for example). Helix then incorporated their feedback into a final series of refinements that included a number of options for further differentiating their systems from competitors. As originally conceived, Helix's efforts were to culminate in the release of final concepts presented in 11" x 17" tabloid-sized photorealistic renderings.

Nonetheless, given the high cost of fabricating an initial MUNI System prototype for review by GE, Helix proposed confirming and validating the chosen design direction by mocking-up a full-scale device. As a risk-reduction tool, a mock-up would also raise internal awareness of the new product development direction at GE in a much more direct way. Happily, GE development staff members were just as enthusiastic about reducing risk as we were, and we sent two designers to Minnesota to build a MUNI System mock-up over a three day period.

...and creating a tool kit of design elements for future platform evolution.

Production MUNI System

Using the framework of a recently-finished MUNI System as a base, Helix designers constructed a new frame and HMI box out of foam core sheets scored, cut, and glued-up to mimic box frame members. Once constructed, the foam core members were painted with GE production paint while the foam core HMI box dressing was covered with faux metal finish vinyl labels. Final graphical elements were then applied to painted frame members to complete the illusion. Production of the first unit was completed later in the year.

Helix Design has a passionate team of seasoned industrial designers and mechanical engineers who develop products for a wide variety of markets, industries, and applications. We offer full-service product development services and excel at injecting profits, peace of mind, and competitive advantage into your product development process.

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