Pressure Forming Precision: Formed Solutions and KYDEX® Thermoplastics Set Avasure Telesitter® Apart

Artificial intelligence and advanced technology are entering the medical market at unprecedented rates.

While some may be wary of how much we allow technology to have a hand in our medical care, many agree this is a step forward. The influx of medical AI technologies allows providers to keep up with fully occupied hospital rooms and patients who may be at a higher risk of injury.

With rotating shifts, daily room changes, and high standards of care, using technology as another set of eyes ensures patients' safety. Avasure's Telesitter® Solution is a virtual patient engagement platform able to continuously see, hear, and even talk to patients without recording video or sound.

Avasure's Telesitter® Solution is rapidly changing the way healthcare can test, monitor, and care for those in need.

With a reported 50% reduction of composite fall rates, additional uses in mental health care, and easing loneliness for patients in isolation, the Telesitter® is remodeling the caregiver-patient experience.

"The Telesitter® is the ideal technology for a nurse or technician who continuously monitor patients and was created for high-risk patients who may be disoriented or could fall. The technicians can talk to the patient through the Telesitter® and send in medical staff to help during an emergency, and patients can also use it like a call button to call for help if needed," said Brandon Reddick, Senior Product Developer at Avasure.

Formed Solutions' pressure-formed KYDEX® Thermoplastics to create the snap-fit, durable parts necessary for Avasure's Telesitter®, which is often eye-level with patients and caregivers in highly traversed hospital areas.

While the first version of the Telesitter brought innovation to patient care, Avasure wanted the second-generation Telesitter® to be more lightweight with increased mobility and softer aesthetics.

"An all-metal machine felt unapproachable to patients. We wanted to include a human quality in the product, which drove the material selection, shape of the body, and color scheme for the Telesitter®," said Reddick.

Enter Formed Solutions' Vice President of Sales, Cam Streidl. Streidl knew his company's pressure forming abilities could bring a less industrial, warmer look to the Telesitter. Because pressure forming has excellent fit and finish capabilities, similar to injection molding but with a more affordable tooling cost, Avasure was interested in working with Formed Solutions.

The sleek Telesitter® is a warmer way to introduce patients to the world of advanced technology and artificial intelligence.

Formed Solutions' expertise in pressure forming was ideal for the project, which had at least 12 parts that had to meet critical dimensional control and texture requirements. Ensuring that the material and parts worked together in a way that provided the Telesitter® with durability and a high level of precision detailing and aesthetics was something Formed Solutions was confident they could achieve. Their experience with utilizing multiple types of thermoplastics and forming processes also made them an expert in specifying the right material for the project.

The medical system had to resist damage from other machines and people, move easily, and withstand harsh cleaning supplies. Formed Solutions knew injection molded materials become brittle after repeated chemical exposure, so any material using PC/ ABS was out. PVC-based KYDEX® Thermoplastics were in, not only because of their high chemical resistance, but also because of their durability and design freedom with thermoforming.

"When you want to achieve beautiful formed-in detail, and crisp, varying textures, pressure forming with KYDEX® Thermoplastics really makes a part pop. The contrasting texture capabilities and parts that snap-fit together through pressure forming are what set KYDEX® Thermoplastics and Avasure's Telesitter® apart," said Streidl.

Avasure's Telesitter® is an AI enhancement that allows healthcare professionals to care for patients efficiently and effectively. With the benefits of KYDEX® Thermoplastics and the pressure forming expertise of Formed Solutions, providers can be assured the Telesitter® is ready for the challenge.