USE STUDY

Wound Care

Genesis Helps OEM Bring Negative Pressure Wound Therapy Device to Market

The client's partnership with Genesis Plastics Welding facilitated a collaboration that fostered outside-the-box ideas relative to product materials and development. This enhanced end product functionality and also expedited prototyping and production to get an innovative wound therapy solution to the global market.

THE CLIENT

A U.S.-based developer and manufacturer of negative pressure wound therapy systems and other medical technologies.

THE CHALLENGE

The OEM was in the early prototyping stage of a negative pressure wound device and working with physicians in the field to test and tweak their initial design. The primary device goals included user comfort, clear identification and instruction to allow for quick and clear placement by a nurse or doctor, and ease of use while providing optimal wound healing conditions for the user. In order to achieve that, they knew their design needed work.

They wanted a specific component but they did not know how to achieve the functionality. They also needed the device to have pliability and ease of drape over the body and wound area, with good adhesion to the skin. In order for the OEM to bring their unique product to market, they needed help in addressing design and document challenges that inhibited their progress.

THE SOLUTION

The OEM reached out to Genesis Plastics Welding, whose team of engineers dove immediately in asking the right questions to clearly define the necessary specifications. Genesis provided expertise in materials sourcing by identifying material options and connecting the OEM with raw component vendors. This helped them to achieve the specifications while keeping a close eye on the desired price point.

Genesis also provided design solutions, such as enlarging the device's center hole to create a better vacuum seal. Rigidity of the device's components was crucial in determining how quickly and easily the device could drape. Genesis additionally used their extensive machining and tooling knowledge to design thermoform tooling that provided a solution composed of materials other than foam. This gave the part more solid structure with less risk of resulting foam particulates that could decrease device efficacy.

THE RESULTS

The Bill of Material (BOM) was also reduced, making production more cost effective. After two rounds of brisk prototyping and slight device modifications along with outside sterilization, the OEM was able to go to market with their proprietary negative pressure wound therapy device and sales continue to climb for the company. Due to our successful collaboration and initial production runs, Genesis is currently working on a new opportunity to once again help the OEM with another proprietary wound therapy device.

MORE INFORMATION

Have a wound care device in development? Call us at 317.485.7887 or email us through our website today to see how we can help: www.genesisplasticswelding.com.

Genesis Plastics Welding is an ISO 13485 certified contract manufacturer providing radio frequency (RF) welding and heat sealing applications of plastic products for various industries. Visit www.genesisplasticswelding.com for more information.

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