

## OASIS – The Bench

Oasis takes its inspiration from the fantastic shapes created in the sand on a windy day. It is as much a captivating sculpture as an inviting functional seat. Its multi-sided design makes it a natural centerpiece and meeting point for both social interaction and quiet contemplation. Oasis adds a human and playful touch to any environment through its familiar, organic and inviting shape. Perfect for interior or exterior placement in corporate, healthcare, hospitality, retail and educational spaces, Oasis seats up to 8 people, its shape offering privacy as well as collaborative areas for groups. The Oasis bench measures 118"L x 58"D x 32"H.

Production of the Oasis bench was a challenge that pushed the envelope at each step of the manufacturing process, resulting in an amazing accomplishment in thermoforming. Production tooling, raw material selection, and forming were extremely difficult due to the complex shape, size, and material flow difficulty the design presented.

No blue print or CAD file was supplied; the work began with a foam sculpture. The wood patterns used to make the aluminum castings were essentially interpretations of that sculpture and had to be created in layers. The 2 single castings themselves were so large that they stretched the limits of what the local foundry could handle. The finished molds, one for the top and one for the bottom, weigh over 2 tons combined.

The sheet sizes used are 0.250" x 76" x 130", for the top, and 0.310" x 76" x 135", for the bottom. The large sheet width, coupled with the enormous minimum poundage required for a special run, eliminated all of the decorative laminant material options. Besides the need for desirable aesthetics, the final material selected also had to be chemical resistant and suitable for outdoor use. Eventually a Weather Pro 2 – Low Gloss, from Spartech, was specified by the client and is currently being produced in granite, white and beige.

Many challenges awaited on the forming front but success was ultimately achieved by inverting the heavy molds and using the upper platen. Other "tricks of the trade" and brilliant innovations by seasoned operators solved problems with cold-flow and part separation. It was an exceptional undertaking to work with such a unique part configuration, which presented several forming challenges, including the need to produce matching top and bottom parts for final gluing and assembly using 2 male molds.

The successful outcome of this unique and natured-inspired product — a true work of sculptural art that may now be enjoyed by consumers – is due solely to the collaboration, creativity, dedication, perseverance, and patience of all partner participants: True Teamwork.