



FOR IMMEDIATE RELEASE:

HORSE TRAILER FRP NOSE COVER PROVIDES PERFECT PHOTO FINISH: CUSTOM DESIGN DELIVERS UNIQUE FORM FOR STYLE & PROTECTION.

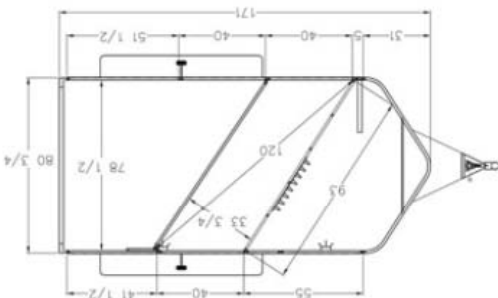
CUSTOM FORMING PROJECT/APPLICATION:



When Universal Trailer Corporation (Cincinnati, OH), a leading specialty trailer company (and largest manufacturer of horse trailers in North America) recently acquired the legendary Miley brand, they decided it could improve on the design and appeal of their enclosed 2 horse straight load models. In an effort to increase its growing horse and livestock market segment, sister company Haulmark (Bristol, IND) explored ways to accentuate the value to reintroduce the newly acquired brand during 2008.

Although known for its aluminum construction cargo trailers, Haulmark contacted Molded Fiber Glass Construction Products (MFG-CP: Independence, KS), specialists in a wide array of custom and standard FRP (fiber-reinforced polymer) forms, to design a new FRP Nose Cover/Roof Cap into the trailer's front end. The goal was to add a touch of style while providing optimal protection from harsh weather as a pivotal value-added selling point in re-launching the brand into the horse/livestock marketplace.

MFG-CP engineers recommended to Haulmark that a V-Shape FRP form design was ideal for that part of the trailer configuration to maximize longevity—due to the strength and non-corrosive properties inherent in the FRP materials. Additionally, the proprietary V-Shape's FRP forming process provided the brand with a consistent, uniform shape for the fleet that was smooth on both sides and, therefore, provided a more pleasant aesthetic value for customers.



FRP NOSE-CONE-FORMING PROCESS:

To create the FRP Nose-Cone, MFG-CP employed a hybrid Resin Transfer Molding Light (RTML) process; a Vacuum Infusion Process (VIP) that uses vacuum pressure to drive resin into a laminate. The RTML was utilized as it combines relatively low tooling and equipment costs with the ability to consolidate large structural parts.

Using a male/female mold with a white gel-coat filled into the cavity, the FRP glass was laid into the mold after drying in raw form. After laying the male form portion (with a vacuum applied around the perimeter), resin was infused into an enclosed body which locks the two halves together. The resin is then hooked up to a port; where a vacuum literally sucks the resin into the laminate throughout port.



After pulling the resin completely through the external port; it's shut off. Once the materials get hard; both molds are removed for a finished part. The ensuing result is a smooth top/bottom (inside/outside) form which provides an aesthetically pleasing finish.



According to MFG-CP engineers, the key is to get the correct amount of vacuum on the inside and outside with optimal resin proportions throughout. The process is trial-and-error to perfect; with a pump counting strokes to perfect the final version's process. Once perfected, it takes approximately 27 minutes (+ cure time). Finally, upon delivery, only a small amount of trimming is required to attach so there's not a lot of fitting & cutting required like aluminum.

FRP NOSE-CONE CONCLUSION:

Haulmark Engineer Ryan UMBER noted the cost-effectiveness of the FRP solution stating, "Ultimately, the FRP design provided a much more cost-efficient solution vs. steel and equal-or-less to aluminum—but with a better aesthetic value. They're currently designed into the core product line as we're using approximately 800 FRP Nose-Cones per year."



According to MFG-CP Engineering Manager Eric Brace, "With Universal Trailer being essentially the Cadillac of the trailer business, we're looking to explore more trailer-based applications to expand on this design's value-added benefits."

MFG-CP / CORPORATE PROFILE: MFG Construction Products Company, formed in 1962 and a charter member of the World of Concrete, manufactures a complete range of one-piece round column forms (RCFs), dome and pan forms for one-way and two-way joist slab floors, and customer forms for cast-in-place concrete construction applications. Made of fiberglass-reinforced thermo-set composites, MFG concrete forms can significantly reduce finishing costs and are fully re-usable.

Comprised of twelve key entities in eight states Molded Fiber Glass Companies (EST: 1948) has been a pioneering force in optimizing resins and fiber reinforced polymer (FRP) materials and continues to build strength through focused diversity in providing superior composite material solutions worldwide.

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