

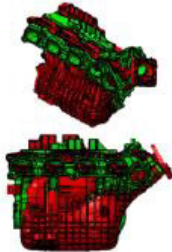
APPLICATION CASE STUDY # 117

RETURNABLE PACKAGING: CUSTOM SIZED MANIFOLD TRAYS AND PALLETS FOR EXISTING AND NEW MODEL PART

APPLICATION:

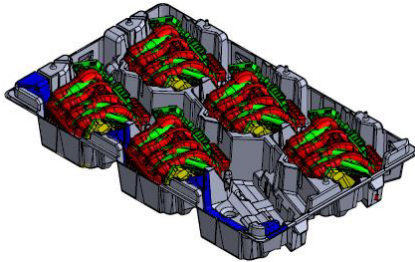
Customer was in need of custom returnable packaging for both the existing part and the upcoming new model manifold.

PROBLEM:



The customer's continuous improvement department was figuring out a new custom sized pallet that would help the plant save on the return trip for empty trays. The customer needed a custom thermoform tray to ship their existing manifolds and that would also work for the upcoming new model part; this packaging application had to incorporate a custom footprint size of 52" x 32.5" in order to maximize full truckload shipments both

SOLUTION:

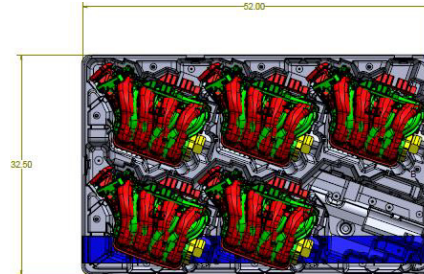


The engineering team at PolyFlex Products designed a tray and custom sized pallet in the specific footprint size that the customer requested. The newly designed tray is able to work with the existing manifold and the upcoming new model part. The HMWPE tray incorporates strategically placed standard TPU buttons and inserts, in order to carefully secure both parts in the tray and protect the most delicate areas of the manifolds.

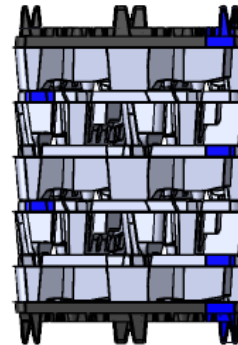
The new design offered the customer the benefit of logistics cost savings for the existing part by improving the return trips by shipping back 1/4 more trays transported per truckload, and this set the path for the most efficient shipping method for the upcoming model part. Our PolyFlex Products design team was able to achieve this by improving footprint density in the trailer's

space, as well as giving the customer the opportunity of handling 4 high nested empty unit loads.

- Efficiently designed tray with strategically placed TPU inserts provide protection for either part transported in the tray.



- Custom sized mirror image pallet/lid provides efficient unit load construction, easier inventory processing and savings in tooling.



- Empty nested trays are able to achieve a 4 high unit load stacking, that translates in logistics savings for the customer.

