



- Process Trays
- Returnable Packaging
- Vacuum Forming
- Injection Molding

APPLICATION CASE STUDY

RETURNABLE PACKAGING: CRANK CASE TRAY

SUMMARY:

PFP produced high precision, pallet-sized returnable trays with accuracies and strength needed for robotic handling by integrating the the economies of vacuum forming with the strength and precision normally associated with more expensive injection molding processes.

APPLICATION:

Supplier needed returnable trays for shipping crank cases that are compatible with robotic load/unload automation systems. The trays must protect the parts from damage during shipping, eliminate slivering from part movement within the trays and be consistently sized, strong and rigid to eliminate deflection.



PROBLEM:

Design and produce an economical returnable tray that has pockets to accommodate the robotic grippers for lifting the pallet to and from loading stations, with reinforcement and stiffening points integrated at strategic locations to assure the tray is strong and stable.

SOLUTION:

For the automated system or robot to do its job, the containers must be consistently sized, strong and rigid to eliminate deflection. PolyFlex designs and engineers precision injection-molded trays and pallets configured to meet the demands of virtually all part configurations, process requirements, and robotic handlers. To assure results, PFP engineers create a wood pattern of the tray concept to run samples. The wood pattern allows the engineers to easily and economically adjust the pattern during this early phase. Once sampling is complete and outcomes verified, PFP fabricates aluminum tooling to complete the production run.

