



PDIPAXTON.COM

# YOUR CENTRAL ILLINOIS SOURCE FOR

CUSTOM INJECTION MOLDING  
THERMOFORMING  
TOOLING / ENGINEERING

## THE SMALLEST PARTS WE MOLD



## THE BIGGEST PARTS WE MOLD



# CAPABILITIES

## INJECTION MOLDING

PDI has 11 injection molding presses running 24 hours a day. Our largest press is an 880 ton machine, capable of making parts up to 39" x 32" and 5.6 lbs. Each part gets its own quality control program tailored to our customer's requirements. Depending on the complexity, we can accomplish product assembly and retail packaging as parts are coming out of the machine.

## THERMOFORMING

PDI has 2 thermoforming machines capable of making parts up to 51" x 98" x 30" with a 0.3" sheet thickness. Some of our favorite parts to run with this process are monster truck body panels for Feld Motor Sports.

## TOOLING / ENGINEERING

Great parts start with a great design. Our engineers will assist you with part design to ensure you get the best results. When you're ready for production, PDI's in-house mold shop sets a maintenance schedule for every mold that runs at our plant. New molds are built by our experienced partner tool shops in the U.S. or China, depending on your preferences, budget, and project requirements. Regardless of the tooling source, we store and maintain the tools in-house with production at our factory in the U.S., ensuring the best quality and shipping rates possible.

# FULLY AUTOMATED MOLDING

One of the best ways to improve quality and efficiency of injection molding is to use robots to pick the parts. It makes the cycle time 100% consistent so that all the parts come out exactly the same. PDI proudly uses part-picking robots in tandem with our experienced workforce in order to guarantee the highest quality parts possible.

## STEP 1

The mold opens revealing the multiple parts molded at once.



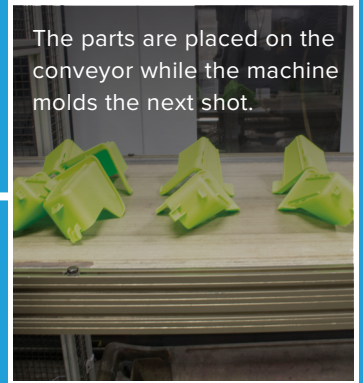
## STEP 2

The robot picks the parts from the mold with suction cups or grippers.



## STEP 3

The parts are placed on the conveyor while the machine molds the next shot.



## CASE STUDY: SHIMSTACK AUTOMATION

### OVERVIEW

Glazetlock, a division of PDI, serves the building and glazing industries with a wide variety of plastic shims. PDI recognized the opportunity to help scale the top-selling product line, ShimStack, through automation.

### CHALLENGE

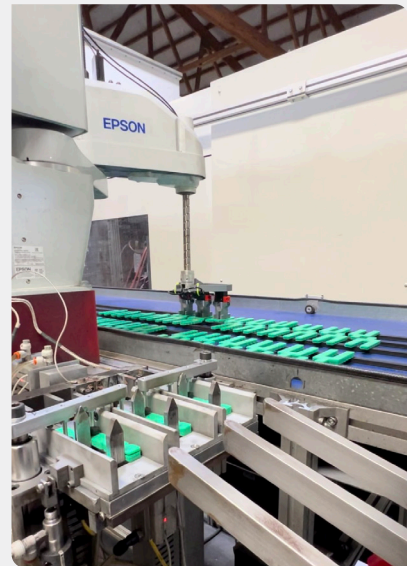
The shims must be neatly stacked and then welded together to form the ShimStack “pack” that users can break apart to the thickness needed. This requires precise handling and post-processing.

### SOLUTION

PDI engineers developed an automation solution in-house to stack the shims, robotically pick and place them, and weld them into finished ShimStacks. Read more about it in [Plastics Machinery & Manufacturing](#).

### RESULT

The in-house-developed automation cost 1/6th that of a turnkey solution. The product cost to the customer was reduced by 12%, with an ROI of 18 months. Production throughput doubled and scrap decreased by 20%.



## CAPABILITIES AT A GLANCE

# 60,000,000

PARTS MADE EVERY YEAR

### INJECTION MOLDING

Capacity :  
11 Injection Molding Presses  
Tonnage: 90 - 880  
Max Part Size : 39" x 32"  
Max Part Weight : 5.6 lbs

### MATERIALS

ABS, ASA, Polypropylene,  
Polyethylene, HIPS, Flexible PVC,  
Rigid PVC, Nylon, Polycarbonate,  
TPE/TPV, TPU, TPO, PETG, Ultem

### THERMOFORMING

Capacity :  
2 Thermoforming Machines  
Max Sheet Size :  
102" x 55" x 0.3"

## A PROUD SUPPLIER FOR



## REQUEST A QUOTE AND SCHEDULE A TOUR



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Office Hours:  
M-F 8am-4pm Central  
Production Hours:  
M-F 24/day



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