

# Kaizen Case Studies

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## **CASE STUDY:** Plastic Gluing Process Preparation (2P)

**CLIENT:** Plastic products manufacturer (noted as “manufacturer” below)

The manufacturer secured a new account and, as a result, experienced a significant spike in orders. In the manufacturer’s attempt to meet the increased production demands, the company discovered the current production process was ineffective. The manufacturer risked losing the new account if output didn’t improve within eight weeks. The manufacturer’s ability to increase output by investing in new systems was hindered by the lack of available capital in the budget. Previous projects to increase output benefited from ample funding.

PDG facilitated the Process Preparation (2P) tool to help the manufacturer design, simulate and test a new manufacturing process. The new process was built in-house and was operational within seven weeks. With the new process in place, production needs were met at a lower cost than the other three systems in operation. The other three systems in production cost \$350,000, \$500,000 and \$500,000, respectively, each producing a finished unit for \$.12 each. By comparison, the new process developed by implementing 2P cost \$60,000 and produced a finished unit for \$.04 each. The volume of the new process was expected to exceed ten million units a year.

Creating, designing and manufacturing a new process in-house required the work of a cross-functional team. This was the first time such a team was formed. Despite the interpersonal challenges the team experienced, their commitment was evident within a couple of days. The team’s engineers went from saying, “We can never do this.” to saying, “We will do this and exceed our goals.” The opportunity to create a new process using 2P enabled the manufacturer to learn the tools of process preparation, the importance of operator involvement and the value of engineers working together.