

CASE STUDY

From Crisis to Capability: How a \$7.5M Injection Molder Rebuilt Itself Around Automotive

And doubled revenue in two years while holding a zero-defect delivery record across five years of production

Company: PRe Plastics — Custom Injection Molder, Northern California | **Revenue at Start:** ~\$7.5M
Timeframe: 2019 – 2024

THE SITUATION

In 2019, PRe Plastics lost its largest customer. The customer had been a cornerstone of the business for years — and then, driven by market conditions, they purchased their own injection molding facility. The revenue impact was immediate and significant. For a company running at approximately \$7.5 million in annual revenue, the gap wasn't something that could be closed by filling existing capacity. A replacement customer of substantial size was needed, and it was needed quickly.

An opportunity arrived from an unexpected direction. A large firm in the automotive supply chain approached PRe Plastics about a major production program. The parts were large, the volumes were higher than anything in PRe's existing book of business, and the customer requirements were fundamentally different from the commercial and industrial work the company had built its reputation on.

Automotive was a different world. It demanded precision inspection equipment the facility did not yet own and personnel specifically trained to operate it. It required a quality system capable of withstanding Tier 1 automotive audits — an extension beyond PRe's existing ISO 9001 certification. It came with an uncompromising expectation: the supplier could never be the cause of a production line shutdown — not at the direct customer's facility, not at their customer's facility, and not at the end customer's final assembly line. And unlike most commercial relationships, the business could be pulled for any reason.

PRe Plastics had the foundation. The question was whether to build the rest of it — fast.

The survival of the business demanded that we proceed with confidence we had not yet fully earned.

THE DECISION AND THE RISK

The program called for four injection-molded parts across three molds — one mold was designed to produce two different part numbers. Two of the molds were the largest PRe had ever been asked to run, and they were significantly heavier than anything in the existing toolroom.

The most acute financial risk centered on a single press. PRe's largest existing machine was a 600-ton injection molding press. Engineering analysis indicated the two largest molds would fit in the machine, but whether 600 tons of clamping force was sufficient to mold complete, acceptable parts

— that was a calculated gamble. A new machine with adequate tonnage would cost approximately \$500,000. If the existing press couldn't handle the job, PRe would need to find a contract manufacturer to run the parts while a new machine was sourced and installed. That scenario would have been financially catastrophic.

The risk was real. Leadership chose to proceed anyway. The survival of the business demanded it.

THE EXECUTION

Compressing the Tooling Timeline

PRe was awarded the program. Work began immediately: qualifying a toolshop in China to build the molds, issuing purchase orders early to compress the timeline, and beginning the internal capability build in parallel. Then the end customer ran two months late on part design finalization — but refused to adjust the production launch date of March 2020. With 9 weeks remaining against a 16-week standard lead time, Brian Miller booked a flight to China that night, built a day-by-day schedule with the toolshop the following day, and returned in late December for mold trials alongside PRe's owner and the customer's lead engineer. The molds shipped on time. First production parts were delivered as required. Full details of this effort are documented in a separate case study.

Expanding Quality Capabilities for Automotive Standards

PRe Plastics entered this program as an ISO 9001-certified operation — a solid quality foundation, but one built for commercial and industrial customers, not Tier 1 automotive supply chains. Winning this business required a meaningful expansion of that foundation. While the tooling was being built in China, PRe constructed a new quality lab inside the facility, purchased precision coordinate measurement equipment, and hired a skilled CMM programmer to operate it. The quality system was extended and documented to satisfy the inspection protocols and audit requirements of the automotive supply chain.

The Tonnage Gamble — Resolved

When the molds arrived and initial production runs began, the 600-ton press performed. The calculated risk paid off. The parts molded completely and consistently within specification. As volumes grew and the program expanded to a second vehicle model in 2021 and a major capacity expansion in 2022, the machine fleet grew with it — ultimately adding seven large presses ranging from 500 to 1,012 tons, all with robotic automation.

COVID — And the Test of the System

Production on the automotive program began in March 2020 — the same month COVID-19 began disrupting manufacturing operations across the country. Labor availability became unpredictable. Supply chains were stressed. PRe's own workforce contracted as the broader customer base pulled back. The automotive customer's volumes, however, continued to grow.

Throughout 2020 and into 2021, PRe navigated the full range of COVID-related operational disruptions — absenteeism, staffing constraints, protocol implementation, global supply-chain complications, and the constant pressure of customer demand — without a single production line shutdown at the customer's facility, their customer's facility, or the end customer's final assembly line.

ERP Implementation

In 2021, PRe implemented a new enterprise resource planning system — the leading ERP platform in the injection molding industry, equipped with real-time machine production tracking. The system was fully operational within 9 months, without disruption to production commitments. It touched

scheduling, inventory, accounting, quality documentation, and production reporting across the entire operation.

THE GROWTH DECISION

The revenue trajectory tells the story directly. In 2020, PRe's annual revenue stood at approximately \$7.5 million — the automotive program was in its early stages and the broader customer base had contracted through COVID. By 2021, revenue had grown to approximately \$10 million as the automotive program expanded. By 2022, revenue reached \$15 million — doubling in two years, before the large capacity expansion had produced a single part.

That expansion was set in motion in spring 2022, when the automotive end customer visited PRe's facility alongside the Tier 1 customer. The program's secondary source was struggling to meet demand. The question was direct: could PRe expand quickly to absorb additional volume that would grow revenue by up to 75%? The opportunity was substantial. So was the concentration risk. The decision to proceed was made contingent on a five-year supply agreement. The agreement was executed.

The \$3 million expansion — four large machines sourced globally, facility reconfiguration, crane systems, robotic automation — was completed in four months by PRe's own team, without disrupting existing production. Full details are documented in a separate case study.

The supply agreement was not fulfilled by the customer, preventing the program from reaching its full potential. The performance record established over five years of production, however, was without blemish.

Revenue doubled in two years — \$7.5M to \$15M — before the largest expansion produced its first part. One management position added across the entire run.

THE RESULTS

The performance record across five years of automotive production was exceptional by any standard — and particularly remarkable given the conditions under which it was achieved.

PERFORMANCE CATEGORY	RESULT
Production line shutdowns caused	Zero Across direct customer, Tier 1, and end customer
8D corrective action requests from end customer	Zero Across five years of production
Estimated parts shipped	~12 million parts Five-year production run
Revenue growth — 2020 to 2022	\$7.5M → \$10M → \$15M Doubled in two years prior to expansion output
Management positions added during growth	One Existing team absorbed the full period of growth

ERP implementation timeline	9 months to full operation Industry-leading platform, no production disruption
Facility expansion completion	4 months \$3M reconfiguration; self-imposed timeline met
Mold tooling lead time compressed	16 weeks → 9 weeks Achieved on schedule in China
Sub-assembly workforce surge	100 → 140 in six weeks Zero quality or delivery failures during scale-up

WHAT THIS DEMONSTRATES

This program tested every dimension of operational leadership simultaneously: capital allocation under uncertainty, supply chain management under time compression, targeted quality system expansion into a new market, workforce scaling, facility expansion during a constrained equipment market, and sustained performance delivery through a global pandemic.

The results were not achieved by adding layers of management or by outsourcing complexity. They were achieved by a leadership team that understood operations deeply, made clear decisions under pressure, and held accountability at every level of the organization.

This is the kind of work Miller Fractional Leadership brings to injection molding companies — not frameworks handed off in a report, but operational ownership and execution experience built over 33 years inside a custom injection molding environment.

Brian Miller | Miller Fractional Leadership LLC | Fractional COO & Operational Improvement Partner
Serving custom injection molders | \$10M – \$75M revenue | millerfractionalleadership.com