

## How to Double Your Production Capacity Without Expanding Your Footprint

*A case study on operational leverage at SoFlo Customs*

### The Context:

#### GROWTH WASN'T THE PROBLEM, FLOW WAS

Demand for SoFlo's vehicles was strong. The team was executing, but throughput wasn't keeping pace with opportunity. Rather than defaulting to a facility expansion or major capital investment, Joe acted with urgency and engaged APG before the transaction even closed.

APG embedded with the frontline team, spending several days on the production floor and in the warehouse to understand how work and information actually moved.

Growth usually comes with a tradeoff: more volume requires more space, more people, and more capital. But at SoFlo Customs, one of the leading designers, manufacturers, and marketers of upfitted Jeeps, Broncos, and trucks, growth took a different path.

Instead of expanding footprint, the company doubled production capacity by rethinking how work flowed through its existing operation. This is how SoFlo, led by founder and CEO Joe Ghattas, partnered with American Pacific Group to unlock capacity inside the business and the lessons other founders can apply in their own operations.



# SoFlo's Path to Doubling Capacity

## STEP 1: Value Stream Map

By mapping the end-to-end value stream - from parts receipt through final delivery - the team aligned around the current condition of the business. This wasn't a theoretical exercise; it was hands-on observation with operators, supervisors, and leaders involved.

### TAKEAWAY:

Most capacity constraints aren't hidden, they're just obscured by day-to-day noise. Mapping creates clarity.



## STEP 2: Identify the Bottleneck

One constraint stood out immediately: **the paint shop**. Work-in-process inventory was piling up as vehicles waited for painted panels. The paint booths were the gating factor for the entire operation.

### RESULT:

Paint booth utilization increased from 2 turns per day to 3 - a 50% gain at the constraint, which translated into meaningful throughput improvement across the plant.

Instead of adding equipment or square footage, the team focused on making minor changes and implemented:

- ✓ Staggered shifts
- ✓ Faster changeovers
- ✓ Clear performance metrics
- ✓ A deliberate focus on "quick turns"

### TAKEAWAY:

You don't fix bottlenecks by working everywhere. You fix them by working precisely where it matters most.



## STEP 3: Identify the Waste

The biggest issue? Waiting for parts. Stockouts caused excess movement, workarounds, and idle labor - all invisible taxes on throughput.

Over time, the team also built a proprietary inventory management system tailored to SoFlo's needs.

APG worked alongside the SoFlo team to implement:

- ✓ A forecasting tool tied to production reality
- ✓ Kanban-based replenishment for critical components

### TAKEAWAY:

Inventory problems rarely show up as inventory problems. They show up as missed builds, expeditors, and frustrated people.....Waste!



## STEP 4: Implement Daily Management and Problem Solving



Operational improvement doesn't stick without discipline. SoFlo implemented daily management routines:

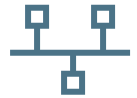
- ✓ Frontline huddles
- ✓ Visual performance boards
- ✓ Clear standards tied to flow, quality, and waste

Joe personally drove accountability, reinforcing the idea that metrics weren't punitive, but rather tools for problem-solving.

### TAKEAWAY:

Culture changes when leaders show up consistently and "walk the talk".

## STEP 5: Streamline the Flow



Continue observing less obvious flow issues by finding where the product waits the longest. Ideal flow time equals the value-added processing time.

A subset of vehicles required less than one day of processing time with just two mechanics, yet they were stuck in the same queue as everything else. SoFlo created a dedicated "streamline" flow path for these vehicles:

- ✓ Pre-kitted parts
- ✓ Standardized work
- ✓ Clear sequencing

### RESULT:

Flow time for these builds dropped by 10x, freeing capacity without adding people or space.

### TAKEAWAY:

Not all products deserve the same process. Segmentation allows you to take care of easier problems first.

## STEP 6: Implement Leader Standard Work



With standards established, Joe focused on reinforcement through:

- ✓ Visual checks at critical workstations
- ✓ Planners and floor leads to offer support and drive accountability
- ✓ Multiple daily touchpoints to reinforce standards

### TAKEAWAY:

Reinforcement discipline is essential. Being visible at the workstation regularly offers support and shared learning.

## STEP 7: Integrate Quality Standards into the Process



Rather than wait until the end of the process to check quality standards, build quality checks into every step and error-proof wherever possible.

Joe worked with the quality team to integrate checks throughout the process, reducing rework and improving process capability.

### TAKEAWAY:

Quality embedded into the process reduces rework and improves consistency.



## The Results:

WITHOUT EXPANDING FOOTPRINT,  
SOFLO ACHIEVED:

- ✓ 2x Production Output
- ✓ 50% Reduction in Flow Time
- ✓ 75% Improvement in First-Pass Quality
- ✓ A Team Fully Engaged in Continuous Improvement