

Case Study Summaries

TA Industrial Solutions has deep experience helping production finishers and metal fabricators maximize first time yield at the lowest operational cost in the industry. During our 65 years of providing industry-leading supplies distribution and process optimization services we have assisted more than 2500 customers.

The following pages include case studies on several of our recent customers.

Case Study:

Automotive supplier of Fiberglass products

Implemented standard operating procedures for finishing prep and finesse of fiberglass molded parts to increase First Time Yield (FTY) and product quality while reducing labor hours per part produced and scrap/reworks; and also increased production productivity by 23%.



Case Study:

Automotive supplier of body panels

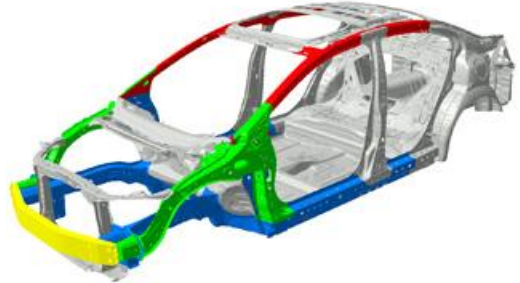
Analyzed the wiping process in an automotive body panel paint prep line and identified/implemented alternative microfiber wipes and tact cloth which reduced wiping cycle time by 600%, increased production rates and saves \$75K annual in labor costs.



Case Study:

Automotive supplier of structural body components

Analyzed, identified and implemented alternative deburring processes of heavy stamping and machined structural components which reduced abrasive parts costs which reduced deburring supplies costs by over 300%, extended abrasive disc life from 8 parts/disc to 350 parts/disc and increased worker productivity.



Case Study:

Highway construction bridge contractor

Assessed and identified alternative abrasive and grinding materials used on certified welds to reduce labor time per grind by 270%, abrasive supplies costs by over 400%, and reduce total operational costs by 300%.



Case Study: Axle manufacturer

Assessed and identified alternative abrasive and grinding materials used on certified welds to reduce labor time per grind by 270%, abrasive supplies costs by over 400%, and reduce total operational costs by 300%.



Case Study: 5S Implementation

We performed an extensive 5S Quality Control program for a mid-size automobile supplier.

The program objectives were to:

1. Increase production
2. Decrease defects

We utilized a 3-step structured process:

- Identified root cause of production outputs and defects, established process control and variables management, and identified ineffective and inefficient activities
- Reworked process workflow, paint prep tools/supplies, maintenance procedures.
 - a. Utilized 5S workplace organization and housekeeping methodology
 - b. Established a performance metrics monitoring process
- Trained staff and facilitated integration of the new processes

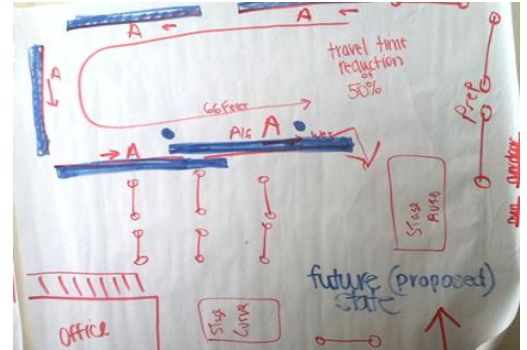
Results:

1. Increased throughput by 15.5%
2. Decreased paint prep costs by \$125K annual
3. Decreased paint prep defects by 89%

Significant Increase in Yield

90.5 % → 97.3%

Reworked process workflow to eliminate inefficiencies



Benchmarked new processes

Runner Test (polishing)

Quantity	Time	Model	Time
150	92 ^{ft}	A30	130 ^{ft}
240	120 ^{ft}	A16	120 ^{ft}
downtime per auto			
150	6 mins	A30	6 mins
240	2 mins	A16	6 mins

Annotations:
 - 19% improvement (22 mins per 150)
 - 55% (100% due to tool change)
 - (100% due to tool change)
 - (100% due to tool change)

Created Visual Performance Goals

GOALS	ACTUAL	POLISHING DEPT.						
TOTAL PIPE PER SHIFT	TOTAL PIPE PER SHIFT	M	T	W	TH	F	S	SUN
1	1	8.	10.	12.	2.			
2	2	4.	6.	8.	10.			
3	3	12.	2.	4.	6.			

TOP PERFORMERS: [Empty]

ANNOUNCEMENTS: [Empty]