



THE DESTUFF-IT IMPLEMENTATION PROJECT

April 25, 2024

GORBEL[®]
A CLASS ABOVE

INTRODUCTION

Franklin Allen

Director, Quality & Continuous Improvement, Gorbel Inc.

- Over 20 years of experience in Quality, Continuous Improvement, and Project Management
- Lean Six Sigma Black Belt
- Led numerous Lean and Continuous Improvement initiatives throughout career

AGENDA

- Gorbel® - Who Are We
- Strategy Map
- March 11, 2020
- DeStuff-it Implementation Planning
- Lean Tools
- Celebration

GORBEL® - WHO ARE WE

- Founded in 1977 by David Reh
- Manufacture workstation cranes, ergonomic lifting devices, fall protection & warehouse solutions
- Plants located in New York, Alabama, Arizona, Canada & Tianjin, China
- Over 800 employees



GORBEL[®] JIB CRANE



This organization flies 100,000 flags over the capitol each year.

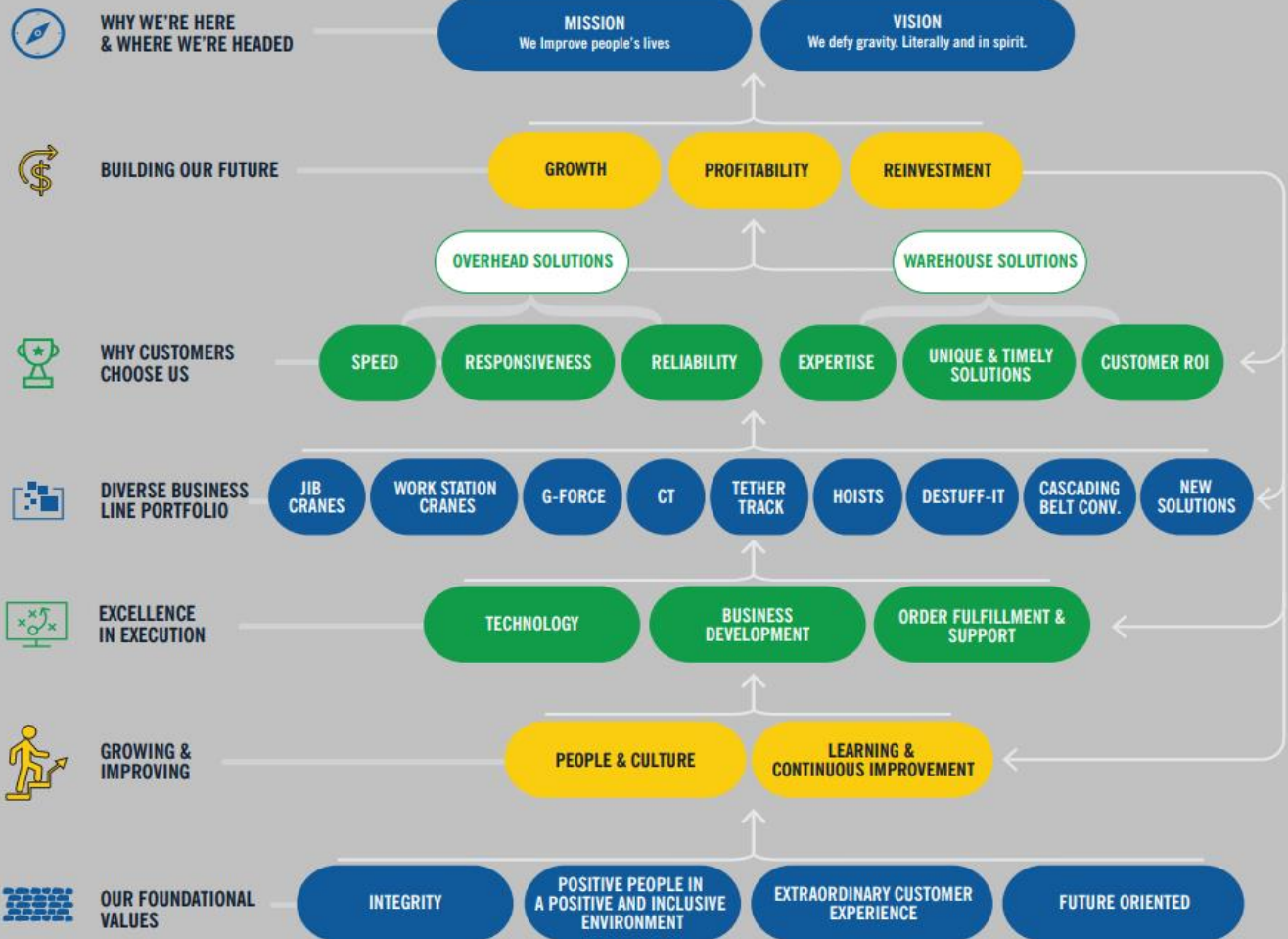
They are distributed primarily at military funerals and presented to veterans.

STRATEGY MAP

ALWAYS "A CLASS ABOVE"

We develop gravity-defying solutions that improve people's lives. By delivering differentiated value which is informed by superior customer intimacy, our passionate, talented, and diverse team provides extraordinary customer experiences – inside and out. To survive and thrive in a global market, we optimize our profitability so we can continually grow and invest in people, technology and innovation to expand our portfolio of business lines.

GORBEL
A CLASS ABOVE



STRATEGY MAP

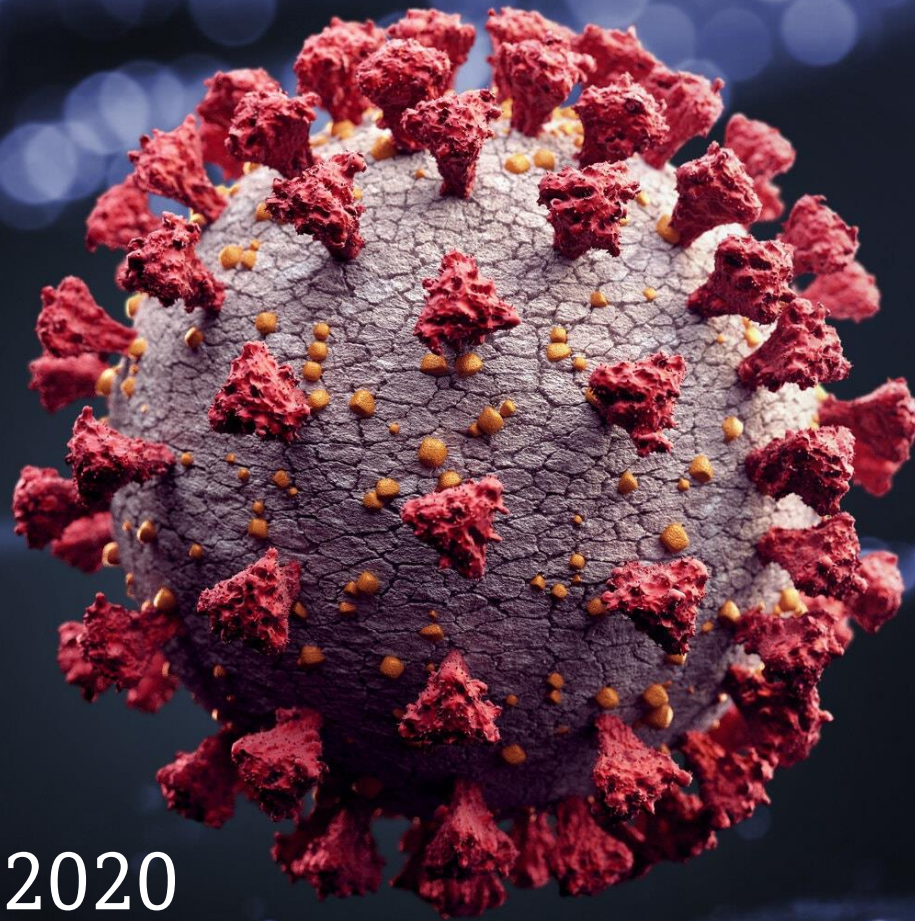
从始至终

“至高至博，精益求精”

我们致力于提供挑战地心引力的解决方案，来改善人们的生活。通过和客户之间的亲密关系，我们可以感知，高博富有激情和天赋的员工们给客户提供了卓越的体验，无论是内部的还是外部的客户。我们优化自身的盈利能力，从而实现持续的投资，发展我们的人员和产品线，从而在全球市场生存及蓬勃发展。

GORBEL
A CLASS ABOVE





March 11, 2020

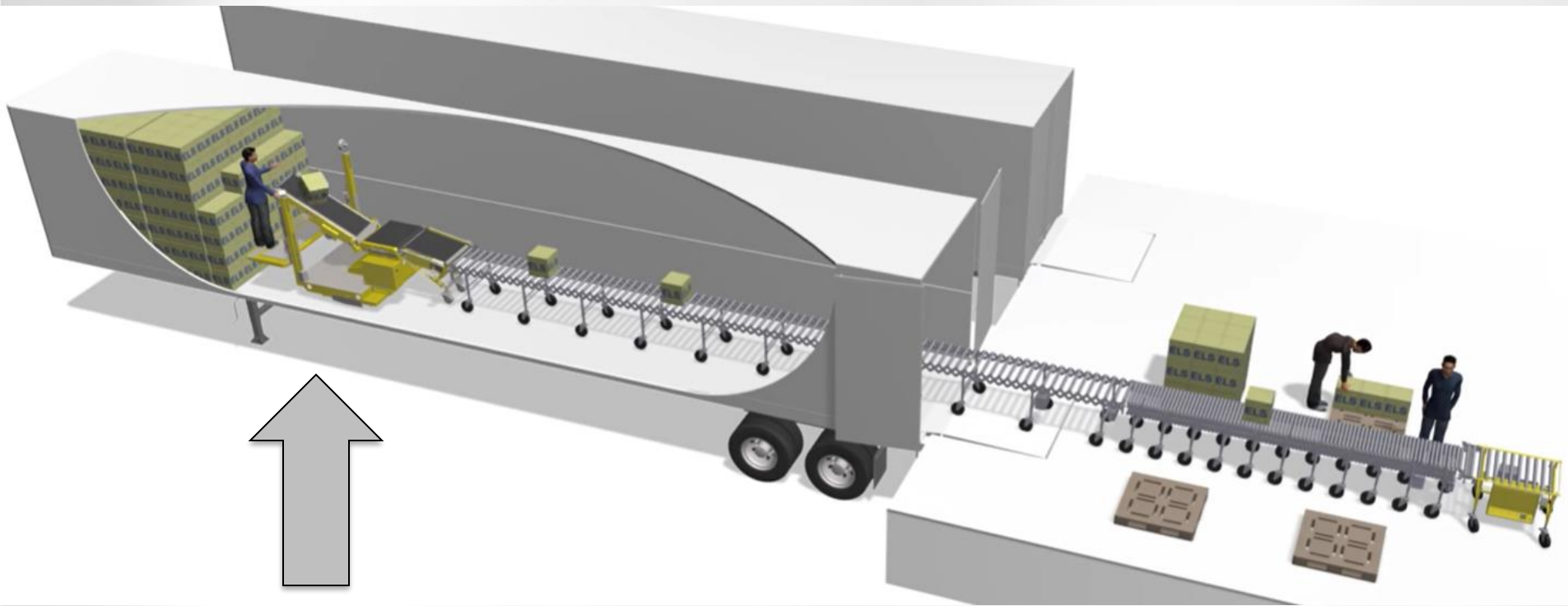
ESSENTIAL BUSINESS



If the government deems the business essential, it may continue to operate while shelter-in-place orders are active.

Executive Order 202.6

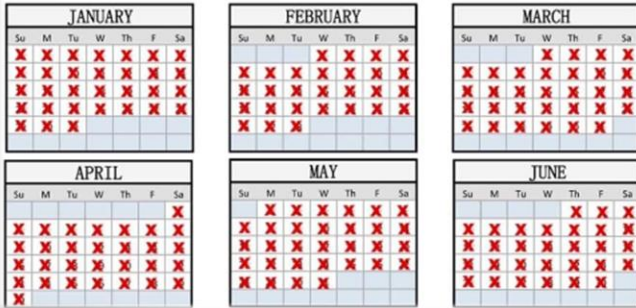
DESTUFF - IT



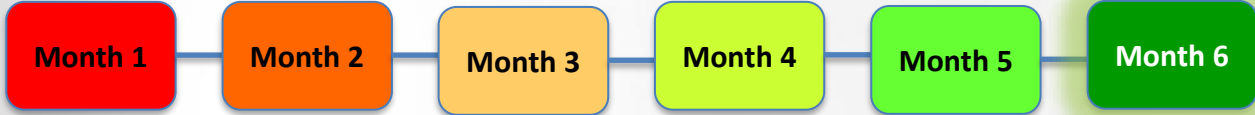


TIMELINE

6 MONTHS



Employee Name	Title	Roles / Responsibilities
Todd Geib	Manufacturing Engineer, Sr.	Development of manufacturing processes, tool identification/purchase, plant layout & operator training
Jennifer Triftshauser	Supervisor, ERP	Set-up of new ELSI site in CSI, integration of CSI and NAV (Elmira's ERP system)
Greg Light	HSE & Facilities Manager	All environmental and employee safety related activities
Christina Green	Marketing & Events Coordinator	Branding activities
Phil Throumoulos	Supervisor, IT Infrastructure	IT Infrastructure set-up
Darlene Farina	Supervisor, Inventory and Production Control	Development of stocking strategy for all purchased parts
Max Powell	Staffing Specialist	Coordination of hiring events and generation of offer letters
Akshay Nawathe	Mechanical Engineer, Assoc.	Development of part numbers and BOMs in CSI
John Mitchell	Supervisor, Logistics	Development and coordination of all logistics related activities (inbound and outbound)
Rick Remmele	Plant Manager	Hiring activities and factory leadership until new plant manager hired
Mike Barbata	Supervisor, Purchasing	Sourcing of all required components
Amie Crowley	Controller	Financial responsibility for expenditures, ROI, etc.
Adrian Thurley	Director, Human Resources	Assist with coordination of hiring events, Job descriptions, policy alignment, etc.
Ravi Alluri	Director, Quality and Continuous Improvement	Development of new quality department for this product (interviewing, hiring and training)
Mike Greer	Buyer, Sr.	Sourcing of all required components
Cary Akins	Director, IT and Facilities	Infrastructure and ERP set-up
Paul LaBella	Director, Manufacturing	Overall Project Leader
Tyler Brown	VP, Operations	Project Sponsor
Daryl Embling	Project Manager	Project manager – Facility readiness for start of production



BORDER CLOSURE



April 25, 2024

Christinne Muschi/Reuters

GORBEL[®]
A CLASS ABOVE

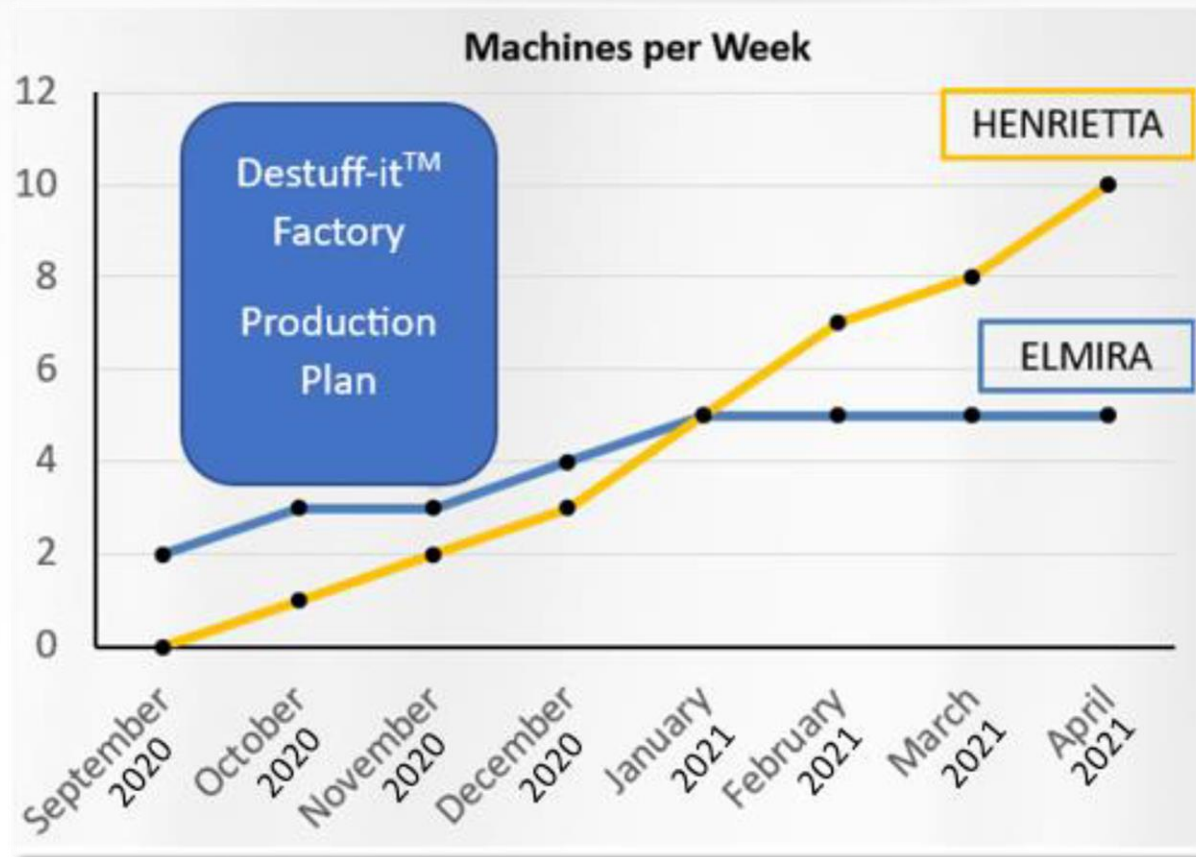
PROJECT PLANNING

Task Name	Assigned To	Current Status	Duration	Planned Start	Plann... Finish	Predeces...	% Complete
Process Transfer		Complete	24d	06/15/20	07/16/20		100%
ERP Development			22d	06/17/20	07/16/20		100%
Determine ERP process to use (ELS vs CSI)	JT Jennifer Triftshaus	Complete					100%
Create New Site in DEV	JT Jennifer Triftshaus	Complete	10d	06/17/20	06/30/20		100%
Site configuration decisions	JT Jennifer Triftshaus	Complete	3d	06/17/20	06/19/20		100%
Create New Site	JT Jennifer Triftshaus	Complete	2d	06/22/20	06/23/20	28	100%
Identify master/supporting data to input	JT Jennifer Triftshaus	Complete	1d	06/22/20	06/22/20		100%
Review / Approve site parameters and settings	JT Jennifer Triftshaus	Complete	0.5d	06/24/20	06/24/20	29	100%
Review / Approve customizations and reports	JT Jennifer Triftshaus	Complete	0.5d	06/24/20	06/24/20	31	100%
Add items and BOMS to CSI DEV	JT Jennifer Triftshaus	Complete	5d	06/24/20	06/30/20	29	100%
Pilot test DEV	JT Jennifer Triftshaus	Complete	3d	07/01/20	07/03/20	27	100%
Setup QA	JT Jennifer Triftshaus	Complete	2d	07/06/20	07/07/20	34	100%
Pilot test QA	JT Jennifer Triftshaus	Complete	3d	07/08/20	07/10/20	35	100%
Setup PROD	JT Jennifer Triftshaus	Complete	2d	07/13/20	07/14/20	36	100%
Validate PROD	JT Jennifer Triftshaus	Complete	2d	07/15/20	07/16/20	37	100%
Go / No Go to PROD	JT Jennifer Triftshaus	Complete	0	07/16/20	07/16/20	38	100%
Go Live in PROD	JT Jennifer Triftshaus	Complete	0	07/16/20	07/16/20	39	100%
Current MFG Process Defined (ELS)			10d	06/15/20	06/26/20		100%
Bill of Materials received	TG Todd Geib	Complete	5d	06/15/20	06/19/20		100%
High level process flow understood	TG Todd Geib	Complete	5d	06/15/20	06/19/20		100%
Powder coat process flow, equipment, utility	TG Todd Geib	Not Require					100%
Job packet received	TG Todd Geib	Complete	5d	06/15/20	06/19/20	43SS	100%
Drawings available for all parts and assembly steps	TG Todd Geib	Complete	10d	06/15/20	06/26/20	43SS	100%
Acquire process documentation and procedures from ELS	TG Todd Geib	Complete	10d	06/15/20	06/26/20	43SS	100%
Quality process documentation transferred	TG Todd Geib	Complete	10d	06/15/20	06/26/20	43SS	100%

CRITICAL FACTORS



PRODUCTION



A3

Title

Front Conveyor Cylinder Assembly – Time and Quality

GORBEL
A C L A S S A B O V E

Owner / Leader

Todd Geib

Contributors

Tim Cond, James Brown

Start Date

11/01/20

Target Finish

11/15/20

PLAN

1. Problem Statement/Business Case

- Current method of assembling the Front Conveyor Cylinder requires measuring the distance between the end of the Shaft and Yoke and setting the gap for each proximity sensor.
- If improperly measured, this results in poor FTQ and rework

2. Describe Current Situation

- Measurement method of the distance between the shaft and Yoke is not specified.
- Proximity Sensor gap is measured using a "shim".



NOTES:
1) ADD SHIM UNDER ITEM #2 TO HOLD .16 DISTANCE ALONG 10" CYLINDER STROKE.

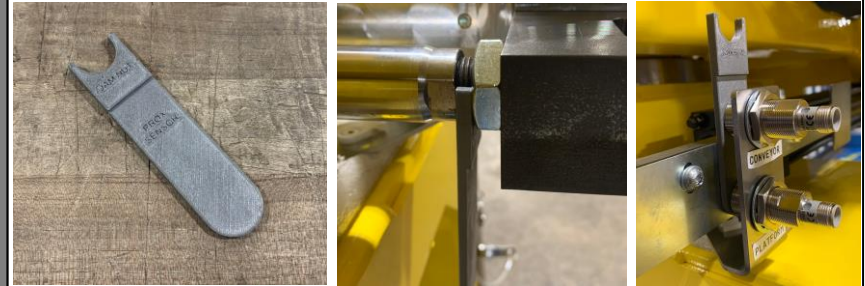
3. Goal / Ideal State

- The measurements need to be set right the first time every time.
- Reduce the time it takes to set the specified dimensions.

DO

4. Action Plan

- Create a Poke-Yoke gage to set the required distances.
- Train operators on how to use the Poke-Yoke gage.
- Update work instructions to reflect new assembly method.



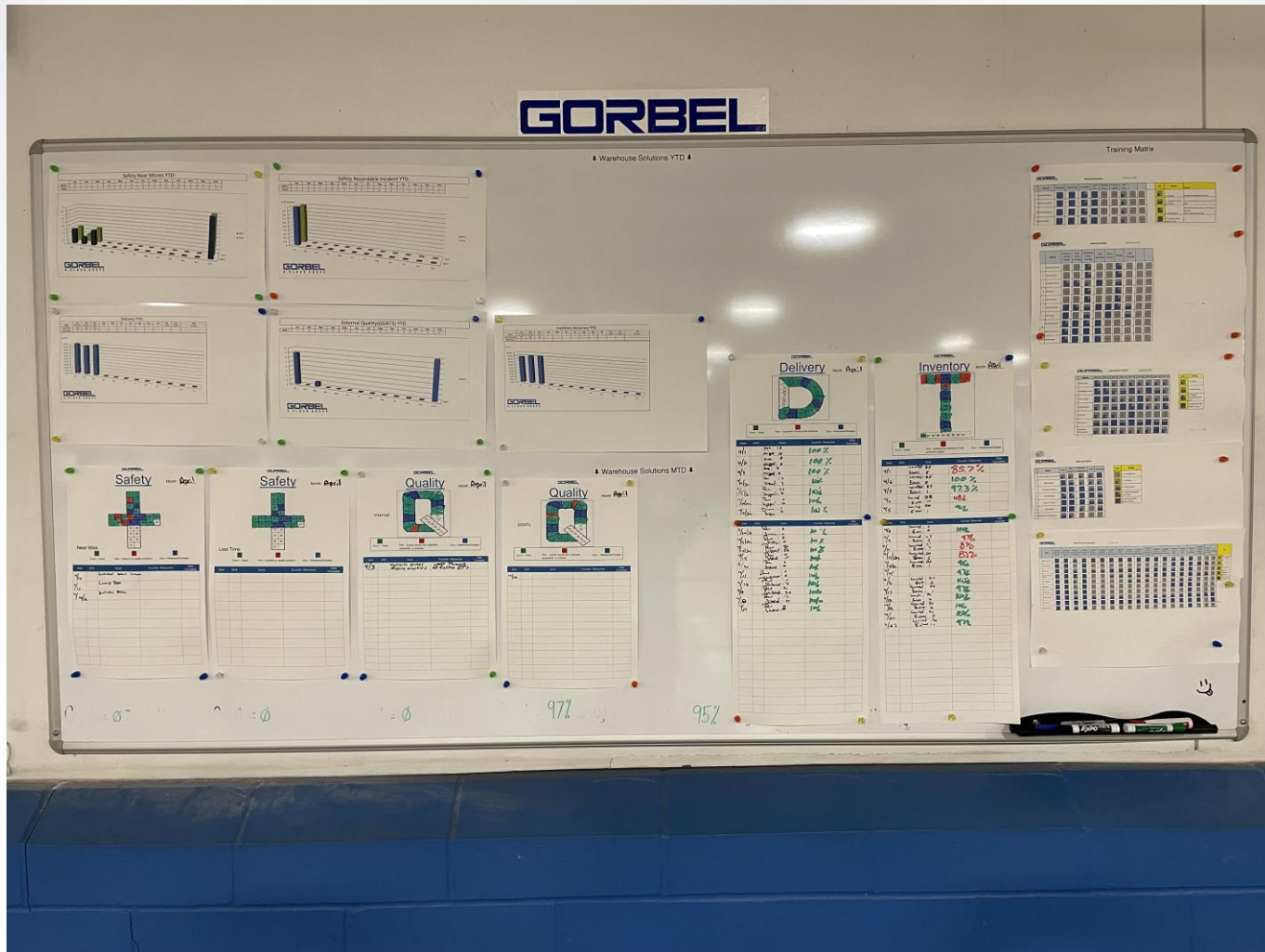
CHECK-ACT

5. Result Summary

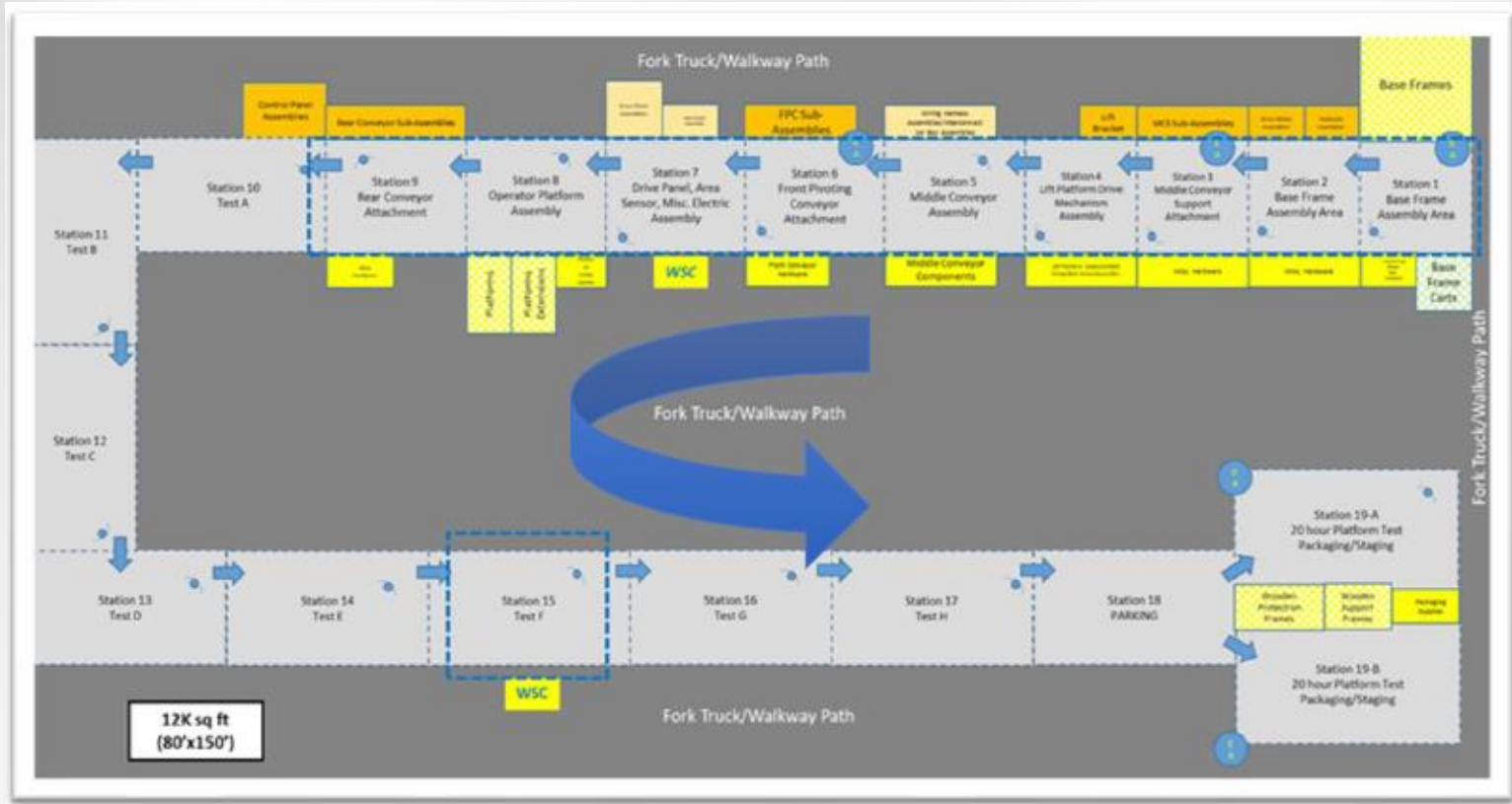
- Assembly step time reduced by 50%
- FTQ improved from 75% to 100%



VISUAL MANAGEMENT



MANUFACTURING LAYOUT



A TEAM AT WORK



April 25, 2024

GORBEL[®]
A CLASS ABOVE

WASTE REDUCTION

T

We have limited movement of people by creating work centers that maintain all the necessary tools within the work area to conduct the work

I

Each work center has a kanban of parts necessary to build their part of the Destuff-it machine

M

With the required parts to build a subassembly of the machine, limited motion is required by the team member

W

Walking is limited by having all the necessary components housed within each work center

O

Work is triggered for each work center only by the prior work center (one-piece flow process)

O

With our fifty minute per work center takt, it does not allow bottlenecking to occur

D

Hard guages have been built to reduce the time needed for team member differences and measurement error

SUCCESS!



April 25, 2024

GORBEL[®]
A CLASS ABOVE

QUESTIONS

