



**SHINGIJUTSU
GLOBAL
CONSULTING**







SUPPLEMENT

Kaizen Results
(IMPACT AT SAMPLE COMPANY)

Kaizen Results: in Brief



A Small Sample of SGC's past Kaizen Activities*

-  Automotive – SGC contributed to development and production preparation of the “Nano” for the India market. In just *1 year*, they also realized a manpower reduction of 220 employees and cost reduction of INR RsCompany – 130,000,000 in the “A” plant alone.
-  Aerospace Reduced “A” model production time from 70 days to 18 days /aircraft.
-  Aerospace – Reduced man-hours by 269 hours, set-up time by 158 minutes, and operators’ walking distance by 9 km, among other kaizen benefits in just *6 months*.
-  Medical Center – In 3 years, reduced expenses by over USD \$8,000,000
-  Health Service - Pharmacy reduced inventory infusion by 69%; resulting in savings of about USD \$150,000. Over 5 years, reduction of unnecessary inventory valuing USD\$900,000.
-  Computer Products – Made +50% quality improvements and increased efficiency by 67% (America) Inc. (Data Storage) In 6 months, Hitachi made +50% quality improvements and increased production efficiency by 67% in the first 6 months. After 18 months, Kaizen activities yielded successful stock reduction saving more than JPY ¥1,000,000,000 from eighteen-month Kaizen activities.

Shingijutsu Global Consulting has helped implement successful Kaizen at too many companies in too many industries to list – each having realized tangible and practical changes with *measurable impact*. Under the guidance of SGC consultants, each has also built their internal Kaizen teams to continue implementing “CONTINUOUS improvement!”

Shingijutsu Kaizen Workshop

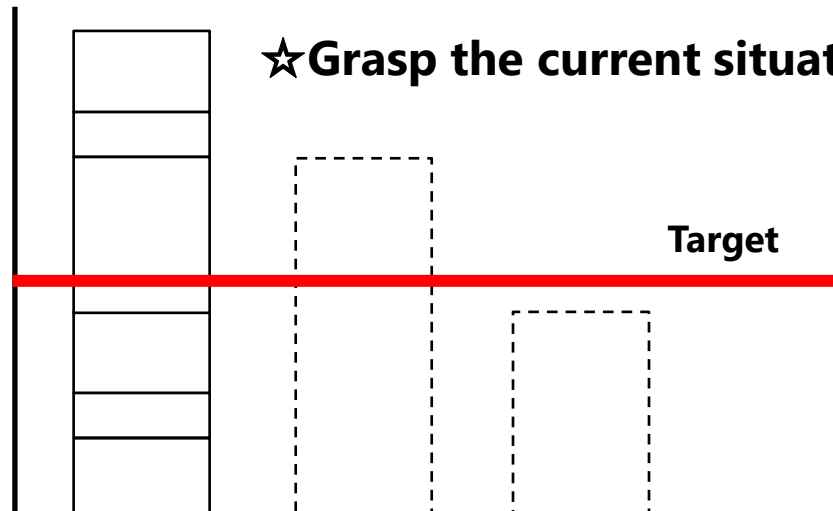
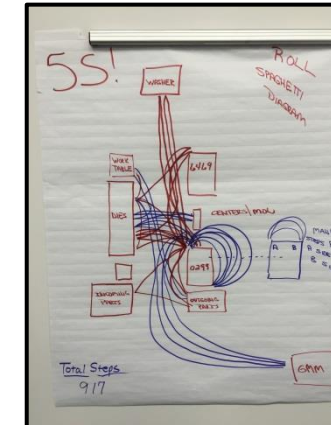
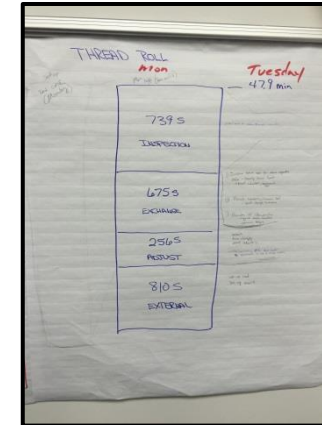
Changeover time Kaizen



● Down time ⇒ Capacity down

Major downtime causes

- Changeover
- Defects
- Breakdown



★ Grasp the current situation ⇒ Time observation, Video



- Work contents
- Work elements time
- Movement
- Non value added work
- Distance



Changeover time Kaizen



Kaizen Means

Kaizen Goals

- Shortening Changeover Time ⇒ Small lot size, Reduce inventories

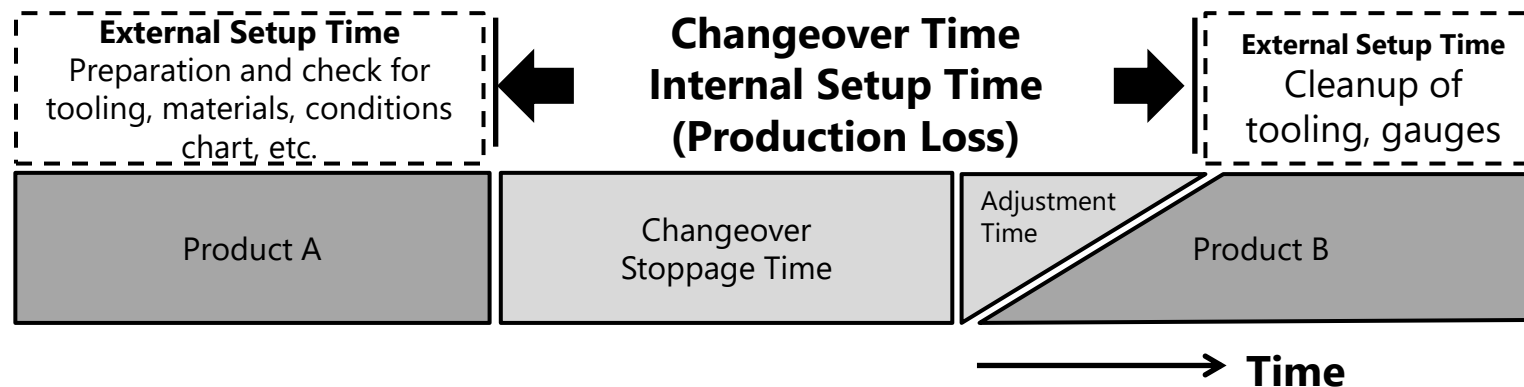
* Breakdown of Changeover Time

Changeover Time = External Setup Time + Internal Setup Time + Adjustment Time

External Setup Time: Time for work that can be done without stopping equipment

Internal Setup Time: Time for work that cannot be done without stopping equipment

Adjustment Time: Time machinery is stopped to ensure accuracy and quality processes after changeovers



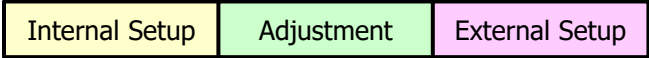
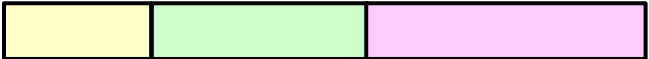



Changeover time Kaizen

Kaizen Means

Kaizen Goals

● **Shortening Changeover Time ⇒ Small lot size, Reduce inventories**

* Steps to Changeover Kaizen

First Step (Make Standard Table)	Clarify internal setup, adjustment, and external setup work (Make Standard Work)	
Second Step (Reduce downtime due to external setup)	Move internal setup work to external setup (Total changeover work does not change)	
Third Step (Reduce internal setup work)	Kaizen for internal setup (Reduce line stoppage and overall work time)	
Forth Step (Reduce adjustment work)	Reduce adjustment time (Eliminate variation ⇒ 0)	
Fifth Step (External setup kaizen)	Shorten time for external setup work (Line stoppage time does not change)	

☆ **Reduce time required for changeovers and stoppage time ⇒
Reduction of stock through smaller lot size**

Sample Company's Kaizen Results

Process Improvement PCA Cart



Operator	Problem	Action(s) Taken	Results
A	The cart from the PCA had all the parts there but not in a user friendly order for the mechanic..	Add 30" to the cart and arrange them in the order of there assembly on the air plane.	Visual ais for assembly

Before



After



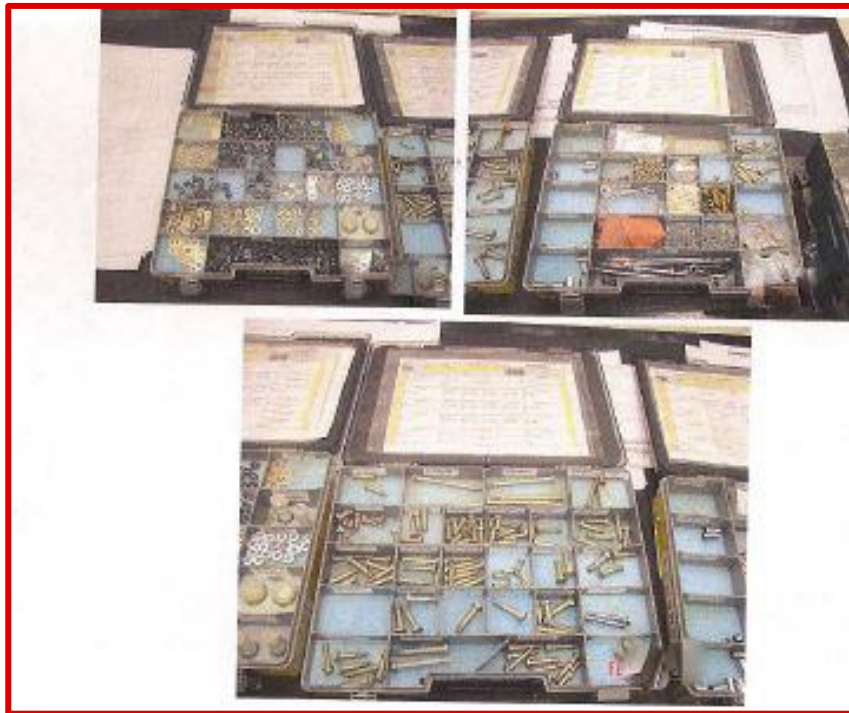
Sample Company's Kaizen Results

Process Improvement PCA Cart

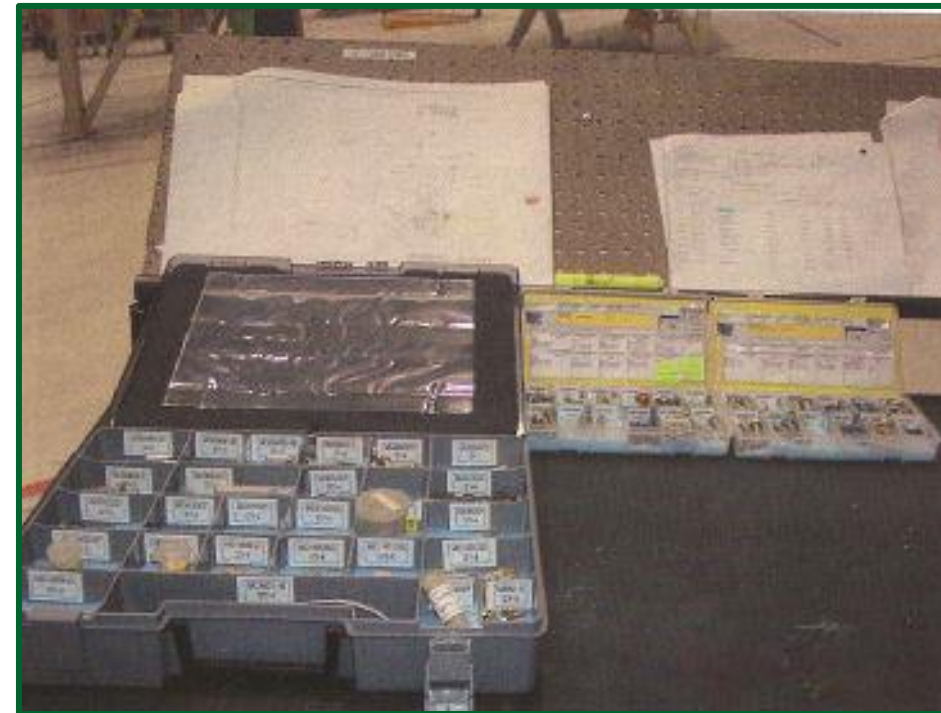


Operator	Problem	Action(s) Taken	Results
B	The fasteners and standards for the three sub assemblies. Were scattered across three kits. Some of the kits had fasteners in them that were not used while others were missing.	Three new kits to match the three assemblies with only the fasteners that are needed	Less searching for what you needed

Before



After



Sample Company's Kaizen Results

Cell Standard Work



BEFORE



AFTER



Sample Company's Kaizen Results



BEFORE

**During Kaizen Work Area
-PAINT**

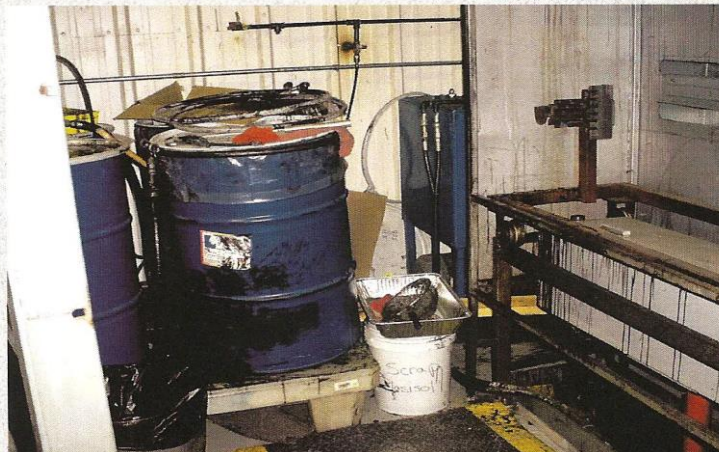


**After Kaizen Work Area
-PAINT**

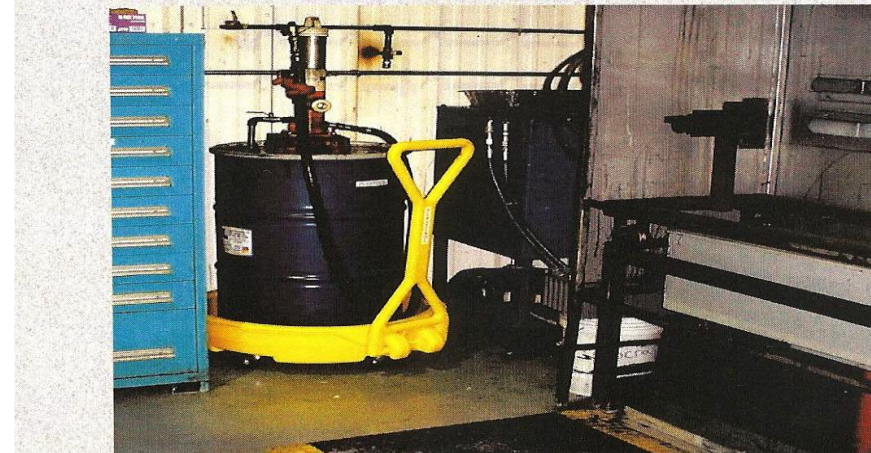


AFTER

**Pre-Kaizen Work Area
-PLASTISOL**



**After Kaizen Work Area
-PLASTISOL**



Sample Company's Kaizen Results

Standard Work Cell layout



**Cell interior blocked by
tables and carats**



**Operator path clear of
obstructions**



Sample Company's Kaizen Results

Cell Standard Work (Documentation)



BEFORE



AFTER



Kitting ① (Hardware, Boxes)

Before



After



**Point of use, less walking, reduce cycle time,
mistake proof.**

Kitting ② (Hardware, Carts)

Before



After



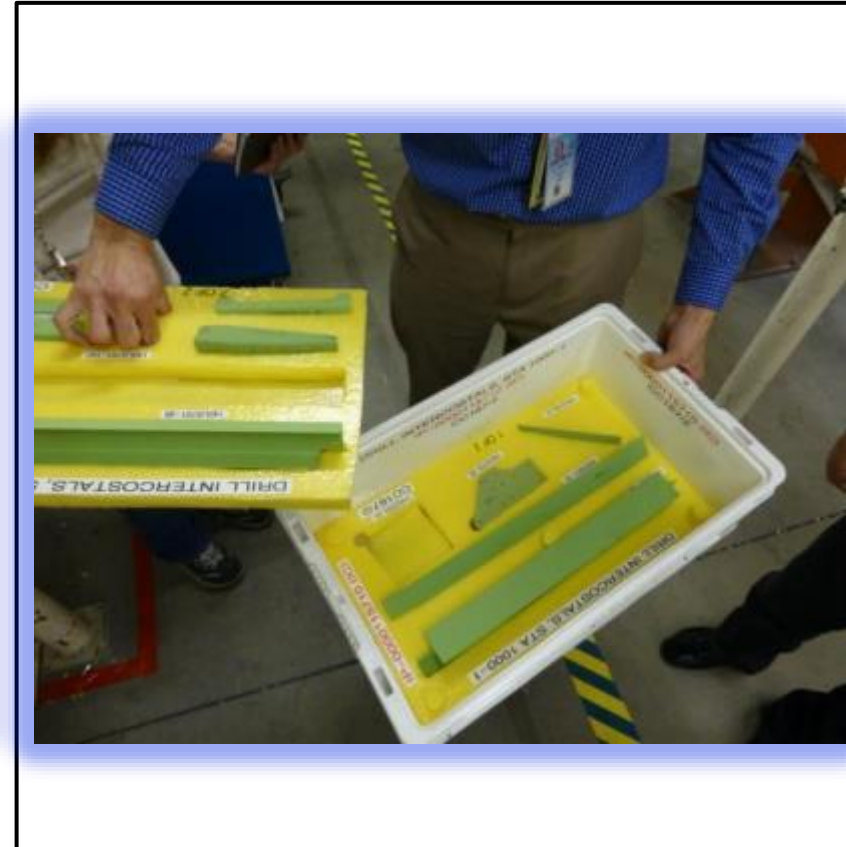
Point of use, less walking, reduce cycle time, mistake proof.

Kitting ③ (Small Parts)

Before



After



**Point of use, less walking, reduce cycle time,
mistake proof.**

Kitting ④ (Large Parts)



Before



After



**Point of use, less walking, reduce cycle time,
mistake proof.**



Point of Use (Shadow Board)

Before



After



Basement of kaizen activities, no Muda (waste)

Point of Use (Shadow Board)

Before



After



**Point of use, less walking, reduce cycle time,
mistake proof.**

Visual Management①(Hoshin Kanri)

Before



After



**No vision means no kaizen,
we don't know targets and progress.**

Visual Management② (Kaizen Planning)



Before



After



Create annual Kaizen plan with Hoshin and Daily management.



A stylized world map in shades of blue and white, showing the continents and major landmasses. It is positioned in the background behind the main text.

**We would like to highly recommend you
“Kaizen Planning & Workshop” for your future Lean
activity deployment...**

**Please contact us. If you have any questions, or require any
further information.**

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