Process	Assembly		Approach for Kaizen	(8) Other		Presented by	Kazuma Takeuchi
Company name	Toyota Motor Corporation						
Section	Tahara Plant Final Assembly Div. Assembly Section No. 1						
Title	C1 line: Productivity kaizen by platform removal						

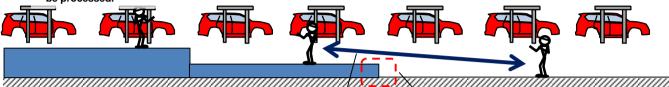
Before Kaizen (situation and problem)

Platforms placed to suit to working height restrained line layout flexibility. → Low line efficiency

* Only car interior could be processed.

* Only engine compartment and tire-wheel houses could be processed.

* Only floor backside could be processed.



Large platform H = 750 mm

Medium platform H = 450 m/m

Processes could not be interchanged.

No process could be placed near the step.

Weighted	Number of	Line
worker hours	processes	efficiency
17.2	19	90.5%

Standard process rate 63.1%

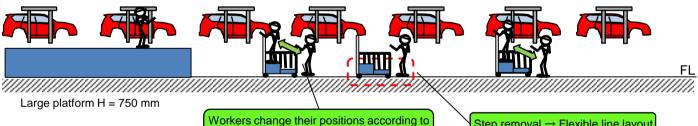
After Kaizen (description of Kaizen and point of view for Kaizen)

Point of view

Can restraints in floor height be removed while working height remains changeable?

Stepped trucks were introduced and medium platforms were removed,

reducing restraints in line layout. → Improved line efficiency



where to process, using a stepped truck.

Step removal → Flexible line layout



* More process combination variations are possible. The engine compartment and floor backside can be processed in a single process.

Weighted	Number of	Line
worker hours	processes	efficiency
17.2	18	95.5%

Standard process rate 66.6%

(Effect) The number of processes is fewer by one.

Cost-effectiveness (expenses for Kaizen versus cost reduced by Kaizen)

Facility investment (incl. all internal and external purchases)

¥17,000,000

Effect (in worker hours)

•Reduction in worker hours: 1 process x 8 hr. \times 2 shifts \times 20 days = 320 hr./mo.

Investment recovery: 11.8 mo.

¥1,440,000 (per mo.)