



Thema:

Enjoyable Process by Eliminate Handling & Difficult Process to Achieve Cost/Unit Competitiveness

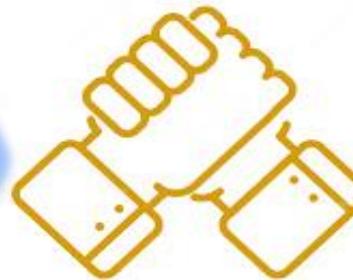


TABLE OF CONTENT

1

Company Business Condition

2

Background Activity & Target

3

Strategy & Schedule Activity

4

Countermeasure

5

Evaluation & Next Activity

6

Documentation Activity

1. GLOBAL POLICY for FUTURE CHALLENGES

Manufacturing & PE Guideline

All Toyota Production Group Global policy
Contribute 500 Million Unit BEP
Productivity 200% & Space ↓75%



TMMIN Commitment

Productivity :

Productivity up 200% base on PEFF KJ
by Dec. 2023 (vs. Mar 2017)

Space :

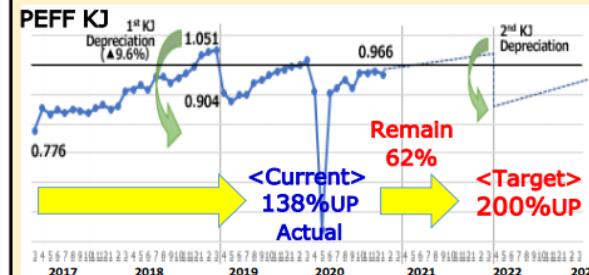
No additional building thru new PJT
In vehicle & EG plant all

Activity Policy

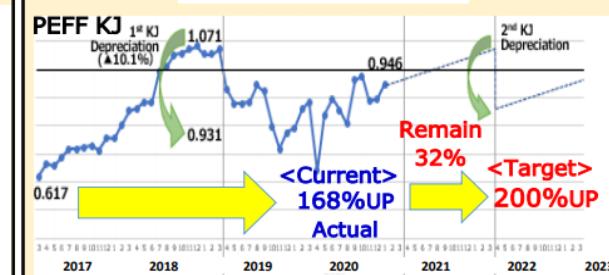
- (i) Thoroughness of TPS thinking way:
Kinsetsuka, Straight Line & Minimum WIP
- (ii) Automation with optimizing IT :
Wise Automation & Integration System
- (iii) Strengthen basic foundation:
Beyond gold , Expand Span Control

Following TPS Basic Thinking Way & Continue TMMIN SR Kodawari

Vehicle Plant #1

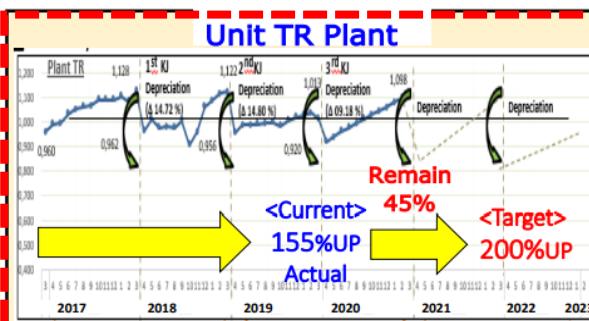


Vehicle Plant #2



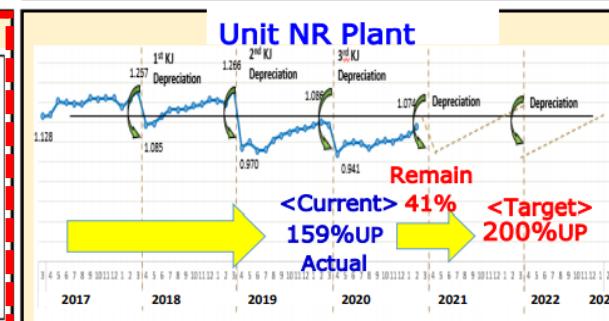
"Achieve Commitment with C-MPV PJT"

Unit TR Plant



"Achieve Cost Competitiveness with Low Volume"

Unit NR Plant



"Achieve Commitment with BMPV & BSUV PJT"

Competitive TR With The Best Cost Competitiveness

2. PRESIDENT DIRECTOR MESSAGE (KPI)

Milestone TMMIN for Competitiveness (Key Performance Indicator)

2014 ~ 2016

Peak #1 & #2 Smooth SoP
(Set Up Foundation)



Prove Asia's #1
Competitiveness
TR Best Practice Yokoten for NR SoP
(Bronze before SoP | Silver after SOP)

2017 ~ 2019

SR #1 – Catch Up Phase
(Initiation of T-D Collaboration)



Speed Up Asia's #1
Cost Competitiveness
Fastest 100% Gold Unit Plant &
Competitively Sustain Gold Levels

2020 ~ 2022

SR #2 – Lead Competitiveness
(Asia's Best Toyota Plant)



Lead Asia's #1
Cost Competitiveness
Through Sustained 3 Pillar Beyond Gold
& lead Cost Competitiveness

2023 ~ ONWARD

SR #3 – Lead Future Changes
(World's Best Toyota Plant)



Global #1
Total Competitiveness
Competitively SMART Unit Mfg
(Gold Lv New Line Projects since SoP)

3 TMMIN PD Messages :

1 Safety & Health

* Keep members' motivation up & physical distancing

2 Comply to Gov't Regulation

* Secure business with COVID-19 Protocol Compliance

3 Reputation as Global Mfg.

* Absorb fluctuated global demand & stay competitive

Competitively Facing B-MPV Projects with

A Sustain 3 Pillar Shop Floor Beyond Gold

Flexible Shop Floor amid COVID-19
for the Best KPI achievements

B Cost Competitiveness TR Last Runner

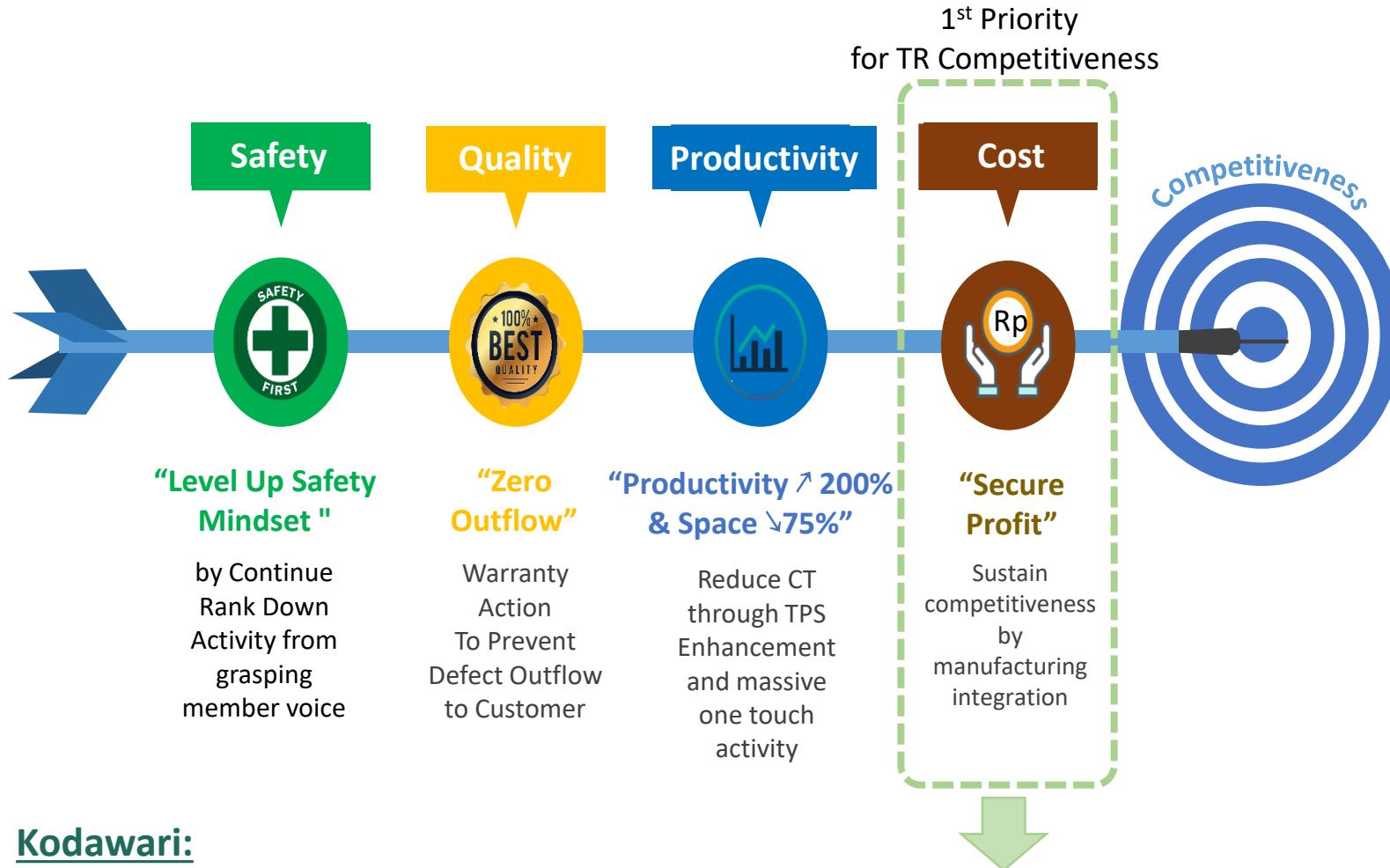
Spirit The Best Quality

Change
"I" view → "U" view

Enjoyable
Work



Mr. Warih AT – TMMIN PD



Hoshin Directorate

Maintain & Strengthen The Company Basic Foundation & Competitiveness



Mr. Nyoman W (Dir)

Hoshin EPSD

Let's execute our action plans by strong collaboration with internal and external parties to secure sustainability TR Engine



Mr. Tagor J.D (DH)

Hoshin PAD

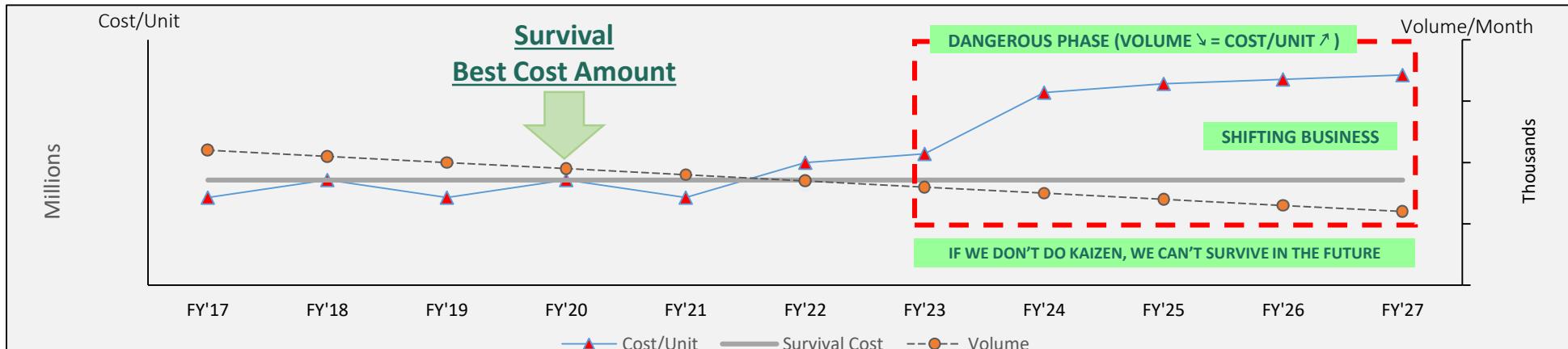
Sustain Best Cost/Unit Competitiveness Even in Low Volume to Become TR Last Runner



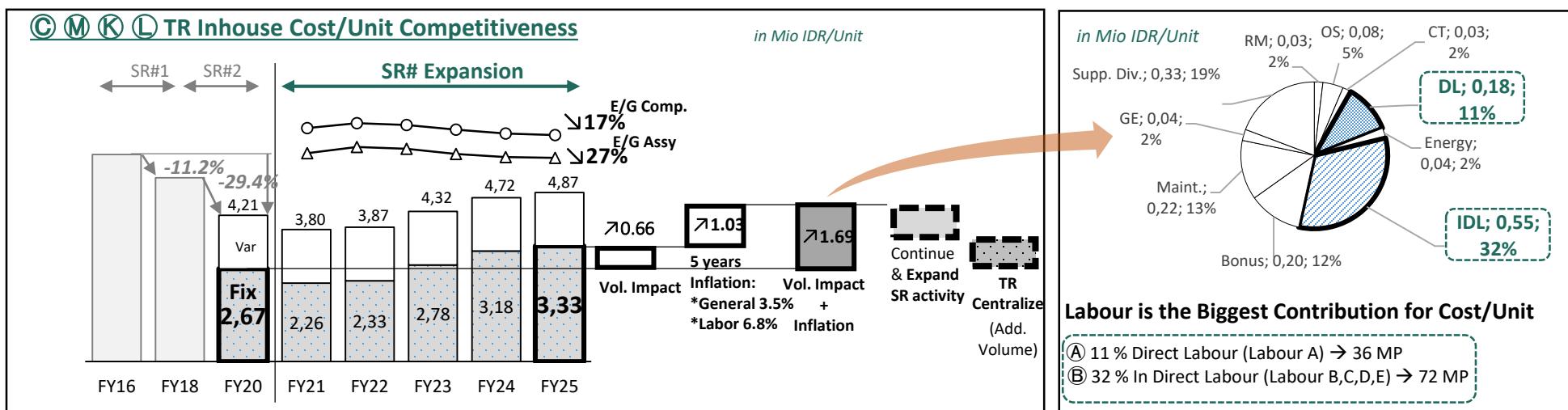
Mr. Luqman U (DH)

1. BACKGROUND ACTIVITY TEAM

COST/UNIT REVIEW (CONDITION ↓VOLUME)



KEEP TR COST COMPETITIVENESS BY KEEP COST/UNIT EVEN IN LOW VOLUME



ACHIEVE COST/UNIT COMPETITIVENESS THROUGH ENJOYABLE PROCESS BY ELIMINATE HANDLING & DIFFICULTY PROCESS

2. INFORMATION PROCESS

2.1 Engine Domestic



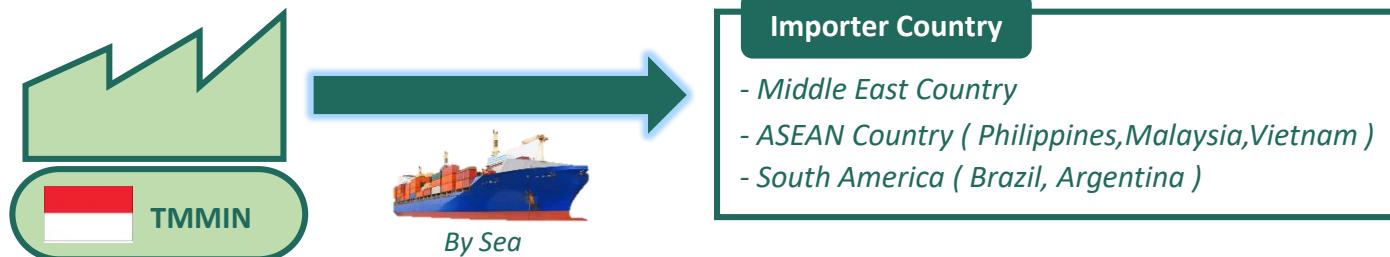
I Engine Domestic Purpose



2.2 Engine Export



I Engine Export Purpose



2.3 Part Component Export to STM and Kamigo



1 Cylinder Block



2 Cylinder Head

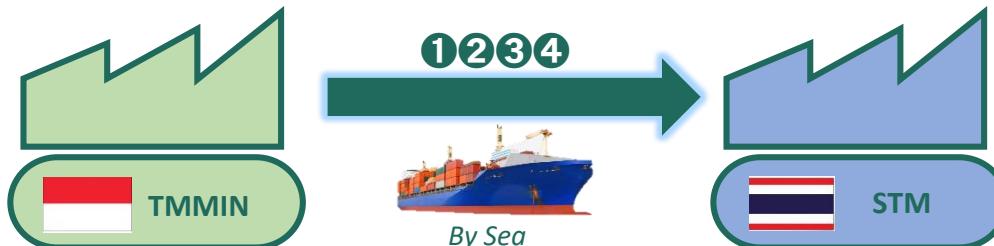


3 Crankshaft



4 Camshaft

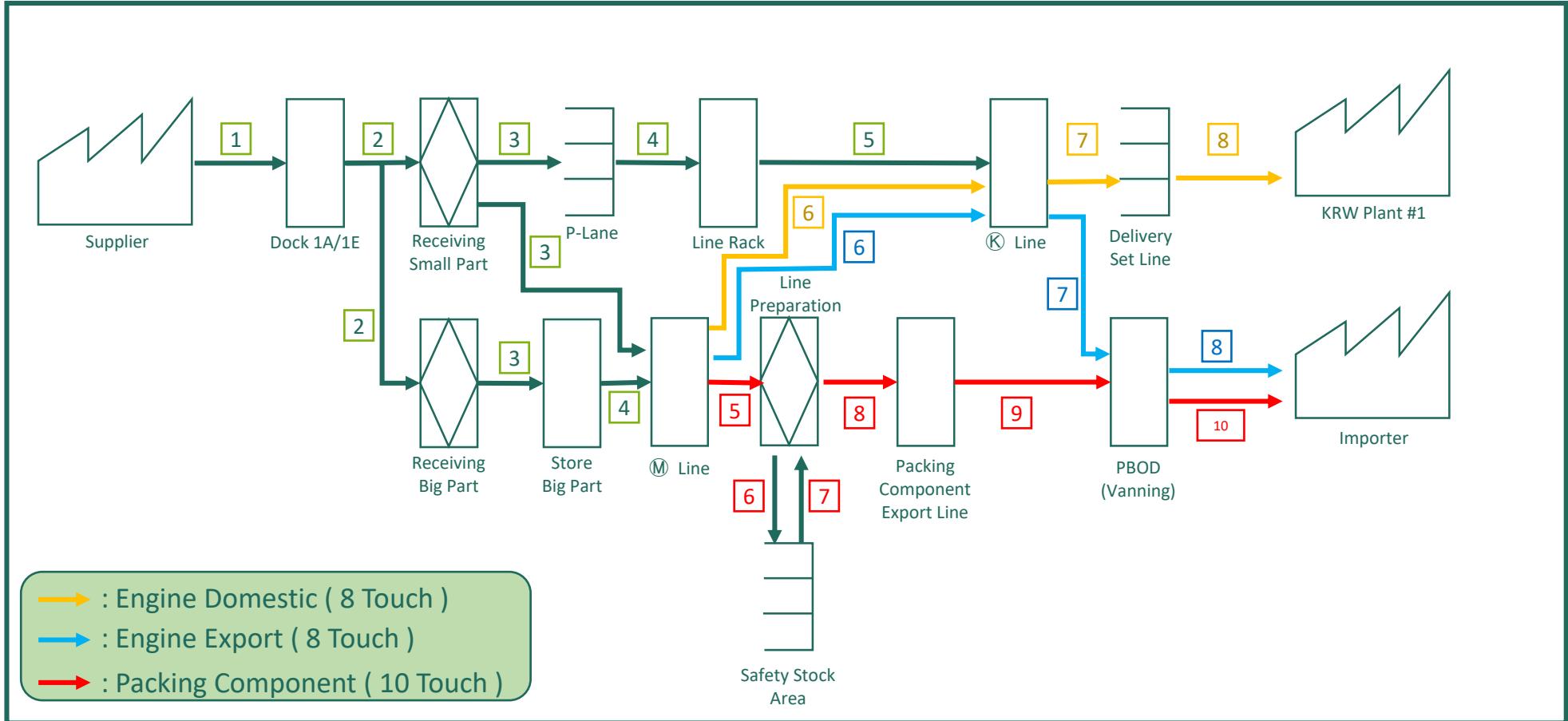
I Component Export to STM



I Component Export to Kamigo



2. INFORMATION PROCESS



Eliminate Handling

Menghilangkan/mengurangi handling yang selaras dengan filosofi kami yaitu “*The Best Logistic Is No Logistic*”



Difficult Process

Mengurangi/mengeliminasi Un-Enjoyable Work

3. TEAM INFORMATION

TASK TEAM MEMBER



EPSD (Division Head)

Tagor J.D



PAD (Division Head)

Luqman U



Syamsul A

Logistic Unit Plant (Dept.Head)



Herman C.N

Log.Engineering (Section)

Log.Engineering (Staff)
Job : Follow Up All Process
Report to Management



Eko Wahyu



EPSD – Engineering Service
Job : Support Study Design & Flow Process Enhancement



Wiji M.Qamarudin



EPSD – Production
Job : Trial & Confirmation Process



Sukardi



EPSD – Quality
Job : QC Check



Murdiantoro Yuda W



EPSD – Maintenance
Job : Check Safety, Support Electrical & Mechanical



PAD – Logistic Engineering
Job : Support Study Design & Flow Process Enhancement



Agus S Wisnu A.W



PAD – Logistic Operation
Job : Trial & Confirmation Process



Usman S



PAD – PP & Cost Control
Job : Support unit plant costing process



Andrea



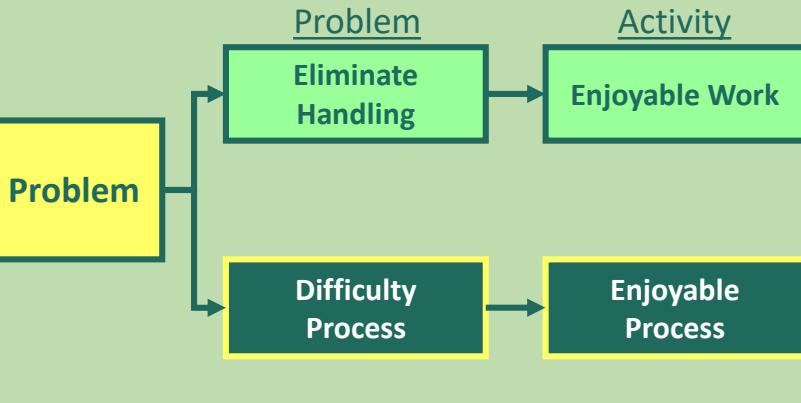
Abduh H

TASK TEAM ACTIVITY

PLAN

1. Task Team Member
2. Close Communication through Collaboration
3. Comprehensive Observation & Massive Improvement

DO



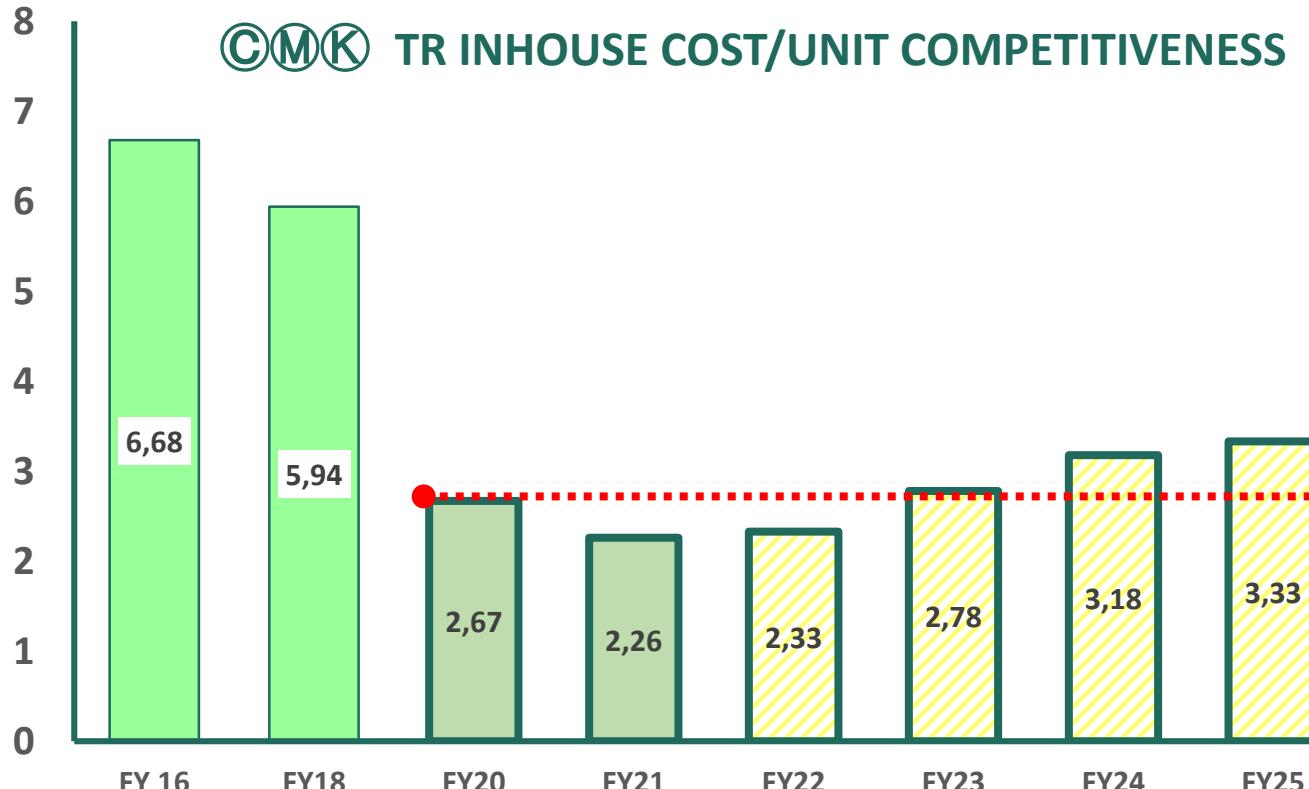
CHECK

FOLLOW UP by TMMIN EPSD & PAD MANAGEMENT

ACTION

STANDARDIZATION IMPROVEMENT & YOKOTEN

4. TARGET ACTIVITY



TARGET : Keep Cost/Unit Competitiveness by Eliminate Handling & Difficult Process

1. STRATEGY ACTIVITY

How To Achieve Keep Cost/Unit Competitiveness..?

Direction from Mr. Warih



*'I' View → 'U' view
Enjoyable Work*

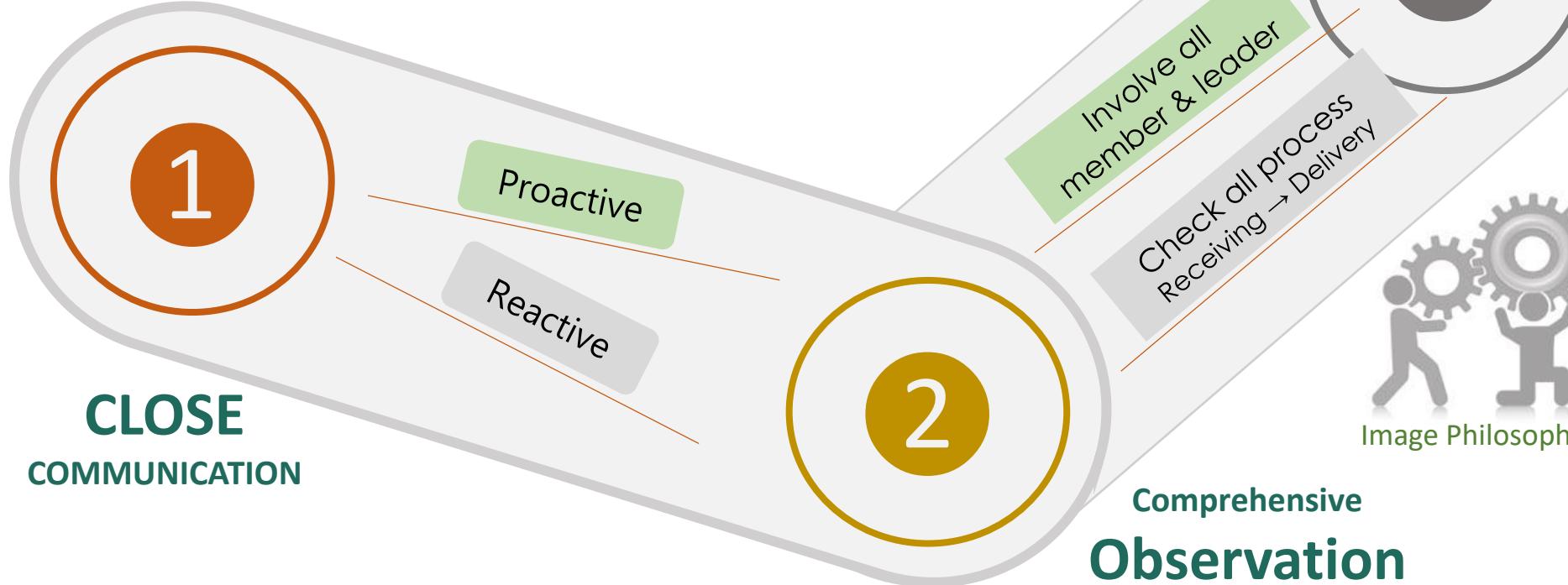


Image Philosophy Blockchain

How to

Participant

Timing

Item Discussion

1. Reactive

Follow Up Member Voice



TL-GL TMMIN PAD & EPSD

Weekly

- **Mapping** difficulties job
- **Setup** temporary countermeasure

2. Proactive

Intense Communication & Involved Top Management

Nemawashi & Invite Top Management



TMMIN PAD & EPSD Top Management
(Until Director)

Bi-Weekly

- **Update progress** to management level
- Sharing from **management Point Of View**

Strong Collaboration

Invite All Supporting



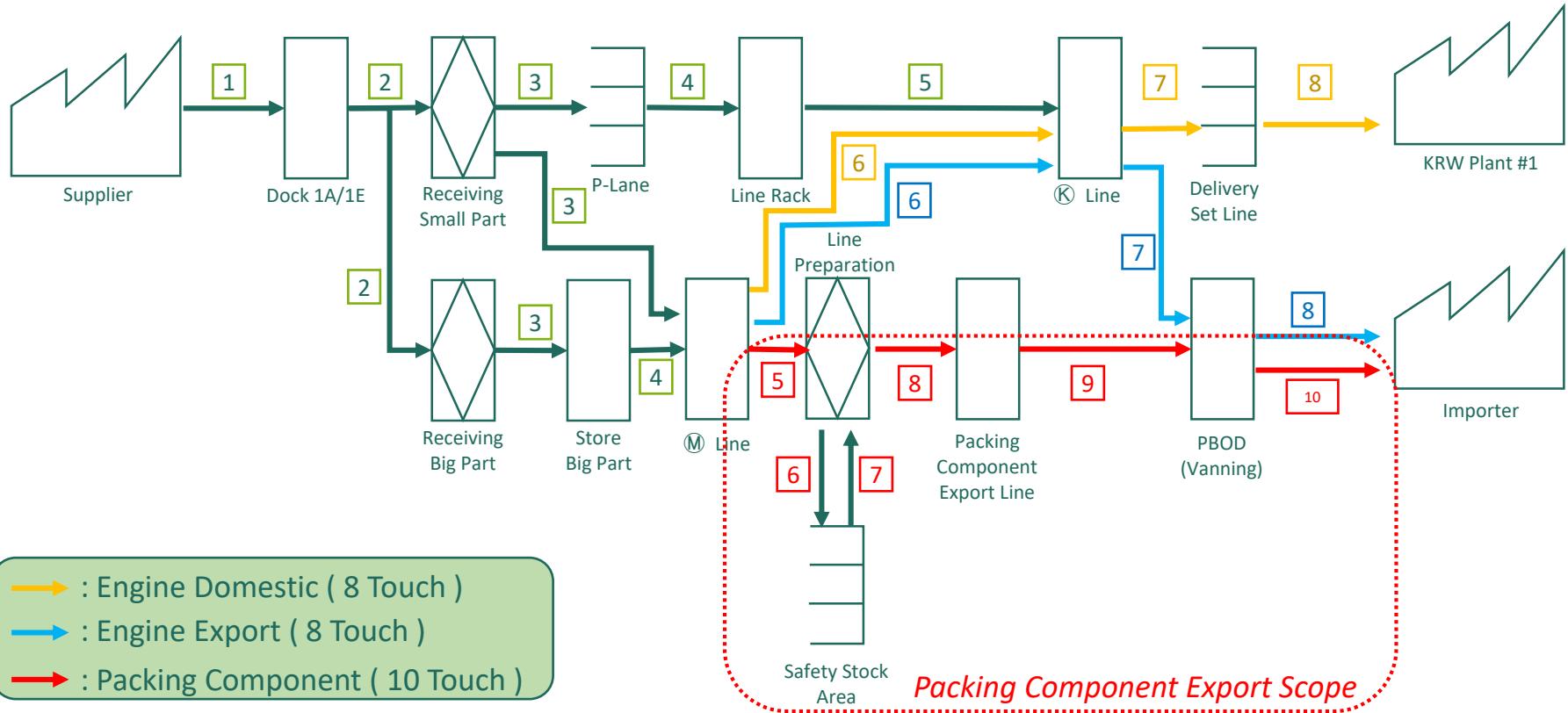
TMMIN PAD & EPSD

Weekly

- **Sharing** difficulties job
- **Discuss** Planning improvement

I Real Activity Genba Observation

MIFC Receiving -> Delivery



Packing Component Export process has the longest touch/handling -> what made this possible?

1. Involve all member & leader level (TL -> GM) from all related parties

Genba Check LH-GM

Study Improvement

Management Advice

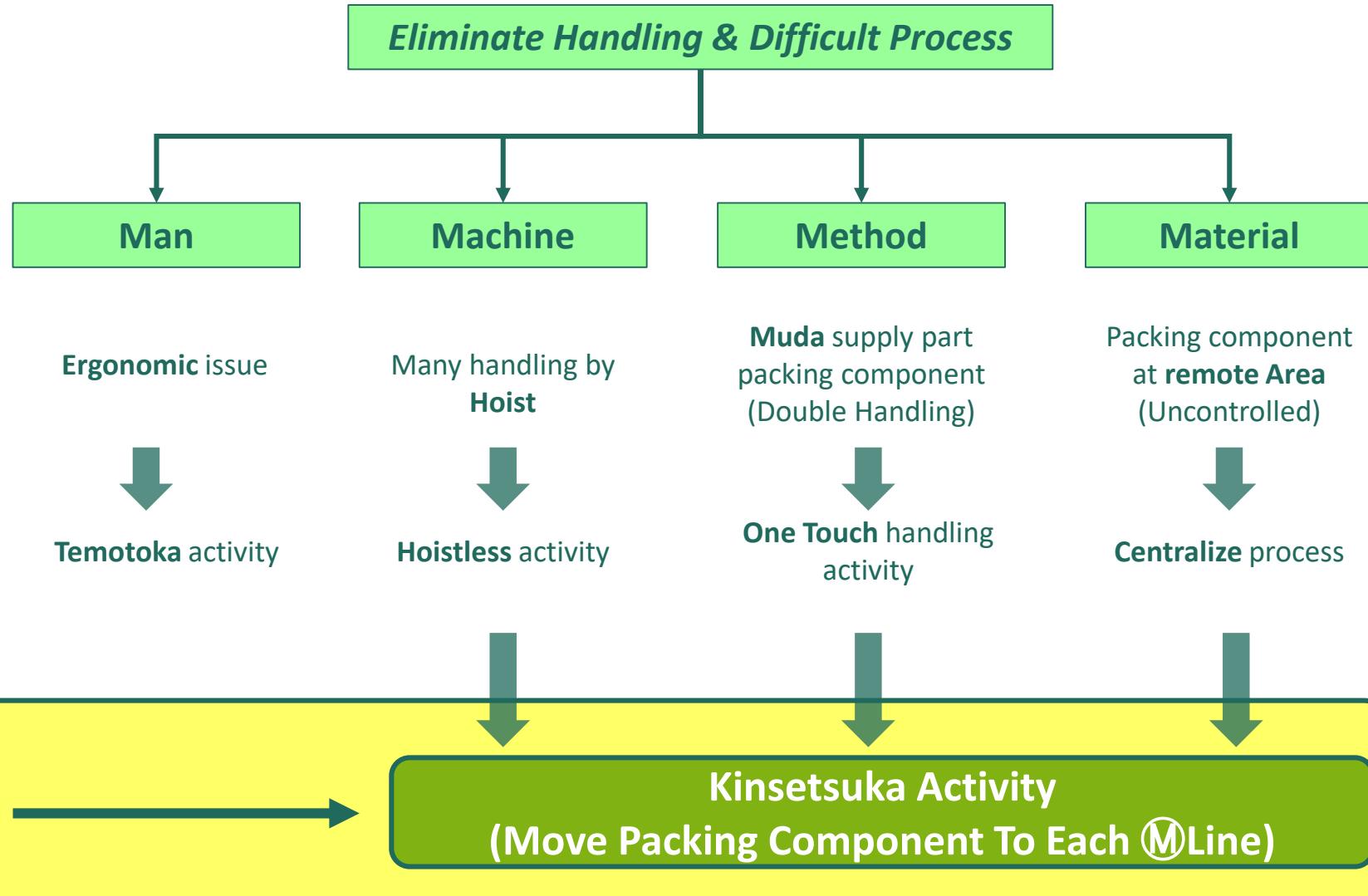
2. Check All Process (from receiving until packing component)**Concern Point from
Genba Observation****Eliminate Handling :**

1. Supply Process

Difficult Process :

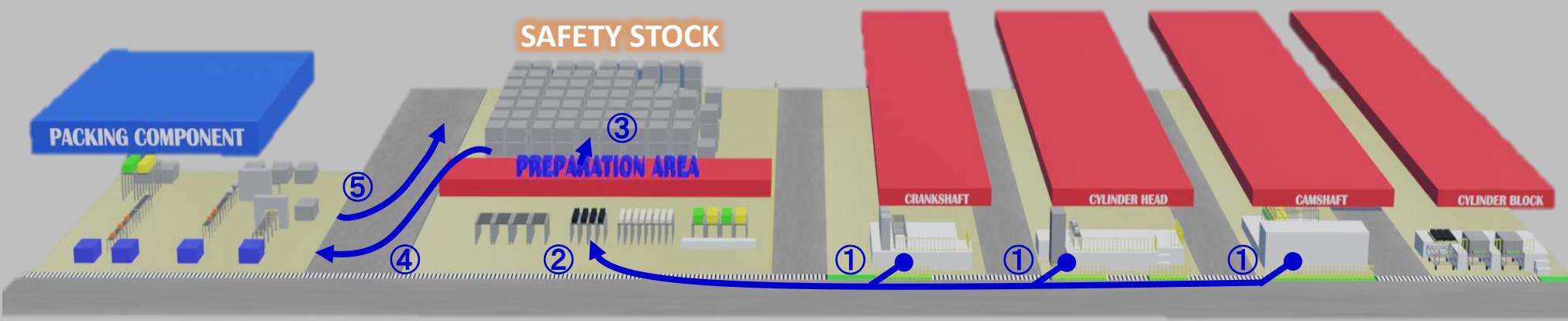
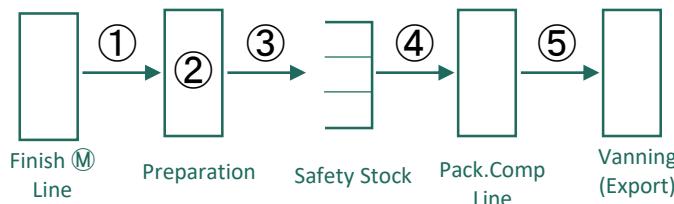
1. Member Voice

I Planning Massive Improvement Activity



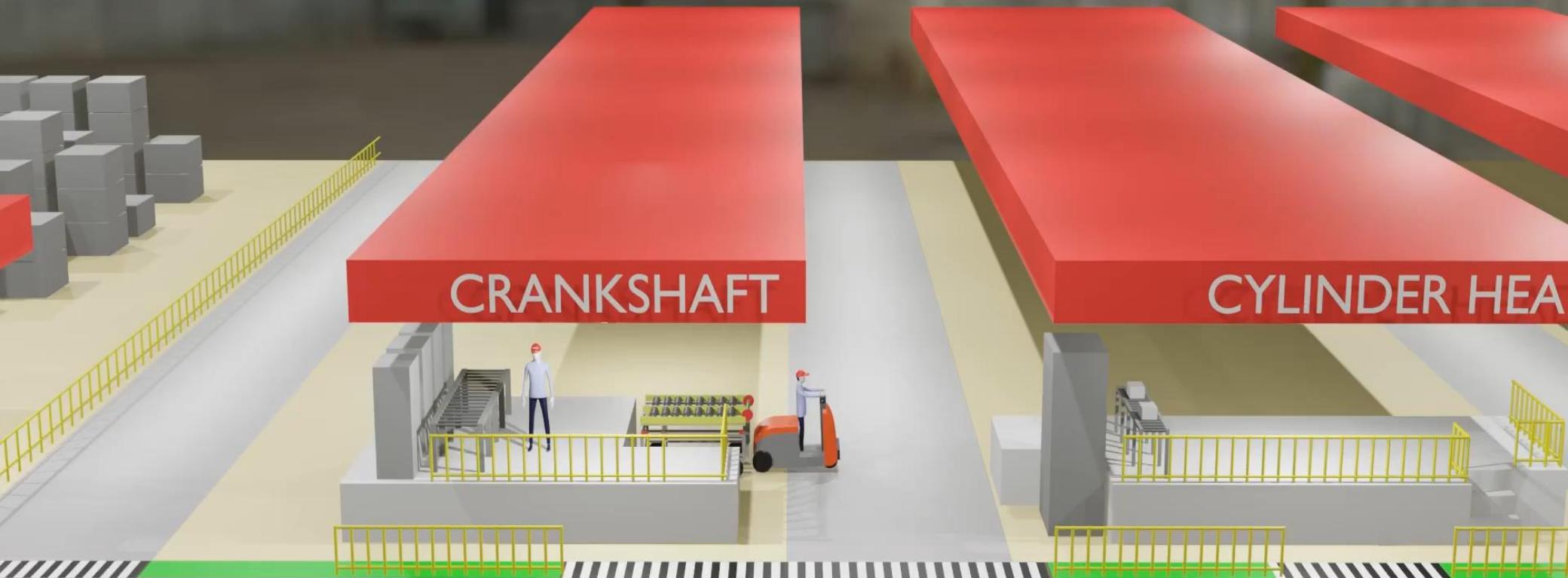
Improvement : Kinsetsuka activity

*MIFC Packing Component



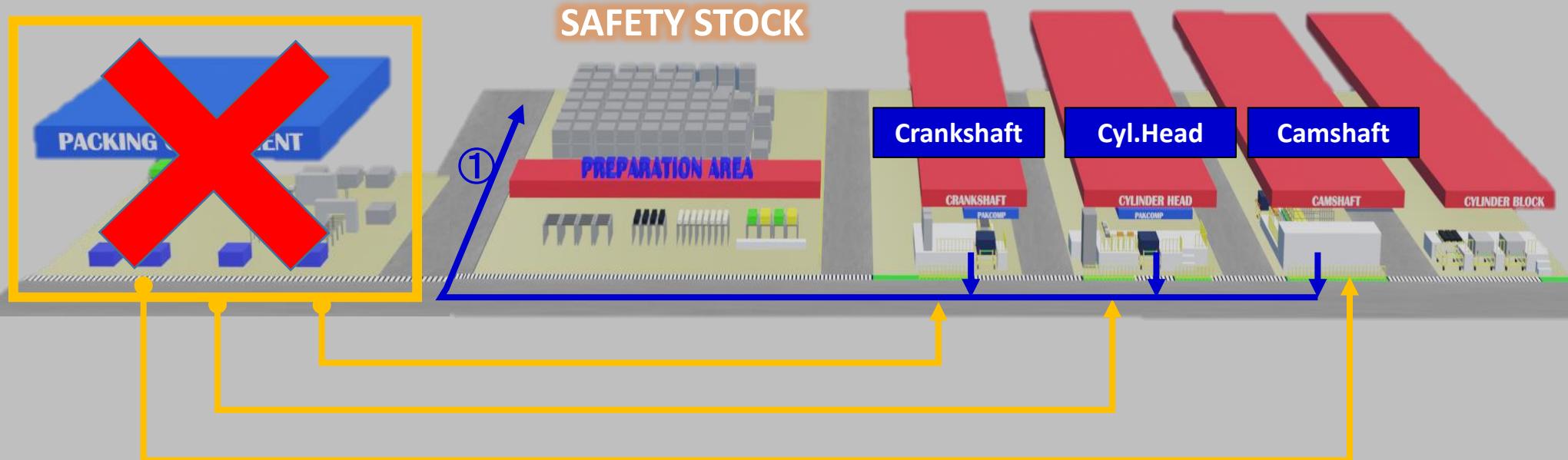
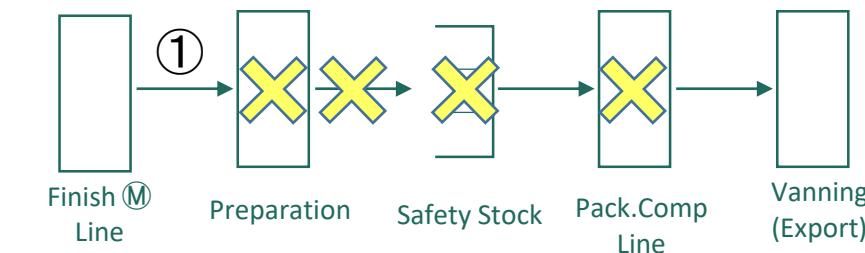
I KADAI

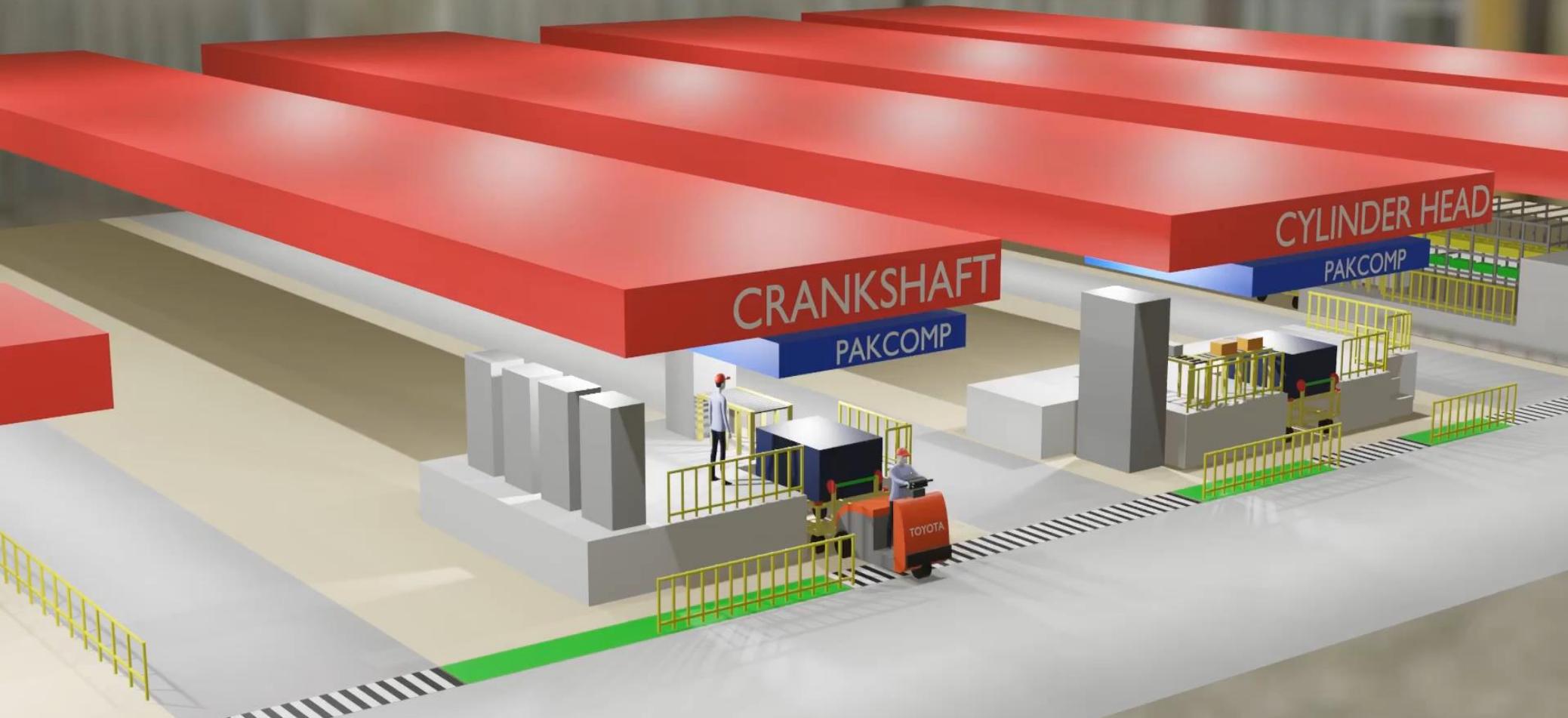
1. Long Distance Conveyance : M Line to Pack. Component ± 70 m
2. SAFETY : Crossing Point Forklift & Towing.
3. Double Quality Check Pack.Comp Material



Take Finished Goods From Line

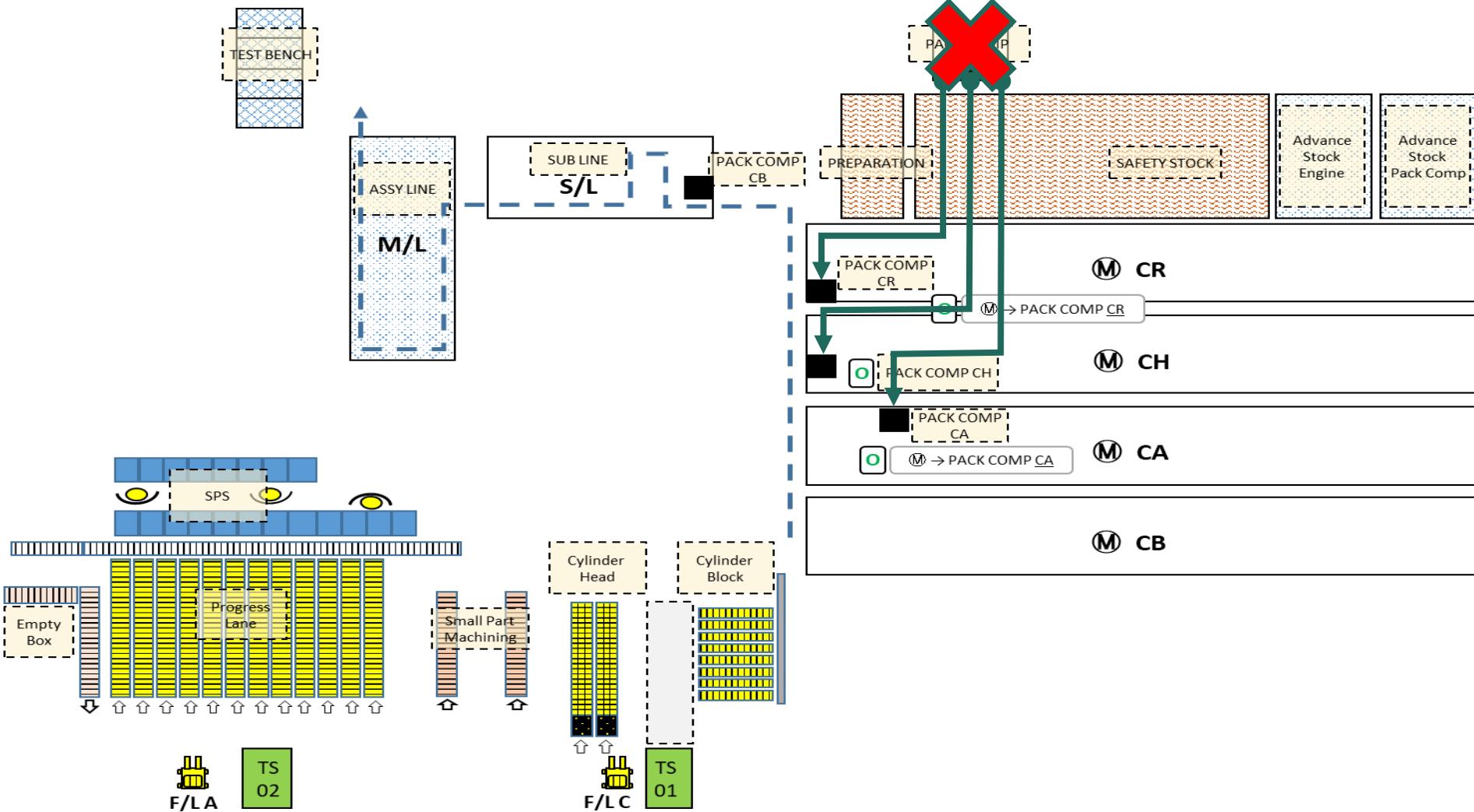
*MIFC Packing Component (After)



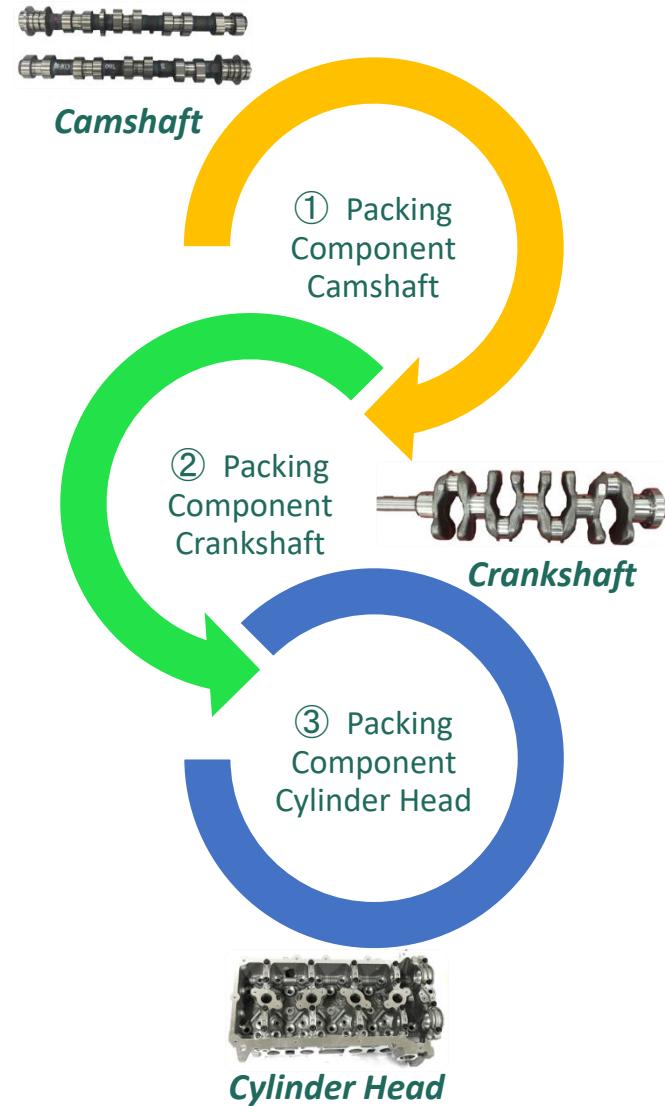


Take Finished Goods From Line After Packing Component

Current Layout (After Improvement)



I Installation Roadmap

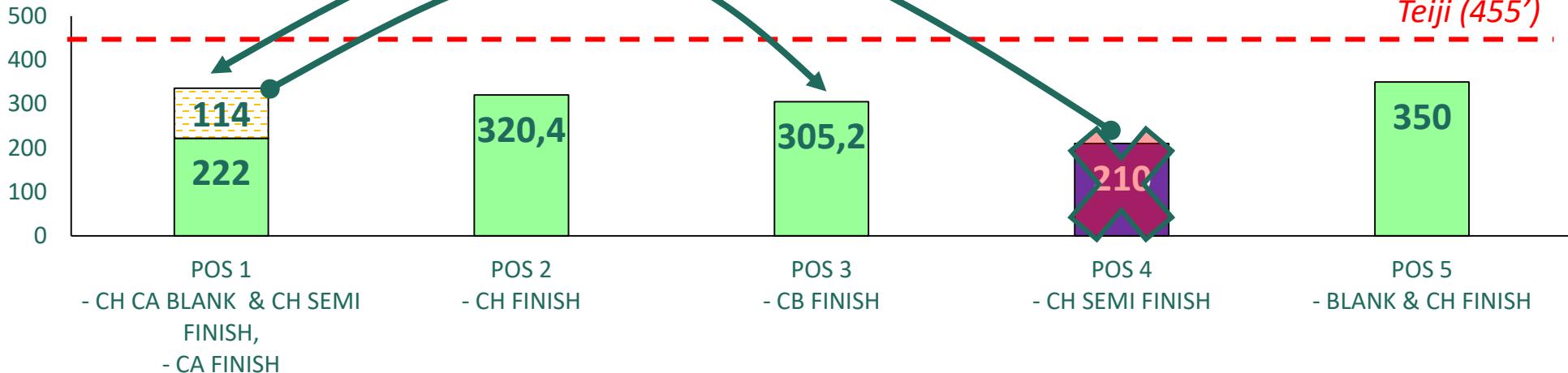


I Implementation

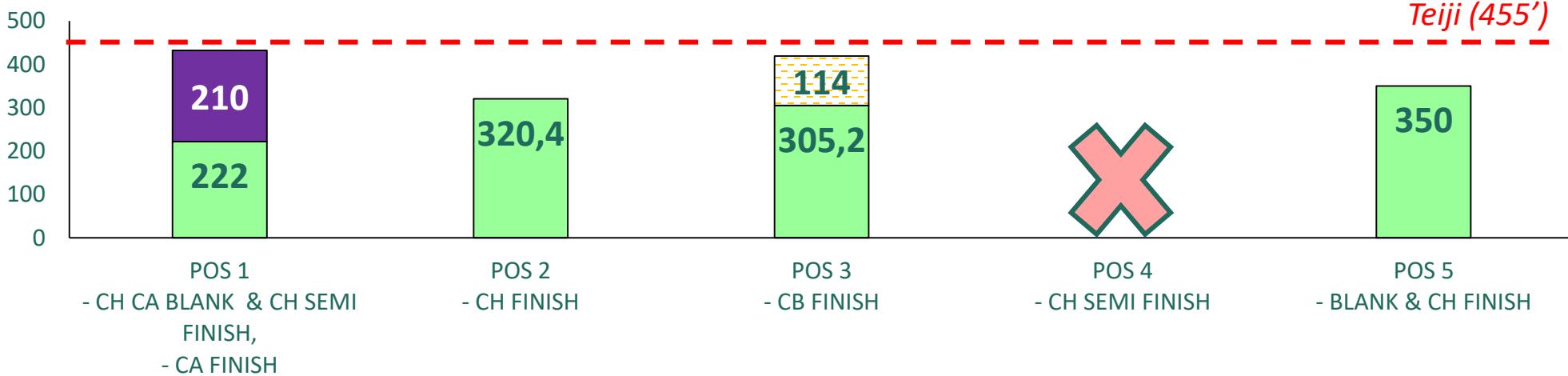


Yamazumi Balancing

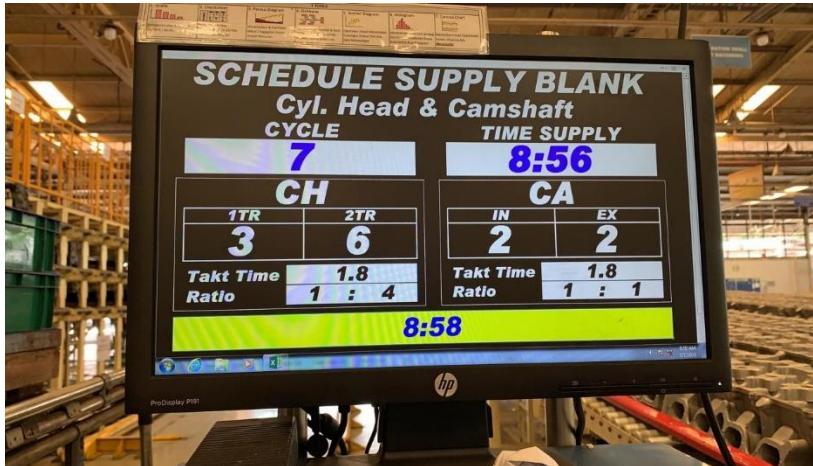
BEFORE



AFTER



I System Support



Andon Supply Store Log (Blank) → M



Andon Supply M/Preparation → K



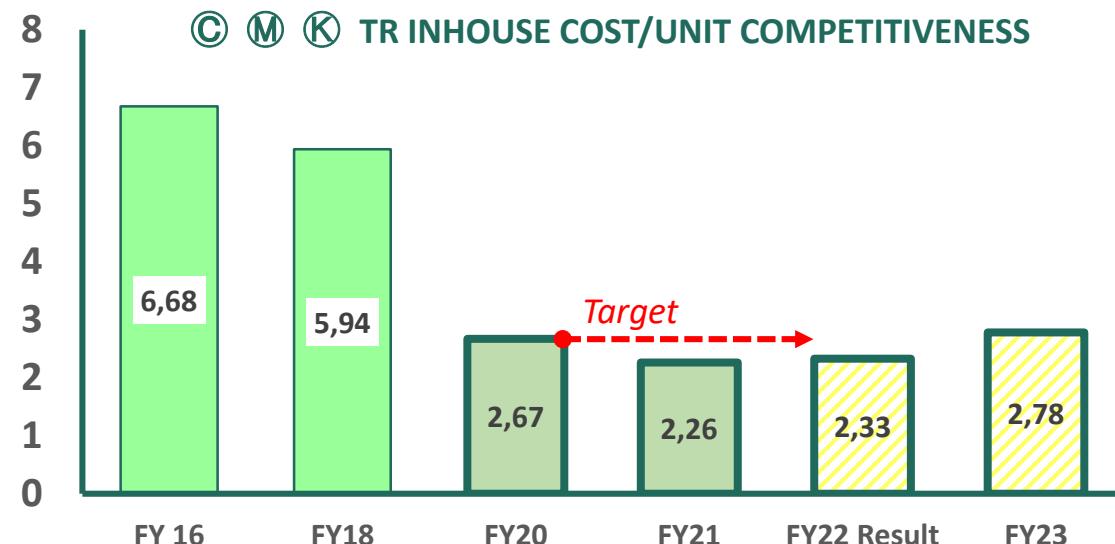
Andon Request Module Pack Comp



Andon Supply Preparation Safety Stock ↔ M→K

I Activity Result

CATEGORY	RESULT
Man Power	↓ 3 Man Power/Shift
Space Reduce	150 m ²
Forklift	↓ 1 Unit
Hoist	↓ 3 Unit



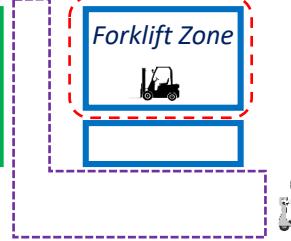
Achieve Cost/Unit As Of December '22

I Impact to SQCP HR

S SAFETY

SAFETY

Eliminate Crossing Point
Towing vs Forklift



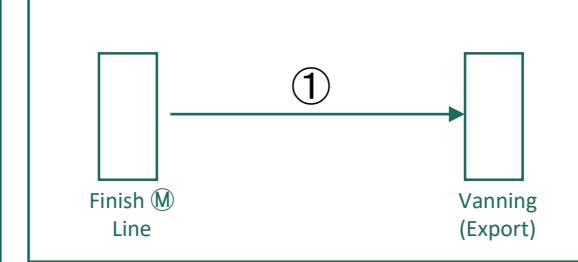
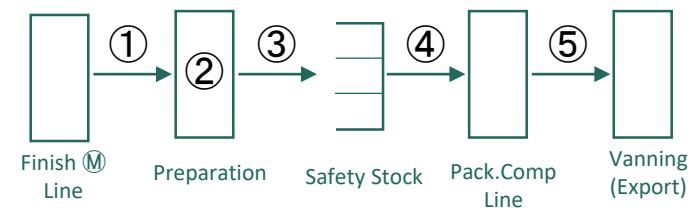
Towing Zone

Q QUALITY

QUALITY

Eliminate Potential Part Export Rusted

*Before



With Direct Supply It Will Reduce Handling & Waiting Time

P PRODUCTIVITY

PRODUCTIVITY

Before



After



↓ Reduce 3 MP/Shift

C COST

COST

Achieve Reduce Cost/Unit :
2.33 from Target 2.67



HR HUMAN RESOURCES

HUMAN RESOURCES

1. Increase Communication Skill
2. Level Up skill and sense to develop Improvement with collaboration

Communication Skills



1. Director Direction for Future Challenge



Message :

Mapping All Process & Equipment for CMK until 2025. Combine machine & equipment for SLIM process

2. Based On Hoshin Division for 2nd Priority Theme

Directorate Hoshin		Strategic Execution	FY 21/22 KPI & Target
Item No.	FY22/23 KPI		
Productivity	b. Achieve PEFF KI=1 (*KI after depre) to become best competitiveness	19. Achieve 200% productivity up compare to FY17 (PAD as coordinator) <ul style="list-style-type: none"> Advance fulfillment of medoari by promote, strong follow up & yokoten activity at each plant Follow up slim structure by eliminate difficulty job for comfort & enjoyable work. 	TR YIP (108.9%) NR YIP (106.9%)
		20. NR Efficient logistic through smooth & slim operation (Logistic) <ul style="list-style-type: none"> Strengthen TPM activity by 3 Pillar massive activity Enjoyable worksite by reduce yarinuki activity. Reduce muda operation by strengthen SW observation & leader activity. Massive 1 byo kaizen activity following member voice. Simple automation & equipment kaizen by engineering activity. 	PEFF = 1 YIP 110%
		21. TR Logistic Operation Optimization (Logistic) <ul style="list-style-type: none"> DL: Reduce CT through TPS Enhancement and massive one touch activity IDL: Reshaping mindset of stop, change, continue in daily work style, accelerate digitalization for enjoyable work 	↓ CT 15% ↓1.325 MH/unit
		22. Kinsetsuka activity expansion to optimize logistic operation (Logistic) <ul style="list-style-type: none"> NR • Reduce muda transportation & muda handling in total logistic operation Absorb fullcapacity & new model SOP with no additional space 	NR : 800 m ² space ↓

Thema :

Achieve **TR Centralize** by Efficiency
Up **200%** and Space **↓75%**

I Sharing Improvement Activity



Mr. Kyogo Onoue
(TMC - Chief Officer TPS)



Mr. H. Ibaragi
(High Max Co.Ltd & AAE Consulting Co.- PD)



Top Management at 26th AP Unit
Kouryukai 2023



**THANK
YOU**

