

WELCOME TO **AGC** CHIBA PLANT



AGC

Today's members

M. ORIHARA

Senior Manager
Kaizen Office

T. YOKOYAMA

Senior Manager
HR Planning Office

Y. OGAWA

HR Assistant Manager
HR & Administration Dept

Y. KITANI

General Manager

H. NAKAMURA

Manager
Kaizen Office

T. TAMAGAWA

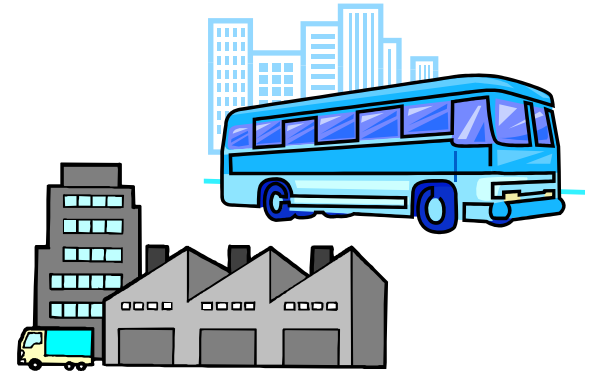
Manager
HR Planning Office

Keiko NAMIKI

"Challenge F" members

AGC

Schedule



9:00 – Opening

9:10 – Introduction of Chiba Plant (DVD)

9:30 – Presentation - “TPM Activities”

10:00 – Go to Plant Tour

***Including introduction of “Utility Dept’s TPM activity” .**

11:00 – Q & A / Closing

AGC Chiba plant TPM activities

How we are progressing our activities.

28th November, 2012

Asahi Glass Company
Chiba Plant

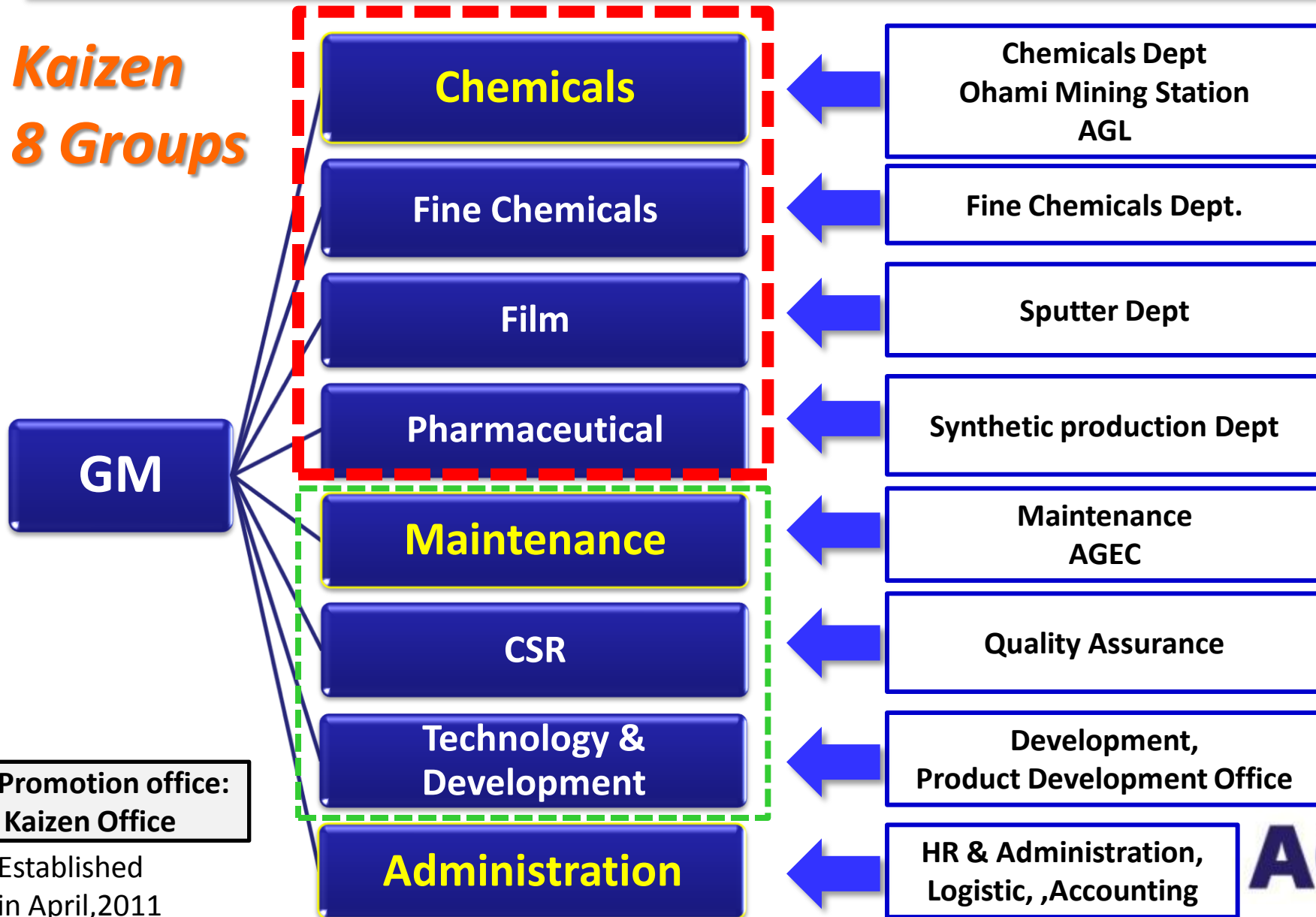


**All employees in Chiba Plant participate
Kaizen (improvement) activity**

“TPM” is one of the method

Organization for Kaizen(improvement) activity

*Kaizen
8 Groups*



Special room for Kaizen Activity

Daruma



To proceed Kaizen (improvement) activity balance is important

Use TPM method



Productivity improvement
Labor productivity improvement
Cost cutting



Leadership

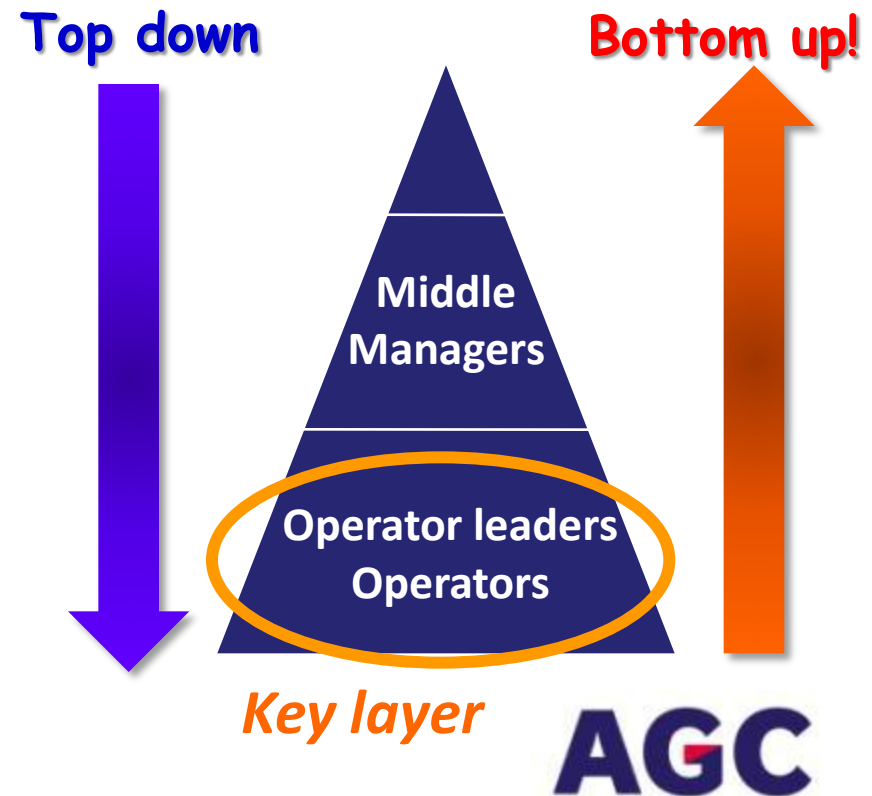
Communication
Fun events

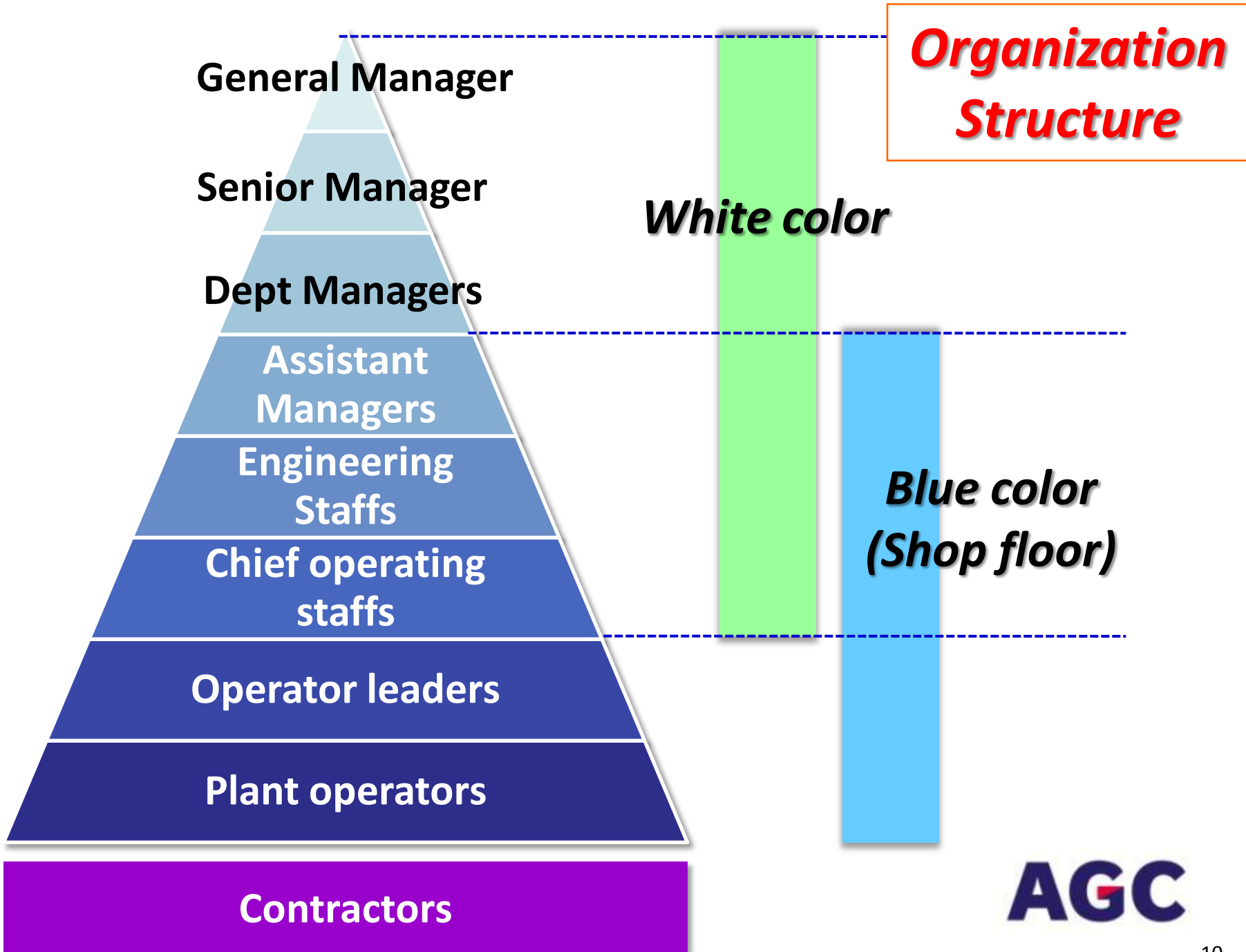


Before we go into details....

TPM activity in here is operated based on Japanese management system and culture

*Not only top down activities, but also **operators** are deeply involved in Kaizen (improvement) activities.*





Objectives of TPM activities

- ✚ Develop employees who play a central role in the future including plants in foreign countries.
- ✚ Through TPM activity, foster Kaizen (improvement) culture in Chiba Plant.
- ✚ Not only desk study, confirm actual scene and actual thing (equipment), educate next generation.



Key points of activities

Key factors to change the culture of our plant

Methods

- ✓ Consulting by JIPM-S
- ✓ Follow up by Kaizen office
- ✓ Senior managers' progress report session
- ✓ Competition in the plant (for Award)

Communication

- ✓ Disclose information (Cost, Profit & loss, etc)
- ✓ Face to face communication session
- ✓ Fun events (Summer festival, Autumn sport festival etc)
- ✓ Participate from top to bottom (All members) *Including contractors
- ✓ General manager motivate senior managers and line managers

Mind

- ✓ Discipline
- ✓ Diversity (Learn from others)

Education

*Introduce concrete
information later*

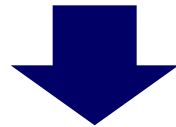
Starting of TPM activities

November 2008 Chemicals Division started TPM activity

Chemicals Company manufacturing technology dep't policy
“Become ideal plant with no loss”

TPM activities are the concrete measures to achieve this policy!

Eliminate losses : Operators find losses which is not
create value in each process.



There is systemized method by using **Loss cost tree**

AGC

Activities : Education & Training

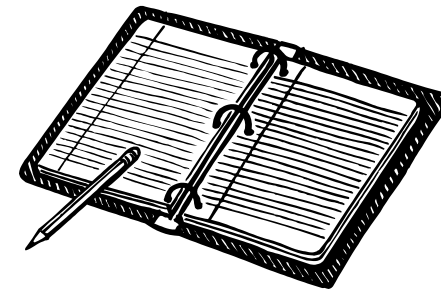
To change managers' (especially line managers) mind, obliged them to take some courses before we launch TPM activities.

➤ **External seminars**

For learning with people from the outside of the company.

➤ **In-company training sessions**

For learning methods.



Activities : Education & Training

External seminars

Each layer took different “Basic TPM Course” to start TPM activity.

	2008	2009	2010	2011
Managers	2	4	7	2
Line leaders (Operator)	11	19	22	3
Others	-	9 (*)	-	-

* Device autonomous maintenance, 5S practice, IE, and etc.

In-company training sessions

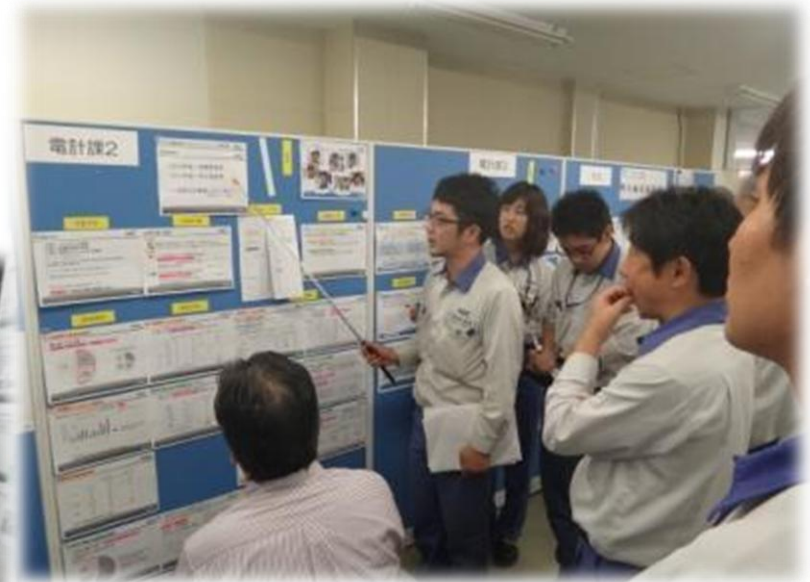
2009 February	“Sangen” principle
2009 June	TPM Basic training
2009 July	Loss cost matrix
2010 November	“Why –why” analysis

Activities : JIPM Consulting session

Proceed the activities, utilize JIPM consulting session.
The meaning of this session is an opportunity to get an advices from the outside of company(different view point) and continuity.

From 2009 to 2012

82 times consulting sessions were held.



AGC

Activities : Information-sharing & Networking

With other companies

Visited following companies and learned from them.

2008 June	Fuji Oil Company
2010 June & July	Idemitsu Kosan Co.,Ltd
2012 March	Mitsui Chemicals, INC.

Inside company

2009 April	Kashima Plant (Flat glass & Chemicals)
2010 October	Takasago Plant (Electronics)
2011 October	Information sharing session *With Aichi Plant (Automotives) and Kashima Plant (Flat glass & Chemicals)



Activities : “Open education” - Training

This college is one of the TPM activities.

“Technical Training” 11 sessions



Teacher Manager or Engineering staff

Participants Employees who are related to their dept

Objectives & Effects By Learning equipments and processes, understand principles and rules.
Employees will be able to make appropriate judgments by themselves.



Activities : “Open education” - Training



EXAMPLE

Where is “Water” come from



We are using following water every day.....

Water for
drinking

Demineralized
water

Cooling water

By teaching process, participants learn principles and rules

Under ground
water

Industrial water

Based on the understanding of essence of processes, **AGC**
try improvement!!

Activities in HR & Administration Dept

Improvement of Labor productivity

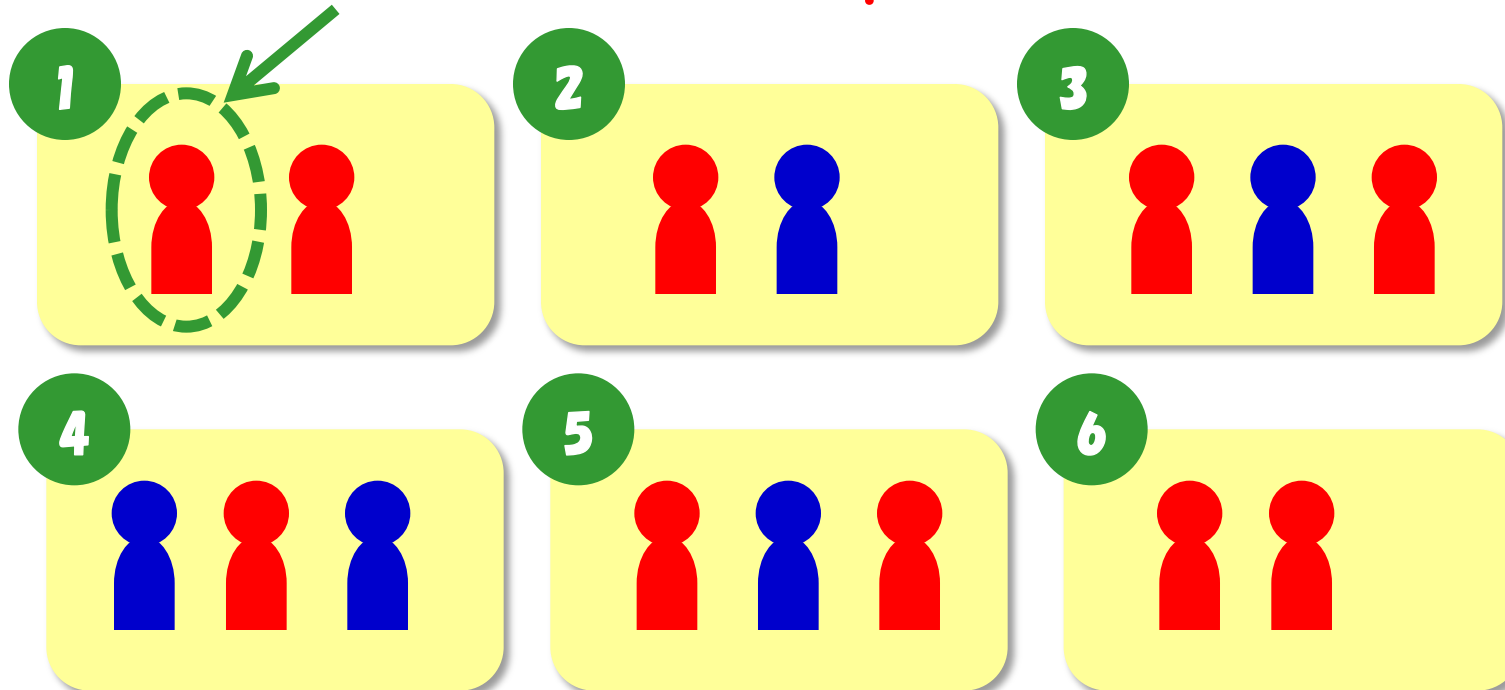
Activities in HR & Administration Dept - 1

Teams

Started from August 2011

- ✓ 6 teams (15 members)
- ✓ Clerk staffs and skilled workers

TPM Leader of our dept



AGC

Consulting Sessions



Competition



Activities in HR & Administration Dept - 2

TPM is the method to analyze operations



1. Preparation

Decide theme and goal, confirm entire picture by flow chart.

2. Confirm current process

Pick up each step and write out all processes in “*Maki-gami* (Roll paper)”.

3. Pick out problems and analyze losses

Pick up problems and questions and make a list, then decide degree of importance of each loss.

4. Improvement

Make improvement plans and implement them.

5. Output and future tasks

Evaluate the output quantitatively and qualitatively.

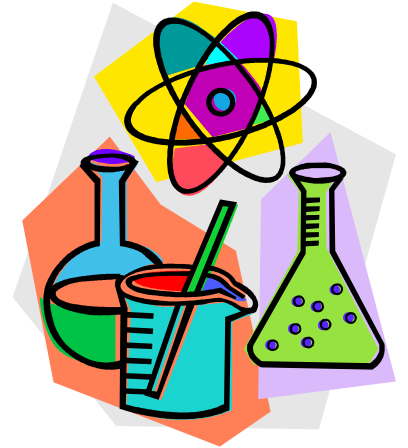
Activities in HR & Administration Dept - 3

Teams & Themes

- 1** **Application for qualification and examination**
Reduce a cost and time for application process
- 2** **Filing system**
Improve work environment by organizing a filing system.
- 3** **Canteen**
Improve operation and reduce outsourcing expenses.
- 4** **Mobile phone**
Improve operation and reduce cost.
- 5** **Welcome customer**
Improve service to guests and preparation .
- 6** **Manual for Payroll operation**
Improve a manual for payroll operation.

Reduce a cost and time for application process of qualifications and examinations

Manufacturing of Chemicals require huge knowledge and qualifications.



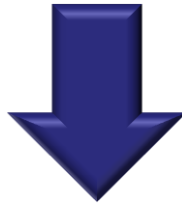
A lot of applications for qualifications and examinations!!

In addition to this fact, many employees mistake these application processes and preparations.

HUGE NUMBER OF LOSSES !!!

AGC

**To improve these losses,
Picked up one application process
of examination.**



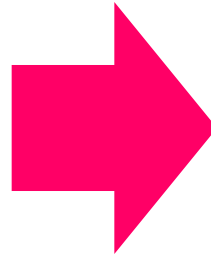
Dangerous object handler

STEP 1

Set a target
Confirm current situation

Currently

4475 min
(75 hours)



Target

2000 min
(33 hours)

- ✓ **Prepare flow chart**
- ✓ **Questionnaires**

STEP 2

Prepare “Maki-gami (Roll paper)”

Process flow	10
Operations	58
Stress of staff	35

<EX>

- ✓ A lot of mistakes in application forms
- ✓ Delay of submitting application

STEP 3

**Pick out problems and
analyze losses**

24 problems !!

- ✓ **60% of all problems are small mistakes in operation**

STEP 4

Improvement

10 improvement has already
done

- ✓ **Changed the application process and reduced the time**

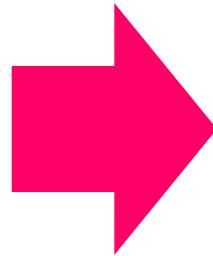
STEP 5

Output and future tasks

achieved 10 improvements

Currently

**4475 min
(75 hours)**



Result

**1400 min
(23 hours)**

Stress of staff 35 ➡ 13

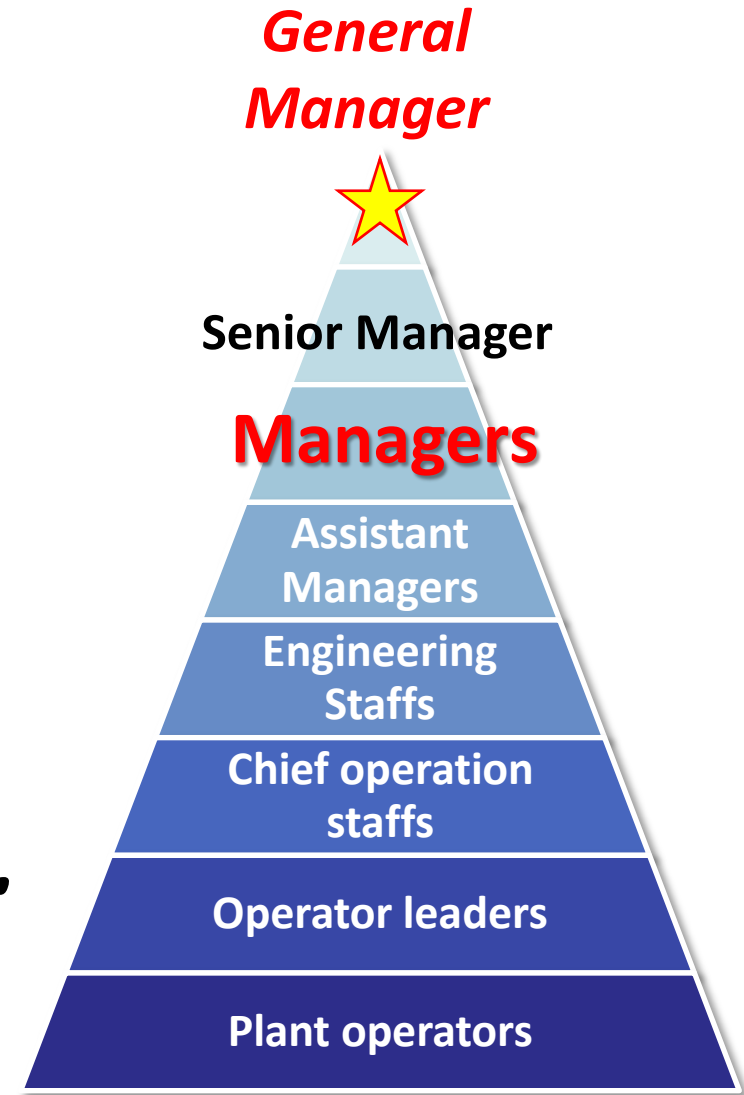
**Through the activity, we found
next improvement points.**

Improvement continues.....

keys for success are...

Based on General manager's strong leadership

- *How managers describe a goal and convey it to staffs !*
- *How managers involve the activities !*
- *How managers encourage their staffs!*



AGC

THANK YOU

 ***NEXT***

Plant tour by “*Challenge F*”

Including introduction of “Utility Dept’s TPM activity !

Chemical Chain of Chiba Plant

