2020 TPM Award Application Outline

Japan Institute of Plant Maintenance

This Application Outline is valid for regions outside of Japan for 2020 TPM Awards only TPM and TPM logo are registered trademarks of Japan Institute of Plant Maintenance

2020: SECTION 1

FOREWORD

Established in 1964, with the purpose of encouraging development of the manufacturing industry, factories which displayed remarkable achievement in plant maintenance were presented with PM Excellence Awards, the predecessor of the TPM Awards. Since 1971, the awarding criteria were changed due to advancements in plant maintenance technology, and factories which displayed remarkable achievement in Japan originated Total Productive Maintenance were presented with TPM Awards. In response to further advancements, the definition of TPM was refined in 1989. It now encompassed the entire company from the shop floor to the executive boardroom, creating a true company wide commitment to production excellence. As a result, factories which have achieved company-wide efficiency by adopting company-wide TPM are presented with the award.

In accordance with amendments made to the Japanese legal system, JIPM transformed itself on April 1, 2012 from a *Shadan-Hojin*, a public interest corporation under the control of the Ministry of Economy, Trade and Industry, to a *Ko-eki Shadan-Hojin*, a public interest incorporated association approved by the Cabinet Office. The TPM Awards, which started in 1964, has been certifying Assessment Agencies since 2007 and, in cooperation with these certified agencies, has been operating the TPM Award system for enterprises and factories outside Japan. Due to the change of its structure, <u>JIPM will directly accept applications for evaluation</u> from the 2013 TPM Awards onward. Agencies that have served to date as assessment agencies—CETPM (Centre of Excellence for TPM, Germany), CII (Confederation of Indian Industry, India), CSD (Corporate Synergy Development Center, Taiwan), KSA (Korean Standard Association, Korea), SMMT (The Society of Motor Manufacturers and Traders Limited, UK) and TPA (Technology Promotion Association Thailand-Japan, Thailand)—are going to assume the role of Associate Agency during the evaluation for the JIPM-TPM Award. We recommend that enterprises and factories that would like to be evaluated consult with the nearest Associate Agency as required.

We would like to take this opportunity to offer our sincere gratitude to all enterprises and factories who have received awards and have embraced the system of evaluation by overseas assessment agencies as well as by assessment agencies and concerned parties who have been involved.

We strongly recommend the use of the TPM Awards operated by JIPM, who has evaluated and awarded for "Operational Excellence and Maintenance Excellence" throughout the world, as a step to further progress and develop your enterprise or factory.

Japan Institute of Plant Maintenance

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2. Application Outline & Principles 2.1 Application Outline

1. Eligibility and Requirements

Plants/factories that have introduced TPM (Total Productive Maintenance - PM with participation by all members) and that have shown significant achievement are eligible to apply.

Please confirm that your plant meets the requirement before applying.

Eligibility for each category is as specified below.

1) Award for TPM Excellence, Category B

- Must have minimum of 2 years or more of achievement activity after the introduction of TPM
- Must have deployed activity based on 5 pillars of TPM focusing on the production site (individual improvement; autonomous maintenance; planned maintenance; education and development; safety, sanitation and environment control).
- Must have completed Step 4 for autonomous maintenance activity¹.
- Must have completed infrastructure development for TPM activity with both tangible and intangible achievements obtained

2) Award for TPM Excellence, Category A

- Must have minimum of 3 years or more of achievement activity after the introduction of TPM
- Must have deployed activity based on 8 pillars of TPM by all staff members of the
 plants/factories (individual improvement; autonomous maintenance; planned
 maintenance; initial management; quality maintenance; administrative and supervisory
 department; education and development; safety, sanitation and environment control).
- Must have completed Step 4 for autonomous maintenance activity¹.
- Must have completed infrastructure development for TPM activity with both tangible and intangible achievements obtained

3) Award for Excellence in Consistent TPM Commitment

- Must have received the Award for TPM Excellence (Category A or B)
- Must have approximately 2 years of achievement activity after receiving the Award for TPM Excellence
- Must have deployed activity based on 8 pillars of TPM by all staff members of the
 plants/factories (individual improvement; autonomous maintenance; planned
 maintenance; initial management; quality maintenance; administrative and supervisory
 department; education and development; safety, sanitation and environment control).
- Must have maintained and enhanced the results achieved at the time the Award for TPM Excellence was received and have established measures for their maintenance and continuation

2020: SECTION 2 APPLICATION OUTLINE & PRINCIPLES Page 3

From 2011 there must be clear evidence of completion of Step 4 from the time of making the application.

2.1 Application Outline

4) Special Award for TPM Achievement

- Must have received the Award for Excellence in Consistent TPM Commitment
- Must have minimum of 2 years or more of achievement activity after receiving the Award for Excellence in Consistent TPM Commitment
- Must have deployed activity based on 8 pillars of TPM by all staff members of the
 plants/factories (individual improvement; autonomous maintenance; planned
 maintenance; initial management; quality maintenance; administrative and supervisory
 department; education and development; safety, sanitation and environment control).
- Must have maintained and enhanced the results achieved at the time the Award for Excellence in Consistent TPM Commitment was received, and be engaged in distinctive and revolutionary activities

NB Award for excellence in Consistent TPM Commitment is required for the applicants who wish to apply for Special Award for TPM Achievement.

5) Advanced Special Award for TPM Achievement

- Must have received the Special Award for TPM Achievement
- Must have minimum of 2 years or more of deployment activity based on 8 pillars of TPM after receiving the Special Award for TPM Achievement and show significant improvement in results
- Must be deploying TPM activities after establishing important items and be showing results
 - eg: Management (production maintenance, quality maintenance, environment maintenance, cost reduction, etc.), SCM, Development (new products, new facilities, etc.), and other contents are independently determined in line with the business category of the eligible site.

6) Award for World-class TPM Achievement

- Must have minimum of 2 years or more of deployment activity based on 8 pillars of TPM after receiving the Special Award for TPM Achievement or the Advanced Special Award for TPM Achievement.
- Must have deployed distinctive and creative TPM activities, and be showing results.

[Notes for Application]

- 1. Each Award Category is applicable by plant/factory. (Applications for single department or lines are not eligible).
- 2. Applicant must have implemented Total Productive Maintenance (TPM) for at least the minimum time periods outlined above.
- 3. The period between winning an award and applying for the next award category must be two years at least; however, in certain situations such as temporary shutdown of the applicants' plants, this requirement may be waived.
 - (e.g. Plant who wins the Award for Category A in 2019 can apply in 2021 at the earliest.)
- 4. The eligibility of applications from sites which have had a serious accident resulting in pollution, explosions, fires and/or serious injury or which has been/is involved in any social scandal within a year of application will be decided by the TPM Awards Committee.
- 5. All of the awards above can be applied for again after being won

2. Application Outline & Principles 2.1 Application Outline

IMPORTANT

Definition of "Completion of the 4th Step" with regard to Autonomous Maintenance (Jishu-Hozen) in the Application Requirements for 2020

One of TPM's focuses is preventive action. In Autonomous Maintenance (Jishu-Hozen), operators are expected to have the ability to prevent equipment and workplace-related losses. An assessment is carried out to quantitatively evaluate each operator's results and performance obtained through Autonomous Maintenance activities and verify whether each operator has the ability to prevent losses. The phrase "completion of the 4th step" with regard to Autonomous Maintenance means that each operator has understood the functions and structures of the equipment in their workplaces in order to prevent losses.

Under the application requirements, the 4th step is <u>NOT</u> considered to be complete in any of the following cases.

- A. If the 4th step in Autonomous Maintenance has been completed only for model equipment, model lines, and model workplaces
- B. If the 4th step is determined to have been completed through diagnosis by the Autonomous Maintenance teams (without involvement of managements)
- C. If the percentage of equipment subject to Autonomous Maintenance in the workplace being assessed for which the 4th step has been completed is less than 75% (note that this calculation includes equipment and production lines that existed at the kickoff of TPM but does not include new equipment introduced (or relocated) after the kickoff.)

Applicants for 2020 category A or category B are required to have completed at minimum 76% of the 4th step by the application deadline.

Typical examples of names for the 7 steps of Autonomous Maintenance:

STEP	Mechanical Equipment case
1	Initial clean-up (Cleaning and inspection)
2	Countermeasures for contamination sources and hard-to-access areas
3	Preparation of tentative standards for "Jishu-Hozen"
4	General inspection
5	Autonomous inspection
6	Standardization
7	Thorough implementation of self-management

^{*} In the future, this percentage will be changed to 100% after sufficient notice has been given.

2. Application Outline & Principles 2.1 Application Outline

2. How to Apply

- Fill in and submit the application form (refer to sample in <u>Section 3 page 15, 16</u>) to the office of JIPM by December 27, 2019.
 - The application should be typed and made by the plant/factory.
- 2. In addition, the profile of the plant/factory must be attached to the application form (refer to <u>Section</u> 3 page 17)
- 3. It is optional (not obligatory) to submit a Non-Disclosure Agreement (NDA) (refer to sample in <u>Section 3 page 19, 20.</u> The actual form is separately provided.)

3. Withdrawal and Refund Policy

The applicant may withdraw the application at anytime by submitting a withdraw form (refer to <u>Section</u> <u>2</u>– <u>page 13</u>) by electronic mail.

The withdrawal fee applicable will depend on the progress of the process at the time that the completed withdrawal form is received by JIPM.

See Section 4-page 23 for details of the fees that would apply.

4. Assessment Fee, Travel Cost and Tax

- For details of the Assessment costs, please refer to <u>Section 4.</u>
- All invoices will be issued in JP Yen and all payments should be in JPY also
- The invoiced amount does not include any tax and transfer fee levied by the applicant's country.
- Where withholding tax may apply due to specific circumstances in certain countries, JIPM must be
 made aware of this and the applicant must provide all necessary support to enable JIPM to recover
 amounts from the tax authorities on a timely basis.

5. Optional Pay Service for Applicants

1. Follow-Up

This is for applicants who have won a TPM award in the past and wish to know whether their plant is well improved as based on comment given by assessors during TPM Award assessment or their plant level is qualified enough to apply upper award.

An assessment team of two from JIPM visit plant and give further advice.

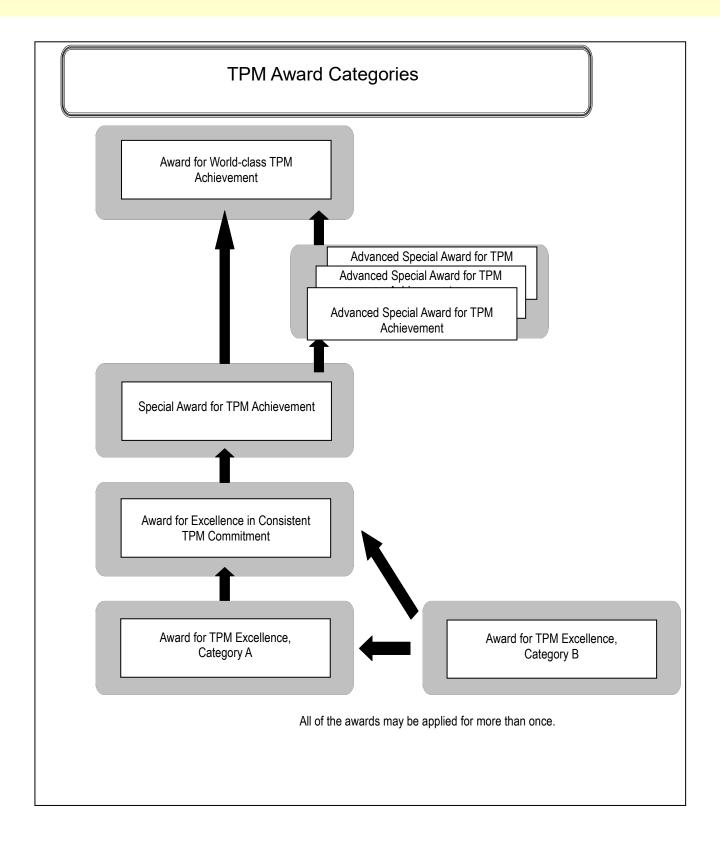
[Period]: one or two days from February to April in every year

[Fee]: 500,000 JPY per day + travel cost of two person

[Note]: * This is not consulting service.

- * A plant which apply to TPM Award of the year cannot apply to Follow-up during TPM Award assessment (from accepted application form to finish all assessment).
- * A plant can apply this service 2 times in year at maximum.
- * Applicant cannot nominate members of JIPM team.
- * Applicant should submit Application Form for Follow-up 2020 (Please refer to our webpage) at least 3 month before the request schedule.
- * The schedule might be changed from the request. The schedule will be concluded in discussion after accepted Application Form.

2. Application Outline & Principles 2.2 Flow of TPM Award Categories



2.3 Main Assessment Principles

1. Main Assessment Principles

- (1) Assessment consists of first and second stages.
- (2) Assessment will be performed by the Award for TPM Excellence Assessment Committee in line with the assessment criteria and checklist items.
- (3) All assessment will be performed at the applicant plant/factory.
- (4) As a rule, the number of assessors visiting the applicant location is as follows:

Note: the number of assessors is subject to change depending on the scale of the plant/factory and the content of the assessment.

- i) Award for TPM Excellence Category A and Category B, Award for Excellence in Consistent TPM Commitment, Special Award for TPM Achievement: <u>2 to 3</u> <u>assessors</u>
- ii) Advanced Special Award for TPM
 Achievement, Award for World-class TPM Achievement: 3 to 4 assessors
- (5) Other than the above-mentioned assessors, an assistant assessor may be present during the assessment.
- (6) As a rule, Category B, A, Consistent, Special Award, the assessment will be performed in 1 day. However, this is subject to change depending on the scale of the plant/factory and the content of the assessment.
- (7) Advanced Special and World Class Award, the duration of the assessment will be decided after the submission of the application (2 days or longer in many cases).

2. Competence Research (Period: January-February 2020)

About the detail of Competence Research, TPM Award Office will announce to applicants after received application form.

3. First-stage Assessment (Period: March-June 2020)

- (1) Using the Assessment Criteria and Checklist for each award (refer to <u>Section 6</u>), screening will be performed for the status of TPM activities, their tangible and intangible results, and the level of understanding exhibited by supervisors, promotional staff in charge, and promotional staff members. Assessors will determine whether the applicant is eligible to move on to the next stage.
- (2) Site being assessed must satisfy the items contained in the "Assessment Criteria" (please refer to <u>Section 6</u>).
- (3) The assessment of tangible and intangible achievements will cover the performance following comment of TPM activities.

2.3 Main Assessment Principles

- (4) The results of the assessment will be announced by the lead assessor on the day of assessment.
- (5) In the event that the applicant does not pass the first-stage assessment, the applicant may reapply in following years.
- (6) There is not "conditional pass" system. When Assessors cannot judge in the regular schedule, the plant fails first stage assessment. If the resetting of First stage assessment is required, additional assessment fee and traveling cost will be required.

Required Documents

• TPM Activity Reports (4 copies and 2 CDs) should be delivered to JIPM

by 15 February 2020.

- Assessment Agenda, Assessment Guide
 By 30 days prior to 1st Stage assessment date.
- Meeting Minutes of First Stage Assessment
 Within 30 days after the 1st Stage Assessment date.

4. Second-stage Assessment (Period: September - December 2020)

- (1) Plants/Factories that have successfully passed the first-stage assessment will continue to the second stage.
- (2) Using the assessment checklist for each award, screening will be performed for progress in the status of TPM activities following the first-stage assessment.
- (3) Assessment results will be determined at JIPM TPM Awards Committee Meeting that will be held by **the end of January, 2021**.
- (4) In the event that the applicant does not pass the second-stage assessment, the assessment result from the first-stage assessment will be annulled.

Required Documents

- TPM Activity Reports (4 copies and 2 CDs) should be delivered to JIPM By 40 days prior to 2nd Stage assessment date.
- "KAIZEN" Improvement Report
 By 40 days prior to 2nd Stage assessment date.
- Assessment Agenda, Assessment Guide
 By 30 days prior to 2nd Stage assessment date.
- The Minutes of Second Stage Assessment
 Within 30 days after 2nd Stage assessment date.

Note: Companies applying for Advanced Special Award and World Class Award are required to submit 5 copies and 2 CDs of TPM Activity Reports for each assessment.

Updated information from the First Stage assessment should be easily recognized by the assessor such as highlighting the section with the updated information. Sections with new improvement cases also should be highlighted to be found easily. (Information in the CD format should be protected as a security measure).

2.3 Main Assessment Principles

5. Passing Score

Using the assessment criteria and checklist, the following minimum scores are required to pass the Second Stage assessment. (*Note:* Applicants' scores are confidential and will not be disclosed to the applicants themselves)

Award for TPM Excellence, Category B
 The applicant must score a minimum of 70 points on 100-point Checklist C.

- Award for TPM Excellence, Category A
 The applicant must score a minimum of 70 points on 100-point Checklist C.
- Award for Excellence in Consistent TPM Commitment
 The applicant must score a minimum of 80 points on 100-point Checklist C.
- Special Award for TPM Achievement
 The applicant must score a minimum of 70 points on 100-point Checklist B.
- 5) Advanced Special Award for TPM Achievement
 The applicant must score a minimum of 80 points on 100-point Checklist A.
- 6) Award for World-class TPM Achievement The applicant must score a minimum of 80 points on 100-point Checklist S.

6. In the Case of Social Scandal or Serious Accident

- (1) In the event that a TPM Award applicant has a past record of social scandal or serious accident causing pollution, casualty, or death 1 year prior to the TPM Award application, the TPM Awards Committee will determine whether the application will be accepted.
- (2) In the event that a TPM Award applicant has a social scandal or serious accident causing pollution, casualty, or death before passing the assessment by the TPM Awards Committee Meeting, the TPM Awards Committee will discuss the matter and may cancel assessment.
- (3) In the event that a TPM Award applicant has a social scandal or serious accident causing pollution, casualty, or death during the year after passing the assessment by the TPM Awards Committee Meeting, the TPM Awards Committee will discuss the matter and may revoke the Award given.
- (4) A report should be submitted to JIPM at the time an application is submitted if (1) above applies, or upon the occurrence of the scandal or accident if (2) or (3) above applies. Please include the following information in the report:
 - ① Name of company/plant/factory
 - ② Location
 - 3 Date of occurrence
 - 4 Location of occurrence
 - Status (including casualty)
 - © Copies of any articles if published in the media such as newspapers
 - ⑦ Causal analysis
 - ® Measures taken to prevent recurrence, etc.
- (5) In the event that the application has been withdrawn or revoked due to social scandal or serious accident, achievements for the relevant year will be annulled (passing of application screening, etc.). If a decision has been made to withdraw or repeal the award after the awards ceremony, the award plaque must be returned immediately.

2.3 Main Assessment Principles

7. Notification of the Assessment Result

The assessment result will be finalized <u>during January 2021</u>, and all applicants will be advised of the result.

The TPM Awards Committee will take charge of the final approval of passing.

The results of the TPM Awards will be announced by e-mail from JIPM to the contact person within the applicant company as stated on the application form.

The Awards winners will then be listed on the JIPM Web-Site (http://www.jipm.or.jp/en/index.html)

For further progress of TPM throughout the world, JIPM would ask the winners to make their TPM activity public by presentation or publishing.

2.4 Other Points

1. Confidentiality Agreement

A confidentiality contract (Non-Disclosure Agreement) will be entered into between the applicant plant/factory and JIPM concerning the intellectual properties of the applicant provided through the assessment processes.

2. Handling of Activity Reports and Requirement for their Return

The applicant will send activity reports, CD-ROM, minutes, and Kaizen improvement plans to JIPM. JIPM will use the activity reports, CD-ROM, minutes, and improvement plans sent by the applicant only for the purpose of assessment. JIPM will compulsorily store all of the activity reports and CD-ROM of the awarded applicants as confidential data that will not be disclosed publicly.

3. Assessors and Assistant Assessors

Since 2007 JIPM has commenced a programme to develop new Assessors on an international (non-Japanese) basis. During 2009 the first non-Japanese TPM Award Assessors were appointed. Others are progressing towards becoming Assessors and are categorized as Assistant Assessors. The Assistant Assessor will make comments to the Assessors but will not be involved in the scoring process during the Assessment Day.

4. The Assessment Days

Great care must be taken to ensure the Assessment Day runs efficiently.

Presentations in the main meeting room and shop floor demonstrations should be trialed beforehand to ensure there is adequate time available in a standard working day. Allowance must be made for breaks and transferring from one place to the next. Further details can be found in *Section 5*.

5. Awards Ceremony

Winners will be presented with a plaque at the "TPM Awards Ceremony" to be held some time during <u>March of 2021</u>. (The exact details to be announced in the future)

6. Complaints

During the assessment process, neither JIPM nor the Assessors will make any personal requests to the applicants that are unrelated to the assessment. If an Assessor personally requests an applicant to take them sightseeing, to play golf, to dine at a fancy restaurant, or to any other places at the applicant's expense, the applicant should immediately report it to JIPM.

2.5 Withdrawal Form (Sample)

[Date]

2020 Award for TPM Excellence Withdrawal Form

To TPM Awards Committee	
Name of company/plant/factory	
Address	
Name and office of the representative	
We wish to withdraw from assessment for Award for TPM Excellence for the reason state below:	ted
<reason></reason>	
We wish to re-apply for the TPM Excellence Award in (year)	
*It's better that concrete reason is mentioned.	

3. Document Submission Schedule

Every document should reach JIPM by each deadline

Co	ntent	Delivery	Deadline
•	Application Form (both PDF and Word file) (See page 15,16)	By Email	27 December 2019
•	Original Application with authentic signature (not a photocopy)	By Courier	27 December 2019
•	Company Profile (See <u>page 17</u>) TPM Award Assessment Achievement Sheet (See <u>page 18</u>)	By Email	27 December 2019
•	2 copies of Non-Disclosure Agreement(NDA) with authentic signature (See page 19,20)	By Courier	Arbitrary

	Content	Delivery	Deadline
	TPM Activity Report (4 paper copies and 2 CDs) (See <u>Section 5, page 26-34)</u>	By Courier	15 February 202
BEFORE Assessment	 Assessment Agenda (See sample in <u>Section 5.5, page 41)</u> Assessment Guide (See sample in <u>Section 5.6, page 42, 43)</u> 	By Email	30 Days prior to designated 1 st St Assessment date
AFTER Assessment	The Minutes of the 1 st Stage Assessment (<u>PDF only</u>) (See sample in <u>Section 5.7, page 44</u>)	By Email	30 Days after the Stage Assessme Date

BEFORE	TPM Activity Report (4 paper copies and 2 CDs) (See <u>Section 5, page 26-34)</u> Kaizen/Improvement Report (<u>PDF only</u>) (See sample in <u>Section 5.8, page 45)</u>	By Courier	Deadline 40 Days prior to the designated 2 nd Stage Assessment date
Assessment	 Assessment agenda (See sample in <u>Section 5.5, page 41)</u> Assessment Guide (See sample in <u>Section 5.6, page 42,43)</u> 	By Email	30 Days prior to the designated 2 nd Stage Assessment date
AFTER Assessment	The Minutes of the 2 nd Stage Assessment (<u>PDF only</u>) (See sample in <u>Section 5.7, page 44</u>)	By Email	30 Days after the 2 Stage Assessment Date

[Delivery address]

Japan Institute of Plant Maintenance TPM Award Office

Jimbocho SF III 5F, 3-3 Kanda-Jimbocho, Chiyoda-ku, Tokyo, 101-0051, Japan

Telephone: +81 3-6865-6081 Fax: +81 3-6865-6082

E-mail: TPMAWARDS@jipm.or.jp

Application for 2020 TPM Awards

-SAMPLE (page 1 of 2)-Use separate form

1.	Company	Information	*DO NOT write	e the address	of P.O.Box.
----	---------	-------------	---------------	---------------	-------------

1.1	Official Company (in English)	Name	Japan Plant Maintenance Co., Ltd.
1.2	Official Company (if applicable)	Plant Name	Tokyo Plant
		Line1:	Jimbocho SF III 5F, 3-3 Kanda-Jimbocho, Chiyoda-ku
1.3	Address of	Line2 (City)	Tokyo
1.3	Plant	Post code:	101-0051
		Country:	Japan
		Line1:	
4.4	Address for	Line2 (City)	
1.4	Invoice Delivery (If different)	Post code:	
	(ii diiioiciit)	Country:	

2. People Information

2.1	Plant Senior Mar	nager (Pi	lant Manager, MD, CEO)		
	Given Name	Taro		Family Name	Suzuki
	Position	Manage	r	Mr. / Ms. / Mrs.	Mr.
	Contact Telephone	e No.	+81 3-5288-5001		
	Email Address		tpmawards@jipm.or.jp		
2.2	Plant Contact for	r TPM (Λ	lormal contact person for	TPM matters)	
	Given Name			Family Name	
	Position			Mr. / Ms. / Mrs.	
	Contact Telephone	e No.			
	Email Address				
2.3	Finance Contact	(To who	m invoices and other fina	nce matters may b	pe addressed)
	Given Name			Family Name	
	Position			Mr. / Ms. / Mrs.	
	Contact Telephone	e No.			
	Email Address				

ა.	Awards Category for which application is t	Deing made Please select one from the list and tick the box
	Award for TPM Excellence, Category B Award for TPM Excellence, Category A Award for Excellence in Consistent TPM Commitment	☐ Special Award for TPM Achievement☐ Advanced Special Award for TPM Achievement☐ Award for World-class TPM Achievement

4. Additional Plant Information

4.1	Industrial Classification	Please select one from the list and tick the box Automobile and Other Motor Vehicle Automotive Parts Iron and Steel & Non-Ferrous Metal Chemicals Rubber & Plastic Products Pulp & Paper Electric & Gas, Petroleum and Coal Others () If you chose Others, please fill in your Industrial Classification above.
4.2	Product Category	Automobile parts
4.3	Annual Turnover (State Currency)	One hundred million Yen
4.4	Number of Employees	100 employees
4.5	Total Size of Site (m ²)	100000 m ²
4.6	Number of days required to complete the assessment	(1) day(s)

Application for 2020 TPM Awards

-SAMPLE (page 2 of 2)-

Use separate form

me of Consultant(s)

one d	ame of your regular o	consultant	and also the nan	ne(s) of any ot	her person(s) performi	ng consulting ser	vices su	ch as
	lav concultina enecia	I visit and	Health check are	requested				cii as
	ne day consulting, special visit and Health check are Name of Consultant				the Consulting Fire	m		
Mr.				Itamo or	the concurring in			
	is required to avoid assessor.	any risk o	f a conflict of into	erest between	a consultant and that	same person bei	ng appo	ointed as
Loc	al Information							
			Haneda Airpo	rt		IATA Airpo	ort	HND
6.1	Nearest Airport	Name	, , , , ,			code*		
6.2	Travelling time t	from Airp	ort to Plant	About 95 m	ins			
6.3	Suggested Hote	el where A	Assessors ma	y stay				
Nam		Tokyo Prir						
Addı		3-3-1 Shib	a-koen, Minato	-ku, Tokyo, 10	5-8560, Japan			
					·			
	el Contact Telephor		+81-3-3432-111	1				
Hote	el Fax No.		N/A	T .				
6.4				About 90 m	ins			
6.5	Travelling time			5 min				
to find	IATA Airport code htt	p://www.na	ationsonline.org/	oneworld/IATA	Codes/airport_code	list.htm		
TDM	/ Information							
IPIV	i illiorillation							
7.1	Completion of S	Step 4 Au	tonomous Ma	intenance	(Please tick appro	oriate box)	YES	NO
7.2	Do you already	have a T	PM Award?		(Please tick appro	priate box)	YES	Mo
7.3	If YES, Category	y of Awar	rd					
7.4	Applied Year of	Award						
Seri	ious Accidents [*]	Depend	s on detail of	accident, a	pplication would n	ot be accepted	d.	
Hav	e you had any se	rious acc	idents in	(Please tic	k appropriate box)	YES	∇	NO
	last 12 months?			-	ES, Accident Repo	ort must be atta	ched	
						Tre made by and		
	lic Holidays and					/		
			′ May 3, 4, 5 / Ju	II 18/ Aug 11/	Sep 19, 22 / Oct 10 / I	Nov 3, 23/		
Dec 2	23 and every Sat and	1 Sun						
				do0				NO.
COL	ıld you carry ou	i assess	sment on Sa	turuay ?				NO NO
	this form you are o	nterina inte			TPM Applicant for 202 between the TPM Ap			
agree		e date of a	application and u					
agree ne 2020 Nam	ement is valid from th	e date of a sed.	ative			Date		
s agree he 2020 Nam	ement is valid from th 0 TPM Award are clo ne of Company Re ase type)	e date of a sed.	ative			Date		
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TPM Award Office

Jimbocho SF III 5F, 3-3 Kanda-Jimbocho, Chiyoda-ku, Tokyo, 101-0051, Japan Telephone: +81 3-6865-6081 Fax: +81 3-6865-6082 E-mail: TPMAWARDS@jipm.or.jp

Company Profile

Required Profile of Applicant

This should be sent via email at the time of submission of the Application Form.

1. Company Profile

Your Company Profile should be prepared as a Microsoft Word document using Helvetica for the headline of each article and Times New Roman font, size 12pt, for the body of the text. We request that printed data or a PDF file also be submitted at the same time in order to prevent printing errors. Both black-and-white photos and color photos are acceptable.

		Item	Words
1.	Com	pany, Plant/Factory Profile	300 - 350 words
	1.1	This should include company ownership, national or international spread of other divisions within the group but the main emphasis should be on the profile of plant applying for the TPM award.	
	1.2	Items to include would be product range, process technology, management organization and staffing structure.	
2.	Mile	stone on the Journey of Manufacturing Excellence	400 – 440 words
	2.1	Please explain the reasons for adopting TPM as a company policy and the major items that have been introduced since commencing the journey.	
3.	Bene	efits Achieved Explain the benefits that have occurred from:	140 – 200 words
	3.1	Tangible business results that have improved and	
	3.2	Employee involvement, motivation and other intangible improvements that have occurred.	
4.	Key	of our Manufacturing Excellence	200 – 300 words
	4.1	With the experience gained so far on the TPM journey what are the key items in our manufacturing excellence programme the in the future.	
5.	Achi	evement Record	
	5.1	Objective measures should be listed for the following general headings:	
		 Productivity Quality Cost Delivery Safety Moral See next page for suggested items for inclusion	
	5.2	Serious Accident Index	

TPM Award Assessment Achievement Sheet

-SAMPLE-Use separate form

TPM Award Assessment Achievement Sheet

Company & plant name	
TPM Slogan/Objectives	

Category	Index (Calculation Formula)		Unit	Kick off/ TPM Started	Actual Status 2019	Target 2020	JIPM Use
S	S		Cases/ annually				
S	Number of wo	rk-related accidents lays off work	Cases/ annually				
Р	Productivity for	r main products	Parts/Operator hours				
Р	OEE (or Overall Pla	nt Efficiency)	%				
Р	Number of tag	s raised	Number				
Р	Number of bre	akdowns	Breakdowns/ annually				
Q	Number of cus	tomer complaints	Number				
Q	In-line defect rate	Scrap Scrap and rework	% %				
С	Cost index		Cost/Unit Cost/Kilogram				
D	Lead time in da	ays	Days				
D	Delivery perfor	rmance	%				
S	Safety index		Accidents per 100,000 operator hours				
S		accidents requiring umulation of past 2	Number/ Year				
М	Number of Em	ployee Suggestions					
Other	 <specify achievements="" expressible="" in="" not="" numerical="" terms=""></specify> 1. Do you have a program where all employees can participate in TPM? 2. Do you have a program allowing employees to be recognized their achievements? 3. Are top management involved in the audit/verification of completion of TPM pillar steps? 4. Are all pillar activity boards displayed and reviewed by top management? 						

Non-Disclosure Agreement

-SAMPLE (page 1 of 2)-Use separate form

Note: Have the indices covered all important items related to PQCDSM measures being undertaken in the entirety of the subject to be assessed. Note all indices in the TPM Activity Report. Where your specific indices vary from those above attach relevant data.

THIS AGREEMENT is made on <a>[Insert Date of filling out this form] BETWEEN:

- (1) **Japan Institute of Plant Maintenance** whose registered office is at Jimbocho SF III 5F, 3-3 Kanda-Jimbocho, Chiyoda-ku, Tokyo, 101-0051, Japan (hereinafter referred to as the "**JIPM**"); and
- (2) [Insert Company Name] whose registered office is at [Insert Company Address] (hereinafter referred to as the "ASSESSEE".)

BACKGROUND

This Agreement is made with respect to the confidentiality of the information provided by either party to the other party in connection with the assessment affairs (hereinafter referred to as the "Assessment") for the TPM Award conducted by the Company for the Assessee.

Article 1 Definition

- 1. The term "Confidential Information" herein used means any technological or business information disclosed by either part to the other party, whether orally, in writing, in electronic or optical form or in other type of media, in connection with the Assessment, except the information that:
 - (1) was already publicly known when disclosed;
 - (2) was already obtained and possessed by the receiving party in a lawful manner when disclosed;
 - (3) becomes publicly known after being disclosed without fault of the receiving party;
 - (4) is obtained by the receiving party in a lawful manner after disclosure from a duly authorized third party without confidential obligation;
 - (5) is required by law to be disclosed; or
 - (6) is required by a duly authorized third party, including without limitation a competent authority, to be disclosed.
- 2. The Confidential Information either party intends to disclose to the other party must be marked as confidential. The Confidential Information which may be disclosed orally must be specified in writing and marked as confidential within 30 days from such disclosure.
- 3. No information that may be disclosed in a manner not governed by the preceding clause shall be considered as confidential Information.

Article 2 Confidentiality

- Neither party shall use the Confidential Information for any purpose other than the Assessment or disclose or divulge it to a third party unless the disclosing party first gives its advance written consent.
- The two parties shall strictly control the Confidential Information disclosed by the other party, or that they
 gained knowledge of from the other party, in connection with the Assessment, and neither party shall use the
 Confidential Information for any purpose other than the Assessment or disclose or divulge it to a third party.
- 3. If reasonably needed, either party may disclose the Confidential Information only to its officers or employees who need to know it or a third party to whom JIPM subcontracts the Assessment. In this case, the same obligation as imposed on JIPM hereunder shall be imposed on the officers and employees or subcontracting third party to whom the Confidential Information has been disclosed.

Article 3 Return

All documents submitted to JIPM will be destroyed except one TPM Activity Report in CD Format for JIPM's archives. If you would like your TPM Activity Report returned, you must contact JIPM immediately after the assessment. The Report will be returned by receiver-pay international courier.

Article 4 Terms of Contract

- 1. This Agreement shall be valid from the date of this Agreement for five (5) years and may be renewed in accordance with the discussion of both parties.
- 2. Notwithstanding the preceding clause, this Agreement may be terminated if either party proposes the termination of this Agreement to the other party in writing and the other party accepts the same in writing.
- 3. Provisions of clause 2 of Article 2 and Article 5 shall survive the termination of this Agreement by expiry, cancellation or any other reason as long as a relevant event exists.

Non-Disclosure Agreement

-SAMPLE (page 2 of 2)-Use separate form

Article 5 Compensation for Damages

Either party may make a claim against the other party to compensate for damage incurred by it arising out of the other party's violation of this Agreement without reasonable cause or may seek an injunction to suspend such violation.

Article 6 Settlement of Doubt

Anything now specified in this Agreement or any doubt arising out of this Agreement shall be settled by both parties with a good-faith negotiation. This Agreement shall be governed by and construed in accordance with the provisions of Japanese Law and any dispute which cannot be settled with negotiation shall be subject to the exclusive jurisdiction of the Japanese courts to which the parties to the Agreement hereby submit.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in duplicate as a deed and each party shall retain one original.

Signed as a deed and delivered by	
Senior Managing Director, Satoshi Suzuoki For and on behalf of Japan Institute of Plant Maintenance	
Signed as a deed and delivered by	
[Insert Position] [Insert Name of Representative] For and on behalf of [Insert company name]	

Other Associated Costs

First Stage Assessment Fees		All Fees are in JPY (Japanese yen)	
	Award for TPM Excellence - Category B	JPY 1 000 000.	
	Award for TPM Excellence - Category A	JPY 1 000 000.	
	Award for Excellence in Consistent TPM Commitment	JPY 1 050 000.	
	Special Award for TPM Achievement	JPY 1 100 000.	
	Advanced Special Award for TPM Achievement	JPY 1 200 000.	
	Award for World Class TPM Achievement	JPY 1 300 000.	

Second Stage Assessment Fees

Award for TPM Excellence - Category B	JPY 1 000 000.
Award for TPM Excellence - Category A	JPY 1 000 000.
Award for Excellence in Consistent TPM Commitment	JPY 1 050 000.
Special Award for TPM Achievement	JPY 1 100 000.
Advanced Special Award for TPM Achievement	JPY 1 200 000.
Award for World Class TPM Achievement	JPY 1 300 000.

[Note]

Multiple day Assessments - See Section 4.5.

1. Invoices, Payment of Fees and Receipts

- 1.1 On receipt of the complete application form, an invoice will be issued to cover the First and Second Stage Assessments fees.
- 1.2 When the travel arrangements have been made for the First Stage Assessment a second invoice will be issued to cover this item.
- 1.3 When travel arrangements have been made for the Second Stage Assessment a third invoice will be issued to cover this item.
- 1.4 When the fee is paid from overseas by bank transfer, please make sure that the total amount of the fee is paid as per invoice.All transfer fees and bank comissions are to be paid by the applicant. In
 - All transfer fees and bank comissions are to be paid by the applicant. In case of a shortage in the payment, additional payment for the lacking amount will be required.
- 1.5 All invoices are payable within 60 days of invoice date. Where purchase order numbers or contracts are required to remit payments, this must be indicated on the application form.
- 1.6 When you make wire transfer, please fill in correct bank information of JIPM which mentioend in invoice, for example, bank account number, receiver name: Japan Institute of Plant Maintenance.

^{*}These fees are for a single day Assessment. (Make sure to check the number of days required to carry out the assessment for each assessment category. -See <u>Section 2.3.1(6) and (7)</u>.

^{*}The assessment fee does not include the travel costs of the assessor(s) where travel arrangements are made by JIPM.

^{*}From 2021, Assessment Fee will be raised JPY 50 000 per day for cost of safety measure.

Other Associated Costs

- 1.7 If your company has outstanding bills for JIPM, the application might be cancelled.
- 1.8 JIPM does not have chack, so cannot provide scanned voided check or deposit slip as certificate document of bank account. Please confirm on this issue with your financial term in advance.

2. Travel Expense

JIPM will make reservation for air tickets (In principle, air tickets are business-class with regular fare tickets), local transportation in Japan (From assessor's home to airport and back), travel insurance and business VISA if applicable.

These travel expense will be charged to the applicant.

Only under special circumstances will JIPM consider requesting the applicant to reserve and pay for air tickets.

3. Accommodation Expense

Accommodation and subsistence expenses that are necessary to carry out an assessment will be paid by the applicant.

If additional expenses are incurred that are necessary to the assessment process these will be charged to the applicant.

4. Tax

The fee does not include taxes, such as transaction tax and value added tax.

When you electronically transfer the fee, please make sure that the total amount of the fee is paid. In case of underpayment the application may not be accepted.

Any tax and bank commission should be paid by applicants.

If TPM Award Office does not received the full amount of invoice, the application will be canceled.

Note that invoices for travel and subsistence are also not considered to attract with-holding tax as there is no provision of services.

5. Additional Fee

An assessment is defined as 0900 – 1700 hrs or as 8 hours including 1-hour lunch and necessary breaks. The assessment schedule should be formatted to fit this time frame.

If the Assessment requires all or part of a second day to complete, the fee charged will be 2 x the fee shown in the table at the beginning of <u>Section 4</u>. Similarly, if a third day is required the fee charged will be 3 x the fee shown in the table at the beginning of <u>Section 4</u>.

Continued to the next page...

Other Associated Costs

6. Withdrawal Fee

In the event of withdrawal, a withdrawal fee in line with the table outlined below will be applied with the balance of the payments made by the applicant to be refunded.

Should an applicant company wish to withdraw after submitting an application, they are required to complete and submit the Withdrawal Form – See <u>page 13</u>.

Timing of Notification of Withdrawal	Fee Payable to JIPM
Withdrawing before the announcement of date for 1st stage assessment, after issued assessment fee invoice	-300 000 Yen as Admin Fee
Withdrawing after the announcement of the	-300 000 Yen as Admin fee -20% of 1st stage fees
date for 1st stage assessment	-Committed travel costs that cannot be cancelled
Withdrawing before the announcement of	-300 000 Yen as Admin fee -100% of 1st stage fees
date for 2nd stage assessment	-20 % of 2nd stage fees - Committed travel costs for 1st stage
Withdrawing after the announcement of the date for 2nd stage assessment	-300 000 Yen as Admin fee -100% of 1st stage fees -20 % of 2nd stage fees -Committed travel costs that cannot be
Withdrawing after the 2nd stage assessment is finished	-300 000 Yen as Admin fee -100% of 1st stage fees -100 % of 2nd stage fees -Committed travel costs for 1st & 2nd
	stage

Other Associated Costs

7. Follow-up Fee

7.1 Follow-up Fee	All Fees are in JPY (Japanese yen)
Follow-up Fee (for 1 day)	JPY 500 000.

7.2 Follow-up Withdrawal Fee

Timing of Notification of Withdrawal	Fee Payable to JIPM	
Withdrawing before the announcement of final Follow-up schedule, after application is accepted.	-300 000 Yen as Admin Fee	
Withdrawing after the announcement of final Follow-up schedule	-300 000 Yen as Admin fee -20% of Follow-up fees -Committed travel costs that cannot be cancelled	

The following section will assist with the necessary preparations for an Assessment.

Items contained in this section are:

Section Conter	nts	Page Numbe
1	The Activity Report	
	1.1 Guide to Creating the activity Report	26
	TPM Activity Report Contents Award for TPM Excellence Category B & A and Award for Excellence in Consistent TPM Commitment Special Award for TPM Achievement Advanced Special Award to TPM Achievement Award for World-class TPM Achievement General Points	27 – 30 31 31 31 31
	Example of Content Outline of Your Company and Plant TPM Policies and Objectives	32 33-34
2	Arrangements for the Assessment	35-37
3	Example of Venue Arrangements	38
4	Example of Memo Notepads	39-40
5	Example of Assessment Agenda	41
6	Example of Assessment Guide	42-43
7	Example of Meeting Minutes	44
8	Example of Kaizen / Improvement Report	15

1. The Activity Report

One of the main objectives of the TPM activity report is to provide a record of the TPM activities conducted to date and to allow Assessors to study carefully prior to commencing the assessment. The report should not contain audio or video material as this may hinder the screening process.

1.1 Guide to TPM Activity Report

Style

Paper Format

- A4 (210 mm (297 mm) or similar size with left-bound format
- Printing copy number on the cover page is required.
- Duplex printing (printing on both sides of paper)
- Use 12 point font or larger
- Provide the Report in easy to read style

 Must bookbinding (Just papers with clip cannot be accepted)
- Avoid using plastic ring binder (the ring might be broken when the reports are delivered by courier)
- Provide 4 Copies (5 Copies for Advanced Special, World-class)

CD Format

- Must be in PDF file format with using 12 point font or larger and with indexes for each chapter. For the security purpose, some sort of protection should be on the data or the file itself.
- Don't use "CD+R".
- Provide 2 CDs

Language

- Must be in English or Japanese.
- If you prepare Activity report in Japanese, <u>please mention your English company</u> name also on cover page.

Report Length

- Report to be a maximum of 300 pages

Report for Second Stage Assessment

<u>Update information from the First Stage assessment should be recognised easily by the assessor</u> such as highlighting the section with the updated information. Sections with new improvement case studies also should be highlighted to be found easily.

Activity Reports Submission Deadline

Item	Submission Deadline
TPM Activity Reports for 1 st stage 4 Copies and 2 CDs	15 Feb 2020
TPM Activity Reports for 2 nd stage	40 Days prior to
4 Copies and 2 CDs	Assessment Date

NOTES:

1. In cases, please prepare the spares of Activity Report in your plant.

A further copy of the company's TPM Activity Report should be made available for the Assessors when they check into the hotel the day before the assessment. This will ensure that the latest information is available to the Assessors prior to the assessment day.

- 2. Should the company require the Activity Reports to be returned, shipment charges will be paid by the applicant.
- 3. While the activity reports may contain PowerPoint slides, slides alone are insufficient information. Support evidence on TPM implementation should be provided.

1.2 TPM Activity Report Contents

EXAMPLE CONTENTS FOR:

- Award for TPM Excellence Category B
- Award for TPM Excellence Category A
- O Award for Excellence in Consistent TPM Commitment

Index

Chapter 1 "Outline of Your Company and Plant" (Refer to page 33 – Example of Content for Structure Guidelines)

- 1-1 Company
 - 1-1.1 Brief history; History of Capitalization and Sales. (Here and in the rest of your report, you may refer to necessary details by using item numbers that are consistent throughout the report, e.g., '1.' or '1)' or '(1)', etc.)
 - 1-1.2 Areas of business your company/plant is engaged in
 - 1-1.3 Organizations
- 1-2 Plant
 - 1-2.1 Brief history
 - 1-2.2 Organizations
 - 1-2.3 Plant Layout
 - 1-2.4 Size of Business
 - Annual production volume
 - Major equipment
 Specify the equipment you have, and its volume, etc; volume subject to TPM, and average length of use of such equipment.
 - The Staffs
 How they are organized, what their work schedule is, and what their working hours is, etc.
- 1-3 Production Systems From order receiving down through shipping; also production lead time
- 1-4 Main Products and Production Processes
- 1-5 Position of Your Company within Industry; Your Share of Market
- 1-6 Date of TPM Inauguration in Your Plant (What year and month, etc.)

Chapter 2 "TPM Policies and Objectives" (Refer to page 32 for Example)

- 2-1 Company's/Plant's Overall Policies and TPM; how they are inter-related
- 2-2 TPM Policies, Objectives, Implementation

Chapter 3 "TPM Organizations and Activities"

- 3-1 History of Equipment Management Organization Evolution
- 3-2 Status of Plant Organization and Staffing by Section
- 3-3 TPM Promotion Organization and Activities

Chapter 4 "Individual Improvement Activities (Kaizen)"

- 4-1 Outline
 - Aims, Goals, Concepts and Key Points of Practice
- 4-2 Structure of Losses and Analysis
- 4-3 Kaizen Topics; how is being practiced
 - Major/minor topics; number of ideas, present status, and techniques used
- 4-4 PM Analysis
- 4-5 Individual Kaizen Examples and Effects
- 4-6 Results and Future Plans

Chapter 5 "Autonomous Maintenance Activities"

- 5-1 Outline Aims, Goals and Concepts
- 5-2 Key Points of Activity
- 5-3 Step-by-Step Implementation and Diagnosis Systems
- 5-4 Activity Status; Status of each step, activity boards, one point lessens, etc.
- 5-5 Autonomous Maintenance Examples and Effects
- 5-6 Results and Future Plans

Chapter 6 "Planned Maintenance Activities"

- 6-1 Outline Features of equipment; issues of equipment maintenance
- 6-2 Maintenance Department Organization and Staffing
- 6-3 Role Sharing between Operating Departments and Maintenance Group
- 6-4 Support for Autonomous Maintenance
- 6-5 Establishing Planned Maintenance System
- 6-6 Maintenance Information Control, Breakdown Analysis, MTBF, MTTR, etc.
- 6-7 Status of Corrective Maintenance
- 6-8 Technical Developments for Automatic Maintenance
- 6-9 Equipment Diagnosis Techniques, Status of Predictive Maintenance
- 6-10 Lubrication Control
- 6-11 Stock Control
- 6-12 Control of Dies, Jigs, Measuring Instruments, Drawings and etc
- 6-13 Maintenance Budgets and Control
 - 6-13.1 How maintenance costs are determined
 - In relation to sales, staffing and maintenance cost
 - 6-13.2 How budget is classified By department, goal, etc.
 - 6-13.3 Budget item breakdown
 - Material repair costs paid outside, internal labor cost, etc.
 - 6-13.4 Criteria by which total budget is fixed
 - Actual performance in previous accounting periods, production volume, repair plans by nature of repair, etc.
 - 6-13.5 Authority for appropriation By position level
- 6-14 Planned Maintenance Examples and Effects
- 6-15 Results and Future Plans

Chapter 7 "Quality Maintenance Activities"

- 7-1 Outline Aims and Objectives
- 7-2 Progress and Inspection Methods
- 7-3 Examples and Effects
- 7-4 Results and Future Plans

Chapter 8 "Development Management Activities"

- 8-1 Product Development Management
 - 8-1.1 Outline Concepts, Aims, and Schedule
 - 8-1.2 Designing easy-to-make products in the development stage
 - 8-1.3 Product Development Management System
 - 8-1.4 MP Information, its collection and use
 - 8-1.5 Designing Recyclable Products and Manufacturing Systems
 - 8-1.6 Results achieved and Future Plans
- 8-2 Equipment Development Management
 - 8-2.1 Outline Concepts, Aims, and Schedule
 - 8-2.2 Integrating Product Development Management and Equipment Development Management
 - 8-2.3 Equipment Development Management Systems
 - Status Analysis, Capital Investment Plans, Economic Comparisons,
 Development and control of equipment budgets
 - 8-2.4 MP Information; its collection, storage and use
 - 8-2.5 Results and Future plans
- 8-3 Individually developed Management Examples and Effects

Chapter 9 Training and Education

- 9-1 Basic Concepts and Priority Measures
- 9-2 Determining Training Budgets
- 9-3 Outline of training and education and methods to improve skills
- 9-4 Evaluation of maintenance work knowledge and skills
- 9-5 Qualified specialists
- 9-6 Examples of training/education materials and effects
- 9-7 Results achieved and future plans

Chapter 10 Administration and Other Indirect Departments

- 10-1 Outline
- 10-2 Autonomous maintenance activities in administrative and other indirect departments
- 10-3 Individual improvement (Kaizen) activities in administrative and other indirect departments
- 10-4 Support for Production Departments
- 10-5 Examples of improvement in administrative and other indirect department and the effects
- 10-6 Results and Future Plans

Chapter 11 "Safety, Sanitation and Environment Control"

- 11-1 Outline
- 11-2 Objectives
- 11-3 Organizations and Systems for promotion
- 11-4 Environmental Protection at work places
- 11-5 Activity Status
- 11-6 Examples of improvement in Safety, Sanitation and Environmental Management and Effects
- 11-7 Results and Future Plans

Chapter 12 "TPM Effect and Evaluation"

12-4

Tangible Effects (List specific equipment and/or the number of machines) TPM Effect from overall management viewpoints 12-1.2 TPM Effect on Production (P) 12-1.3 TPM Effect as seen from quality (Q) viewpoints 12-1.4 TPM Effect on Cost (C) 12-1.5 TPM Effect on Delivery (D) 12-1.6 TPM Effect on Safety (S) 12-1.7 TPM Effect from Morale/Training (M) viewpoints 12-2 Intangible Effect 12-3 Issues of present practice and counter-measures

Visions of 21st century and their implications for TPM

2020: SECTION 5

EXAMPLE CONTENTS FOR:

Special Award for TPM Achievement

Index

Chapter 1 "Outline of Your Company and Plant"

Chapter 2 "TPM Policies/Objectives and TPM Organization/Management"

Chapter 3 "Innovative/Breakthrough TPM Activity"

Chapter 4 – 12 Contents can be the same as for "Award for TPM Excellence Category A"

"Award for TPM Excellence Category B

EXAMPLE CONTENTS FOR:

Advanced Special Award for TPM Achievement

o Award for World-class TPM Achievement

Index

Chapter 1 "Outline of Your Company and Plant"

Chapter 2 "TPM Policies/Objectives and TPM Organization/Management"

Chapter 3 "Creative TPM Activity"

Chapter 4 – 12 Contents can be the same as for "Award for TPM Excellence Category A"

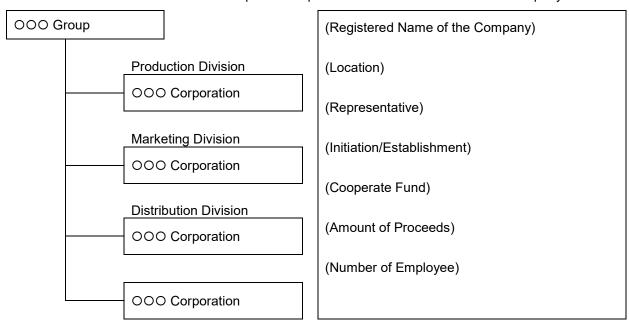
"Award for TPM Excellence Category B

GENERAL POINTS FOR ALL CATEGORIES OF ACTIVITY REPORT:

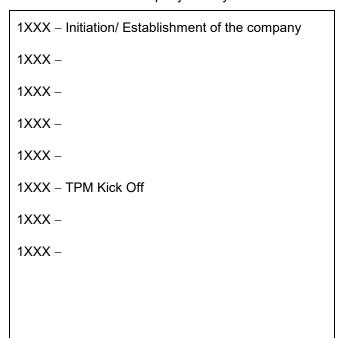
- 1. Terminology Definitions should be attached to the reports especially when applicant uses their own terminology which assessors might not understand.
- 2. If there is updated Information and new improvement cases in the activity report for Second Stage assessment, these should be highlighted for easy recognition.

1.3 Example of Content

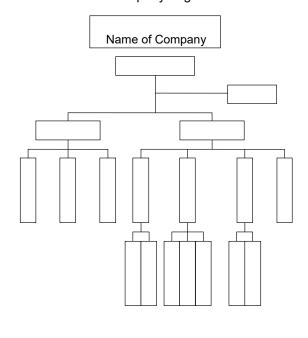
- 1.3.1 Chapter 1, "Outline of Your Company and Plant"
- 1.3.1.1 Introduction of Enterprise Group
- 1.3.1.2 Profile of the Company



1.3.1.3 Company History



1.3.1.4 Company Organization



1.3.2 Chapter 2, "TPM Policies and Objectives"

1.3.2.1 Background of TPM Implementation

(Reason for TPM Implementation)

Example: For becoming valuable and survivable company in the 21st century and becoming more competitive in the global market, we need effective business tool as TPM.

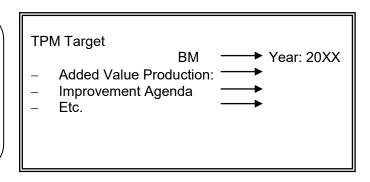
External Needs - Diversified customer needs - Intensification of global competition - Correspondence to environmental movement - Lack of management ability 20XX, XXX (Date) TPM Kick Off

1.3.2.2 Emphasized Target/Slogan and Category



Focal Points

- Planning Skill-up Course throughout design process
- Maintain information system for better information sharing
- Reduce lead-time
- Etc.



2. Arrangements for the Assessment

2.1 Travel

- 1. Travel arrangements required for travel by assessors and assistant assessors (travel to and from international airports within Japan) will be made by JIPM.
- 2. When there happens sudden schedule change or trouble, please inform to TPM Award Office promptly.
- 3. If it is national holiday in your county on transportation day, please let us know in advance. (In national holiday security in airport/station might be changed, and TPM Award Office will tell assessors about that.)
- **NB** It is requested that you make arrangements and make payment for transportation within your country to and from your international airport. Arrangements for travel between hotel where assessors stay and your plant should be included.

2.2 Accommodation

- 1. Hotel reservations and payment for accommodation for assessors shall be made by the applicant.
- 2. Hotel rooms should be equipped with appropriate lighting and a desk for reading documents and writing reports.
- 3. Wake up calls should be arranged for the assessors
- 4. All hotel expenses incurred during stay should be billed directly to your company.
- 5. Designated clothing needed to enter your plant/factory such as uniform, hardhat, etc., should be available.

2.3 Preparation for the Venue

- 1. The seating should be arranged with the lead assessor at the head of the table, the assessor seated next to the lead assessor, and the assistant assessor seated next to the assessor. If there are more than 3 assessors present, arrange the seating so that the lead assessor is seated in the center.
- 4. If you wish to make a video or sound recording, please inform the assessors at the beginning of the assessment.
- 5. The following items should be ready for use at the assessors' table:
 - -Name plaques for the assessors and assistant assessors,
 - -A hard copy of the PPT presentation,
 - -Stationery
 - -Any documents such as Meeting Room or Workplace Explanatory Memos that will be used by assessors (refer to page 36, Example 1 and Example 2)
 - -Notepads, microphone etc, (as needed).
- 6. Stationery should include mechanical pencils, erasers, ball-point pens (red and black), markers, post-it notes (large, small), etc.
- 7. Prepare one microphone per one or two assessors.

2.4 Preparation for the Assessors' Room

- 1. Please have a room ready that assessors can use to change clothes, rest, and hold meetings among assessors.
- Lockers for assessors will be required.

- 3. Please have work clothes and protective equipment for the assessors and assistant assessors ready for use as required.
- 4. Please set aside approximately 30 minutes from the arrival to the commencement of assessment for changing of clothes and briefing. Members of the applicant company are asked to step out of the room during this period.
- 5. Please have the same type of stationery mentioned above ready for use in the room.

2.5 Preparation for On-site Presentation

- 1. On the TPM activity board to be used for on-site presentation, place numbers corresponding to the on-site presentation program and explanatory memos.
- 2. Have receivers ready for use by assessors and assistant assessors as needed.

2.6 Preparation of Explanatory Documents

Explanatory Documents such as slide copies and other presentation material for TPM Activity Presentation/On-site Presentation should be available at the Assessor's desk.

2.7 Preparation of Memo Notepads

To assist the Assessors' note taking during office presentations and other presentations made during the plant tour, notepads should be prepared with headings to indicate the theme of the presentation, the names of the presenters and location. (See page 39-40 - Memo Notepads).

2.8 Interpreter(s)

To avoid misunderstandings due to language barriers, interpreters <u>from your native language</u> <u>and that of the assessors (Japanese)</u> should be made available from arrival at the plant/factory to the commencement of assessment

2.9 TPM Activity Presentation in the Main Venue

- 1. Presentations should be focused on the point you would like to emphasize.
- 2. Describe improved conditions precisely in regard to the subjects that have been remarkably improved.
- 3. Provide a period of more than 40 minutes for questions and answers after all presentations have taken place.

2.10 On-Site Presentation in Shop Floor and Offices

- 1. Depending on necessity, wireless microphones and receivers should be available.
- 2. Post pictures taken before improvements.
- 3. On-Site presentation aims at examining plant conditions. examples of improvement on equipment, and presentation of "KAIZEN" examples.
- 4. The presentation should include an explanation of each TPM pillar of TPM implementation, such as Individual Improvement, Autonomous Maintenance, Planned Maintenance, etc.
- 5. Presentation of "KAIZEN" examples should be performed at the scene with equipment at work. If the noise is too loud, explanations should take place in another area and equipment be examined later.

- 6. If the size of the plant is too large or widely spread out, assessors and presenters will be split into small groups, and assessment will be conducted concurrently in several locations.
- 7. Allocate enough time for transferring between facilities/locations.
- 8. The number of explanatory points should be less than **TEN**.

2.11 Break Time

- 1. Allocate break times appropriately.
- Please set aside 60 minutes for lunch break.

2.12 TPM Awards Assessor Meeting

- 1. Assessors review their observations following the Assessment.
- 2. The meeting is only attended by Assessors and is closed to consultants and applicants.
- 3. Please allocate **more than 45 minutes** for this meeting including changing clothes.

2.13 Feedback Session

The assessors express their impressions, interests and concerns at the final feedback session. Comments of each assessor usually requires **more than 20 minutes** (Assistant assessors will not be giving feedback).

2.14 Schedule Control

In order to adhere to the provided schedule, a timekeeper should be designated to manage the time allocated.

2.15 Communication

- 1. All inquiries and the required Documents should be sent to JIPM and must meet respective due dates.
- 2. All the communication regarding TPM Award will be done between the designated contact person on the application form and JIPM.

2.16 Confidentiality

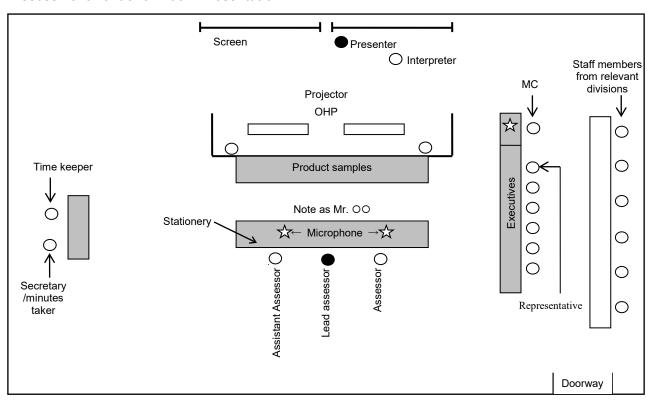
All documents you submit to JIPM will be destroyed except one TPM Activity Report in CD Format for JIPM's archives.

[NOTE]

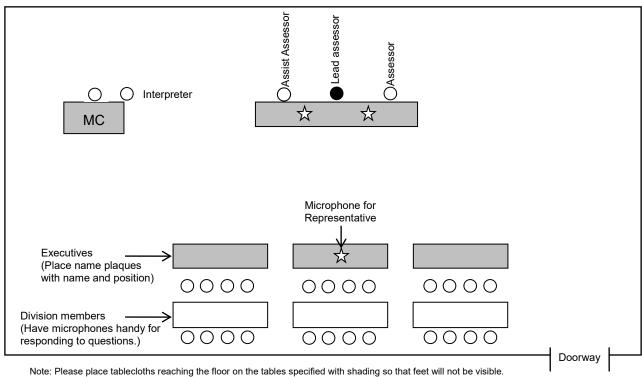
Especially at the first-stage assessment, please explain in details the aim of introducing TPM. It is necessary to show how goal setting and KPI are connected.

3. Example of Venue Arrangement

Assessment Venue for Room Presentation

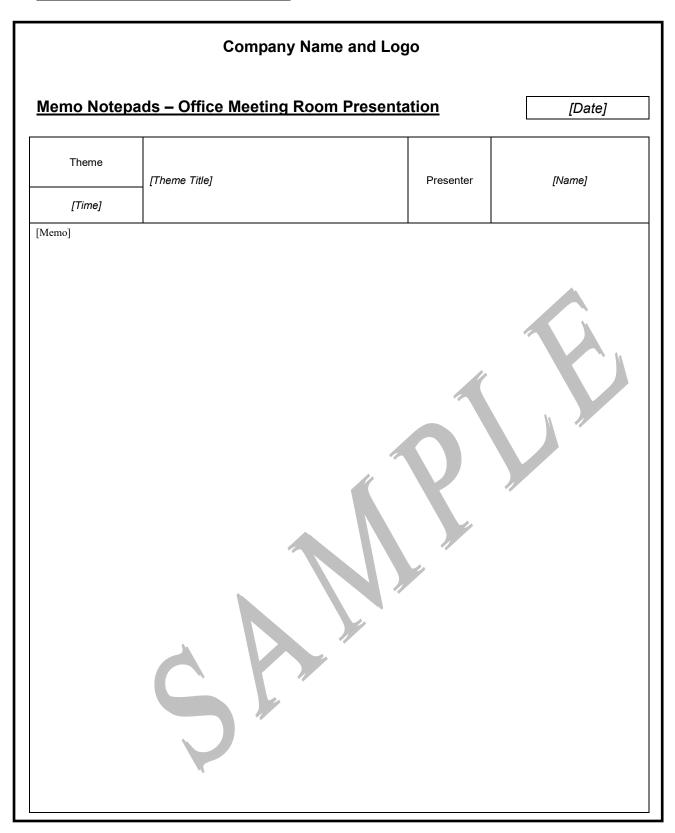


Assessment Closing Session



2020: SECTION 5

4. Example of Memo Notepads - 1



4. Example of Memo Notepads -2

Company Name and Logo				
	Presentation No.			
Memo Notepa	ds - Workplace Presentation [Date	e]		
Theme	[Theme Title and Associated TPM Pillar]			
[Time]	Presenter [Name and Section]			
Memo]	[Presentation Location]			

5. Example of Assessment Agenda

Time	Description	Responsible Person	Location
09:00 - 09:40	Room Presentation - Contents -	Names	Assessment Venue
09:40 - 10:00	Question and Answer	Names	
10:00 - 10:10	Break		Assessors' Room
10:10 - 11:40	Room presentation - Content -	Names	Assessment Venue
11:40- 12:00	Question and Answer		
12:00 - 13:00	Lunch Break		Venue name
13:10 - 15:40	Room presentation Onsite Presentation - Content	Names	Assessment Venue On-site
	_		
15:50 - 16:40	Break and Assessors' Meeting		Assessors' Room
16:40 - 17:00	Closing Session	Names	Assessment Venue

NB On-site presentations are intended to provide a practical illustration of activities.

Managing available time is very important to ensure:

- The delivery of the presentation / demonstration
- o An allowance for Questions & Answers with the Assessors
- o Travel time to the next point of presentation

*Please be careful not to add too much Case Study in on-site presentation.

6. Example of Assessment Guide-1

Office Fax

Mobile No.

* official use only Reference No.		Country				Assessors
Company Name					1	Prof.
Plant Name					1	Dr.
Assessment Date					1	Mr.
					_	
	Name			Interpreter	Name	
	Office Tel			Interpreter	Mobile No.	
Contact person			1			

Pick up at

Name

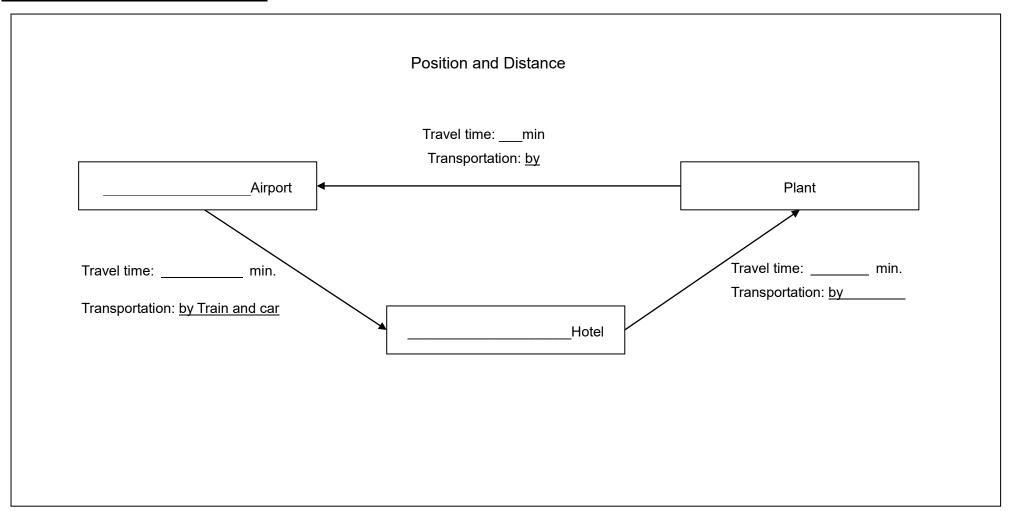
Mobile No.

Date		Date Schedule Time		Details	Pick up/Companion	Accommodation	
14 th June 2020	Wed	Pick up			Airport at gate No.XX	Mr. XX with sign board	Hotel Name: Address:
15 th	Thu	Pick up	XX:XX		Meet at (xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		
June 2020		Transportation	XX:XX	XX:XX	Move to the Plant.		Tel:
2020		Assessment	XX:XX	XX:XX	(Plant Name)		
		Transportation	XX:XX	XX:XX	Move to the Hotel		Fax:
							In: / Out:

 $\ensuremath{\mathrm{NOTE}}$: Assessors would prefer to have dinner with the interpreter or just by themselves .

 $\label{please let us decline your plan to have dinner with assessors before the assessment. \\$

6. Example of Assessment Guide-2



7. Example of Meeting Minutes

- -Please submit in PDF file.
- -Font size should be big enough to read when printing it out

Example (Cover Page)

Example Contents (pages after the cover)

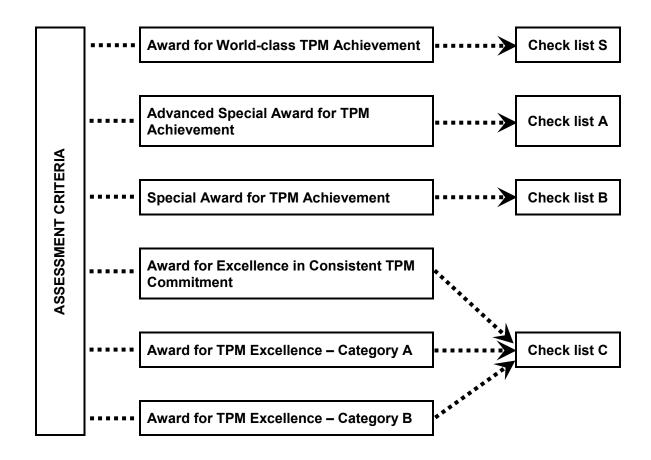
Example Contents (pages after the cover)								
Assessment Category		Name of Assessor	Question	Response	Name of Respondent			
Presentation	Autonomous Maintenance							
Prese	Individual Improvement							
e tion	(cases)							
On-Site Presentation	(cases)							
Pre	(cases)							
				1				
Comment	(name of assessor)							
Сош	(name of assessor)							

8. Example: Kaizen / Improvement Report

- -Please submit in PDF file.-Font size should be big enough to read when printing it out

any :						
st Stage Ass	sessment Date:					
2 nd Stage As:	sessment Date:					
	KAI	ZEN IMPF	ROVEMENT PLAN			
KAIZEN ITI	EM		ACTIVITY PLAN	RESP	COMP DATE	STATUS
Reach Step	4 in all 'A' Class ma	achines	New Plan agreed with all team members and machine-by- machine master schedule prepared	KP	Oct 2018	OK
Continue as	s required					
			Report prepared by: Name:			
	st Stage Assemble Stage Assemble Reach Step	st Stage Assessment Date: 2nd Stage Assessment Date: KAL	st Stage Assessment Date: Reach Step 4 in all 'A' Class machines	Stage Assessment Date: Malzen IMPROVEMENT PLAN KAIZEN ITEM Reach Step 4 in all 'A' Class machines Continue as required Report prepared by: Name:	st Stage Assessment Date: Main Stage Assessment Date:	Stage Assessment Date: KAIZEN IMPROVEMENT PLAN RESP DATE

6. Reference Documents



6. Reference Documents Assessment Criteria For all Categories of TPM Award

Ass	sessment Criteria	Explanations
	ic conditions as business nager	The basic conditions are to fulfil the social responsibility to be exercised by an enterprise, and achieve labour and equipment safety.
	Formulation of policy and target	A target contributing to management is established in line with the concepts that TPM policy is consistent with the basic corporate policy, TPM is clearly positioned in the strategy as an enterprise or working site, and "TPM is a job."
	Formulation of master plan	The master plan showing the basic promotion plan of TPM in chronological order is created in order to fulfil the initial purpose, and is used as a criterion for all activities and as a fundamental when making a plan to promote each pillar at the working site.
	Establishment of promotion system by top management	The chief executive for TPM promotion is the business manager who exercises leadership based on his/her own intentions. The organization for TPM promotion based on the premise above is established and functions.
	Manager and technical staff-led type formation of overlapping small groups	A manager and technical staff-led type of working organization consisting of overlapping small groups is formed in establishing the promotion system. The role and responsibility of each level of overlapping small-group organizations are clarified.
	Creation of opportunity for all members to participate	All members participate in TPM activities across all departments and levels, in order to clarify the presence and accomplishment of each member through participation by each member in the activities based on the idea that "TPM is a job."
entation	Introduction of step-by-step implementation system	The steady progress management of activities is carried out through step-by-step implementation which clearly shows what to do at the present stage, what to do at the next stage and the final picture, in order to definitely implement what to do and clarify the guidance points in the process of activities.
s for implementation	Implementation of step-by- step examination	Appropriate consultation is carried out in the system where a group in a position of leadership evaluates the appropriateness of going on to the next step when implementing activities through step-by-step implementation, and where top management at the working site also evaluates it.
sites fo	Ensuring of top management diagnosis function	The business manager confirms at a certain time the status of accomplishment as stated in the TPM policy and implemented as planned by the manager to produce results, and also confirms the need to change the future policy, plan, system, etc.
Prerequisite	Establishment of pillars of TPM implementation	Basic pillars toward activities are established from the viewpoints of a double-wheel system concerning equipment management by a field operator and specialized maintenance so as to avoid problems in production equipment, prevent the occurrence of problems by upstream control, and develop human resources. Based on the above, pillars for activities according to the needs as a working site are clarified.
	Clarification of loss	TPM aims to contribute to business by thoroughly eliminating "losses" including chronic loss. Therefore, the existence and definitions of loss and structure are clarified, and the level of contribution to business by eliminating such losses is clarified.
	Utilization of methods and techniques to solve problems/issues	In order to produce results toward solving problems including chronic loss, such approaches as applicable analyses and improvement, and their methodologies are clarified and activities logically implemented.
	Utilization of tools for circle activation	"TPM activities board," "one-point lessons" and "circle meetings" are utilized as effective tools for circle activation.
	Establishment of system for developing human resources	A system for training is established in order to secure personnel having capabilities corresponding to the work, and education and training based on that system are carried out. Special programs are systematized and implemented for workers directly engaged in equipment management, in order to secure professional engineer capabilities and develop human resources having new capabilities.

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6. Reference Documents Checklist C - Page 1 of 2

Award for TPM Excellence - Category B Award for TPM Excellence - Category A Award for Excellence in Consistent TPM Commitment

	atogorios	Check Points
	Categories	
1	TPM Policies and Objectives	TPM policies are planned in relation between company policies and plant/factory policy.
		The relation between TPM target values and management target results are clear.
		The master plan is in an appropriate order as an action plan to achieve TPM.
		TPM policies and objectives are checked using methods such as benchmarking that all sections of PQCDSME are displayed corresponding to 8 pillars.
		TPM policies and objectives have been set forth and observed by all the departments and sections.
		The achievement status of TPM policies and objectives is available in a time line using objective data.
		Overlapping small groups, the TPM promotion committee, and other special committees are organized in a way that leads to TPM activities.
		TPM promotion units help facilitate TPM activities within departments/sections.
		Small groups on the front line have been vitalized.
		The achievement status of TPM objectives is confirmed and necessary actions are taken for unachieved indexes.
2	Individual Improvement	Individual improvement issues and themes are set up in relation to TPM policies and objectives.
		Objectives are set forth for each subject of individual improvement, and contributions are being made clear by performance indexes.
		Terms and definitions are being made clear on production department losses and their elimination is being dealt with.
		A system is set up to analyze and understand the relationship between loss and cost using the loss map and loss tree methods.
		Improvement activities are being actively carried out, and contribution to the achievement index is clearly understood.
		A system to prevent recurrence of problems such as defects, breakdown, and short mechanical stalling is standardized.
		A system to apply cases of individual improvement horizontally is established.
		There are many cases of zero occurrences of defects, breakdown, and short mechanical stalling.
		Many necessary improvement measures, such as the QC method, Nazenaze analysis, and PM analysis, are used effectively and the custom of thinking with rationales and principles is being established.
		The results of improvement are being announced qualitatively and in terms of PQCDSME, and future issues and goals are clearly set.
3	Autonomous	Autonomous maintenance achievement goals are set up using a step-by-step method.
	Maintenance	Achievement goals are appropriately assessed at each step by managers for progress and completion.
		Workplace/on-site visual boards, which show the status of activities, goals, accomplishments, and issues to be resolved, are in place.
		Actions are being taken to remove dirt, stains, scattered raw materials, oil leakage, etc. and to eliminate their cause.
		Cleaning, lubrication, bolt tightening, and inspections are performed perfectly and without fail, and thorough measures are taken for difficult-to-handle areas.
		Excellent storage procedures are in effect for tools and jigs, and cleaning is carried out routinely.
		Improvement proposals are made and implemented.
		A system to upgrade the skills of all employees is established with a skill evaluation chart, one-point lessons, and maintenance skill training, and is showing results.
		One-point lessons are available as training texts and are being used.
		Employee morale surveys and skill maps are used to confirm that all employees are working on workplace improvement with a sense of accomplishment.
4	Planned	Goals for autonomous maintenance are set up in line with TPM policies.
	Maintenance	Duties for autonomous maintenance and planned maintenance are clearly defined and a mutual cooperative structure is established.
		Appropriate equipment diagnosis technologies are being put to use for predictive maintenance and deterioration checks, and TBM (time-based maintenance) and CBM (condition-based maintenance) are selectively used.
		Maintenance standards are in order and an appropriate maintenance calendar is created.
		Sudden breakdown has significantly decreased with thorough failure analysis and enhanced improvement maintenance; a system is set up for MP design information to accumulate and utilize the data.
		A system is set up and is being upgraded for professional maintenance skills such as repair skills, inspection skills, lubrication control skills, and failure analysis skills, for which a sufficient technical level has been reached.
		Spare parts, molds jigs, fixtures, measuring equipment, drawings, etc. are all stored as data.
		Maintenance information on the status of equipment deterioration, failure, equipment shutdown, maintenance man-hours, etc. is stored and utilized.
		Maintenance technology training is provided, and maintenance men are obtaining certification as equipment maintenance engineers.
		Maintenance costs are being adequately budgeted and controlled, and the maintenance cost ratio is monitored.
5	Quality	Goals for quality maintenance are set up in line with TPM policies.
	Maintenance	Data are being accumulated for defect outflow and defect process, causes are being analyzed, and improvement goals are being set up.
		A system is structured to set up requirements for equipment that will not turn out defects, and maintenance control is performed appropriately.
		For quality defects, measures are taken to prevent recurrence from the aspect of 4M.
		Various analytical methods such as Pareto analysis, QM matrix, and PM analysis are effectively used at the appropriate stages.
		Based on fundamentals and principles, quality defects are being analyzed for cause.
		Measures aiming for zero occurrences of quality defects are showing results.
		A measure is set up to effectively and thoroughly applies the brakes on defect recurrence.
		A system is established to set up a quality maintenance system with figure 8 deployment.
		In order to reduce the defect rate caused by equipment, necessary training and research are moving forward.

6. Reference Documents

Checklist C - Page 2 of 2

Award for TPM Excellence - Category B Award for TPM Excellence - Category A Award for Excellence in Consistent TPM Commitment

(Categories	Check Points
6	Product and	Goals for development and control of plants and products are set up in line with TPM policies.
	Equipment Development and Control	Items of development and control of plants and products and their standards are clear and the progress is monitored.
		In product and plant development management, a system that extracts the origin of problems in design review and debugging is fully functioning.
		The structure generating loss for product development management is clear and improvement measures are put in place.
		The MP design approach and the implementation of equipment, molds, jigs, and fixtures are both systemized.
		An information feedback system for MP design is in place.
		Economic comparison and risk analysis of plant investment plans are carried out appropriately for the cash flow base.
		A design method based on assessment standards for ease of production is introduced.
		Initial phase control is being exercised on new products and equipment, and there is a positive case.
		There is a case in which development of new technology and processing has led to the development of new products and equipments.
7	Training and	Goals for training programs are qualitatively set up.
	Development	Important themes for the training programs are interlinked with the future plans of the company.
		A systematic training program for each job and rank is established with employees having a full understanding of the required knowledge and skills for each job and rank.
		A training curriculum and lecturers are available based on the training system, and appropriate training is provided.
		Effective training programs are set up for managers, staff members, operators, and maintenance workers.
		A place for maintenance skill training is provided and utilized for professional maintenance training and operator training, making it possible to carry on the skills.
		OJT training programs are fully functioning leading to the upgrading of skills for all staff members and progress in multi-skilled worker training.
		Staff members are actively working to obtain certification as autonomous maintenance engineers and equipment maintenance engineers.
		Employee satisfaction and the status of motivation are quantitatively analyzed and measures are in place for their enhancement.
		Results from the human resources program are being fed back to TPM activity, and achievement is understood.
8	Administrative	Goals for administrative and supervisory departments are set up in line with TPM policies.
	and Supervisory	By supporting the efficacy of production activity and improvement of supplier activity, the product inventory and goods in process have been reduced.
	Departments	Losses by the administrative and supervisory departments are accurately measured.
		Significant reduction in man-hours has led to a reduction in overtime and work on holidays, which has reduced fixed administrative costs.
		A multi-disciplinary and multi-skill approach has moved forward, and man-hours for different departments are becoming equal.
		Morale is being enhanced in the administrative and supervisory departments.
		The office supply inventory is kept at a minimum and the office environment is improved.
		An information system is being structured and a system is set up for quick and accurate information transmission.
		Each department is dealing with reducing costs incurred from operations and overall cost reduction is improving.
		A system to carry over the skills required for sustainable operation maintenance is in place.
9	Safety,	Safety, sanitation, and environment control policies are well defined, improvement targets are set for reduction in waste and emissions, etc.
	Sanitation and Environmental	Past cases of labour accidents and plant disasters have been scientifically analyzed, and action has been taken to prevent recurrence.
	Control	The Industrial Safety and Health Law is being complied with and the work environment (noise, vibration, dust, light, etc.) meets the legal standards.
		A risk analysis hazard map of the entire plant has been created, and the safety inspection manual is in order and is being audited.
		Safety awareness improvement activities take place regularly with near accident, KY and other measures.
		An emergency manual is in place, protective equipment and lifesaving equipment are ready to use, and emergency drills are being executed.
		Safety devices such as safety covers, safety nets, safety signage, and foolproof disaster prevention measures are appropriately prepared.
		Safety assessment is enforced before introducing new equipment and/or process.
		Results from improvement activities have led to energy and resource conservation.
		Environmental measures such as risk management and waste management are being considered, moving forward targeting zero emissions and reduced environmental load.
10	Effects and Evaluation of	The level of achievement for the TPM goal is being assessed, and cause analysis is being carried out for its achievement or non-achievement.
	TPM	Objectives are being met in terms of overall equipment effectiveness, sporadic breakdowns, minor stoppages, and defective product indexes.
		Prominent results have been obtained in reducing process defects and customer complaints.
		The product inventory and works in process have been drastically reduced in comparison to before TPM introduction.
		A record of zero accidents and zero pollution is continuing.
		Product cost is reduced, and cash flow is improved.
		Achievement is seen that contributes to the operation profit improvement.
		TPM cost/benefit analysis is in order.
		High worker morale and a stimulating working environment are in place as an intangible benefit of TPM activities.
		Problems that remain unsolved in connection with TPM activities are being clearly recognized and concrete action plans are being envisioned.

2020: SECTION 6

6. Reference Documents Checklist B – Page 1 of 2

Special Award for TPM Achievement

(Categories	Check Points
1	TPM Policies	As premises for the fulfillment of corporate social responsibility (CSR), the corporate vision is clearly defined for business growth in the 21st century
	and Objectives	TPM policies are planned in relation between company policies and plant/factory policy.
	,	TPM policies and objectives are checked using methods such as benchmarking that all sections of PQCDSME are displayed corresponding to 8 pillars.
		A TPM target value is established in line with management results, and a system is set up to quantitatively evaluate the progress of activities.
		The achievement status of TPM policies and objectives is available in a time line using objective data.
		The achievement status of TPM objectives is confirmed and necessary actions are taken for unachieved indexes.
		Distinctive and innovative TPM activities are exercised fusing the market needs and seeds of the company.
2	Individual Improvement	Each loss from equipment, procedure, operation, unit requirement, and management are being exposed along with the flow of materials and information, and improvement issues are prioritized according to the level of importance.
		Thinking and procedures for zero-loss are thoroughly implemented.
		Human-machine systems are completed in line with management objectives.
		Efforts are made to set up easy-to-operate equipment.
		There are many improvement cases that directly connect to management.
		Individual improvement issues and themes are set up in relation to TPM policies and objectives.
		A system is set up to analyze and understand the relationship between loss and cost using the loss map and loss tree methods, and achievement i seen.
		A system to prevent recurrence of problems such as defects, breakdown, and short mechanical stalling is standardized aiming for zero occurrences.
		A system to apply cases of individual improvement horizontally is established and results are being achieved.
		The results of improvement are announced qualitatively and in terms of PQCDSME, and future issues and goals are clearly set.
3	Autonomous	Autonomous maintenance is established and the improvement structure is moving forward.
	Maintenance	Small-group activities have been revitalized and specified achievements are gained.
		Kaizen proposals are made actively and the contents are at a high level.
		Continued level improvement training is provided for maintenance skills.
		The achievement target for autonomous maintenance is shown in steps, and there is a system established to diagnose the progress and completion showing results.
		Actions are being taken to remove dirt, stains, scattered raw materials, and oil leakage, etc. and to eliminate their cause.
		Cleaning, lubrication, bolt tightening, and inspections are performed perfectly and without fail, and thorough measures are taken for difficult-to-handle areas.
		A system to upgrade the skills of all employees is established with a skill evaluation chart, one-point lessons, and maintenance skill training, showing results.
4	Planned Maintenance	Computerized systems are being successfully used for the purpose of spare parts control, maintenance cost control, maintenance information, etc. showing results.
		The concept of optimal maintenance cost is being effectively applied.
		Equipment diagnostic techniques are steadily being applied and are showing results.
		Equipment is set up for easy autonomous maintenance.
		A number of cases are available that demonstrate excellent results of corrective maintenance.
		Goals for planned maintenance are set up in line with TPM policies and their progress is being monitored.
		Duties for autonomous maintenance and planned maintenance are clearly defined and a cooperative structure among operators and professional maintenance men is established, showing results.
		Sudden breakdown is significantly decreased with thorough failure analysis and enhanced maintenance; a system is set up for MP design information to accumulate and utilize the data showing results.
		A system is set up and is being upgraded for professional maintenance skills such as repair skills, inspection skills, lubrication control skills, and failure analysis skills.
		A system is set up and is being upgraded ensuring the accumulation of maintenance information such as the status of equipment deterioration, failure, equipment shutdown, maintenance man-hours, etc.
5	Quality Maintenance	The 4M requirement for quality assurance is clearly defined and duty segregation for each pillar and collaborative issues are noted.
	atoriarios	Details of manufacturing procedures are traceable.
		A system is structured to realize a facility that will not send out defects.
		A system is structured to set up and manage operations and work requirements that will not send out defects.
		A production line with zero defects is available.
		Quality maintenance goals are established in line with TPM policies and progress is monitored.
		Based on fundamentals and principles, quality defects are being analyzed for their cause.
		A measure is set up to effectively and thoroughly applies the brakes on defect recurrence.
		A system is established to set up a quality maintenance system with figure 8 deployment.
		In order to reduce the defect rate caused by equipment, necessary training and research are moving forward.

6. Reference Documents

Checklist B - Page 2 of 2

Special Award for TPM Achievement

С	Categories	Check Points
6	Product and	Systems are in effect for the development and control of plants and products; results have been achieved.
	Equipment Development	Systems are in effect for economic comparison and risk analysis of plant investment alternatives.
	and Control	Systems are in effect for MP design and MP information feedback.
		A number of cases are available for easy-to-make products and easy-to-use equipment.
		Plants and products have been developed that achieve high-level customer satisfaction.
		Management items and standards are clearly defined for product and plant development management, goals are set in line with TPM policies, and
		progress is being monitored.
		In product and plant development management, a system that extracts the origin of problems with design review and debugging is fully functioning.
		The MP design approach and implementation in equipment, molds, jigs, and fixtures are all systemized and an information feedback system for MP design is in place.
		Initial phase control is being exercised on new products and equipment, and it is producing a positive result.
		A system that connects the development of new technology and processing to the development of new products and equipments is in place and specific cases are available.
7	Training and Development	The training environment, curriculum, and tools are in order for the improvement of knowledge, skills, and techniques.
	Development	Internal TPM instructors have been trained and appointed.
		All company staff members eligible for certified maintenance specialist have taken the examination, with a high passing rate.
		The criteria for training assessment are in good order and are proving conducive to operator vitalization.
		A challenging training program is in good order providing a comfortable workplace.
		Goals for training programs are qualitatively set up and important themes for the training programs are interlinked with the future plans of the company.
		A systematic training program for each job and rank is established with employees having a full understanding of the required knowledge and skills for each job and rank, showing results.
		A place for maintenance skill training is provided and utilized for professional maintenance training and operator training, increasing the ability to carry on skills.
		OJT training programs are fully functioning and lead to the upgrading of skills for all staff members, improving multi-skilled worker training.
		Results from the human resources program are being feed back to the TPM activities and system to verify that achievement is moving forward.
8	Administrative and	People-friendly, pleasant offices are in place.
	Supervisory	Actions are being taken to provide shorter work hours and care of senior workers.
	Departments	Effective support is being rendered to production departments to improve operation efficiency.
		Cost control is in effect for each product.
		Work improvement is being aggressively pursued, and concrete results are being obtained.
		Improvement goals for administrative and supervisory departments are in place in line with TPM policies and progress is being monitored.
		By supporting the efficacy of production activity and improvement of supplier activity, the product inventory and goods in process have been reduced.
		Losses by the administrative and supervisory departments are accurately measured, significant reduction in operation man-hours is achieved, and indirect fixed costs are reduced.
		Information is being transmitted quickly and accurately, and information needed is available on demand.
		A system to carry over the skills required for sustainable operation maintenance is in place.
9	Safety,	Company policies regarding safety and the environment are being observed in every area of company operation.
	Sanitation, and	Human contact is being aggressively pursued on production floors.
	Environmenta I Control	Work environment protection (noise, odor, light, etc.) is in effect.
		Zero accidents and zero pollution are being pursued in an effort to create a globally friendly plant.
		Safety, sanitation, and accident prevention are all being handled adequately.
		Safety, sanitation, and environment control policies are well defined, improvement targets are set for reduction of waste and emissions, etc., and progress is being monitored.
		Past cases of labor accidents and plant disasters have been scientifically analyzed, and action has been taken to prevent recurrence.
		A risk analysis hazard map of the plant has been created, the safety inspection manual is in order, and safety patrols are being made.
		Safety assessment is enforced before introducing new equipment and/or process.
		Environmental measures such as risk management and waste management are being considered, moving forward targeting zero emissions and reduced environmental load.
10	Effects and Evaluation of	TPM activities are in place with a goal-oriented emphasis.
	Evaluation of TPM	The level of achievement for TPM goals is being assessed, and cause analysis is being carried out for its achievement or non-achievement.
		Objectives are being met in terms of overall equipment effectiveness, sporadic breakdowns, minor stoppages, and defect product indexes.
		Prominent results have been obtained in reducing process defects and customer complaints.
		The product inventory and works in process have been drastically reduced in comparison to before TPM introduction.
		A record of zero accidents and zero pollution is continuing.
		Product cost reduction, cash flow improvement, and achievements leading to operating profits are showing.
		High worker morals and a stimulating working environment are in place as an intangible benefit of TPM activities.
		Problems that remain unsolved in connection with TPM activities are being clearly recognized and concrete action plans are being envisioned.

6. Reference Documents Checklist A

Advanced Special Award for TPM Achievement

	Categories	Check Points
1	TPM Policies and Objectives	As premises for the fulfillment of corporate social responsibility (CSR), the corporate vision for business growth is defined and open management takes place based on the roadmap.
		With distinctive and innovative TPM activities fusing market needs and corporate seeds, restrictions hindering product cost reduction and loss are being thoroughly eliminated.
	Important Themes	
2	Individual Improvement	Loss hindering product cost reduction is accurately extracted, with the participation of all departments, including sales, development, production, distribution, and management.
		Loss from product cost is being categorized in line with the flow of materials and information, and activities in each department and section and activities surpassing departments and sections are clarified to achieve zero-loss.
		Cost effectiveness is being considered for improvement, and methods appropriate for loss items are being effectively used.
		Many zero-defect and zero-breakdown lines are created with improvement measures, and there are many cases of reduction in non-value-added processes.
		New technologies and processes are being developed that can be boosted in the industry.
3	Autonomous Maintenance	Steps for autonomous maintenance are evolving to the point that autonomous management is being implemented.
		Training to upgrade maintenance skills continues to be provided, with skill level goals being upgraded and reaching a high level.
		The autonomous maintenance percentage has been heightened to reach goals by involving a part of the professional maintenance operation.
		All staff members are flexibility dealing with new equipment, products, and processes, and are working for workplace improvement.
		Improvement proposals are actively made, leading to a cheerful, safe, and pleasant workplace.
4	Planned Maintenance	Computers are effectively utilized to provide good results for spare supply management, maintenance fee management, and maintenance information management.
	Maintenance	Methods, tools (measuring instruments, sensors), and evaluation methods for facility analysis are being systemized.
		Ex post facto, regular, prognostic, and improvement maintenance are differentiated in consideration of appropriate maintenance fees, and are effectively implemented.
		The facility makes autonomous maintenance easy to handle.
		With improved maintenance, measures for zero breakdown and defects, and conservation of resources and energy, are implemented and there are many cases that produce effects for product cost reduction.
5	Quality Maintenance	The 4M requirement to ensure quality is clearly defined, role sharing by each pillar is accomplished, and collaboration issues are specified to prevent defect occurrence and outflow.
		A structure and facility that prevent material defects, and establish and manage operation and work requirements, are set up and are showing results.
		It is possible to track down material procurement, manufacturing, and distribution records for each product, enabling easy pinpointing of causes of defect generation and outflow, making it possible for improvement measures to be taken immediately.
		Quality maintenance at the mass production stage is in effect.
		Systems are in effect for zero-defect production.
6	Product and Equipment Development and Control	A cross-functional system and information network is organized for development management by sales, development, designing, trial production, manufacturing, and distribution departments.
		Evaluation is performed in new facility development for product cost-saving benefit, operability, maintenance, safety, environmental load, and LCC.
		LCA is introduced in the development of new products.
		CAE and 3D-CAD simulation technology is used at the development stage progressing in non-test production.
		In view of the market lifespan of a product, a percentage-of-sale goal value is set up for new products, and the goal is being met.
		Product development with high customer satisfaction is taking place with intellectual property rights, such as patent applications, being obtained.
7	Training and Development	Necessary technology and skills, core and detailed, are being systemized, and training programs are installed and provided in steps according to job and position.
		Training programs are established in line with corporate renovation, and employees are improving in the technological and skill aspects of their positions.
		Training is provided to foster human resources that can comprehensively manage cross-functional organization for development.
		The criteria for training assessment are in good order and are proving conducive to operator revitalization.
		The number of certified equipment maintenance engineers is increasing.
		The training provided, which is firmly established, inspires motivation, purpose, and ease.
8	Administrative and Supervisory Departments	A management control system is established that connects related departments such as the sales and distribution departments.
		A system is established for product cost control for each product in line with the flow of materials and information.
		A support system is established that leads to the optimization of the overall production process.
		Improvement measures are actively installed for operation contents and are showing results.
		A project is actively deployed for time reduction with significant efficacy of operation.
		The workplace is made kind and pleasant by taking time reduction measures and giving consideration to senior staff members.
9	Safety, Sanitation, and Environmental Control	Company policies regarding safety and the environment are being observed in every area of company operation.
		Considerations are made for sound human relationships in the workplace and employee satisfaction surveys are carried out regularly.
		Training is systematically provided for safety assurance, environmental conservation, and disaster measures.
		Workplace safety, environmental conservation, and disaster measures are evaluated when new technology, equipment, or products are being introduced.
		Waste and emissions are being controlled with yield enhancement and energy source improvement.
		The work environment is becoming pleasant to its workers with workplace environmental protection (measures for noise, odor, and light), sanitary measures, and health checkups.
10	Effects and	TPM activities are in place with a goal-oriented emphasis.
	Evaluation of TPM	Through continuation of TPM activities, applied goals are being met.
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6. Reference Documents

Checklist S

Award for World-class TPM Achievement

	0-4	Obsala Daints
1	Categories TPM Policies and	Check Points As premises for the fulfillment of corporate social responsibility (CSR), the corporate vision for business growth is defined and open management takes place based
'	Objectives	on the roadmap.
		Fusing market needs and corporate seeds, creative world-class TPM activities take place giving birth to innovative products and manufacturing methods.
2	Individual Improvement	Company-wide backbone technologies such as product quality improvement, reliable equipment, process streamlining, ease of operation, production efficiency, speeding up of information processing, and efficient distribution are being theoretically systemized and utilized in relation to the flow of funds, materials, and information.
		Processing and reaction phenomena, the core of production, are being visualized and monitored by visual images, sensors, and simulations, aiming to enhance product quality.
		An innovative plant and production system that can flexibly respond to new product manufacturing and small-volume production of multiple items are established.
		Profit planning is established with product value enhancement and reduction of prime cost.
		Review of loss is being performed regularly and zero-loss activity has been established.
3	Autonomous Maintenance	Autonomous plant maintenance is evolving into autonomous production maintenance, and into autonomous production management, thereafter developing into company-wide autonomous management.
		Systemized maintenance training has been established to gain skills, and achievements have been made.
		Innovative activities and suggested activities directly related to company management are producing achievements.
		A friendly and comfortable workplace exists.
		Autonomous maintenance is taking place with commitment and a sense of ownership.
4	Planned Maintenance	The relationship between facility function and component parts is systematically understood, leading to effective weakness improvement, the specification of sections prone to produce defects, and the establishment of a maintenance time cycle.
		Deterioration of the facility is categorized as regular and irregular deterioration based on facility structure and load history, for which measures are taken to prevent breakdown and accidents.
		Measurement and sensor technology for facility analysis is being upgraded, and the maintenance period, cycle, and area are determined with a high degree of
		accuracy. With the improvement in the planned maintenance technology, measures to prevent recurring breakdown are established and the facility is improved for ease of autonomous maintenance.
		The system and concept of optimal maintenance is completed in comprehensive consideration of the 4M requirements.
		Facility maintenance is systemized and implemented from the perspective of the production system.
5	Quality	Unified control of materials, purchasing, specifications, design, manufacturing, and distribution data has been developed, with which quality can be guaranteed, and
	Maintenance	has become a source of pride for the company in its industry. A system is established to swiftly obtain information on defective products and immediately utilize the information in the production process and company-wide
		operations.
		Quality maintenance is implemented for new product development.
		Zero customer complaints and zero defects are standardized and are being achieved.
		The structure is systemized to avoid defects and, at the same time, continuous feedback concerning quality improvement is leading to learning opportunities.
6	Product and Equipment Development and Control	New product development and technological development are taking place through strategic alliances. Internal and external technologies and market information are being managed in unification and utilized in the establishment of development themes for products
		and equipment.
		Development in consideration of the product lifecycle management (PLM) of products and equipment is taking place and a management system for the development is established.
İ		A cross-functional system is organized for product and equipment development by planning, designing, manufacturing, distribution, and marketing departments.
		A mutual relationship between product development and equipment development is fully considered.
		There are many cases that show examples of user-friendly and environmentally gentle product design and development.
		Innovative products that can be boosted in the industry are being developed.
7	Training and Development	The thinking that a company stands on its people is being established and implemented.
		An ideal of training has been developed individually among employees with different jobs and positions, and training is provided systematically.
		Training is provided to foster human resources that can comprehensively manage cross-functional organization for development. A training program is available for young and mid-level employees aiming to foster managers with an understanding of management, sales, finance, development, technology, and skills.
		Systemization and technological improvement of skilled workers is being done through cooperation from individuals exceeding the pillars of TPM activities.
		TPM training is provided at cooperative companies and other plants/factories, leading them to the level for assessment.
		The number of certified maintenance specialists (highest level) is increasing.
		The results of TPM implementation are periodically presented and experiences are exchanged with other plants for the purpose of mutual development.
8	Administrative and Supervisory Departments	A consolidated system is established ahead of the industry that organizes management resources (people, things, funds, information).
		Major operation processes are defined and continued process improvement is taking place with the operation inventory.
		An SCM system is established that is consistent in terms of procurement, manufacturing, sales, and distribution.
		Reform of the operation content is performed appropriately.
		Use of a comprehensive system is leading to a stronger relationship with related and cooperating companies.
		Expansion in ROA is further progressing with downsizing.
		The workplace has become kind and pleasant to its employees.
		Considerations are made for part-time and senior workers, increasing the pleasantness of the workplace.
		Evaluation is performed on 4 levels of satisfaction (4S: CS, ES, SS, GS) and specific activities are deployed.
9	Safety, Sanitation, and Environmental Control	Sufficient consideration is given to health and safety issues.
		Physically demanding labor has been automated and a user-friendly assembly line is being structured.
		Basic thinking on environmental conservation is clarified and regional environment assessment is being performed for new business development.
		In addition to the realization of a safe and sound workplace, contributions are made for the realization of a safe and sound community. Steady reform is taking place for the realization of a resource recycling production factory.
		Steady reform is taking place for the realization of a resource-recycling production factory. Evolution activities take place with the local community.
10	Effects and	Exchange activities take place with the local community. TPM activities are in place with a goal oriented emphasis.
10	Evaluation of TPM	TPM activities are in place with a goal-oriented emphasis.

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Contact Details

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