

## Establishment and Operation of Assessment Criteria of TPM Awards

### Background for Establishment and History

In order to achieve a more objective assessment and evaluation in the assessment for TPM Awards, the Japan Institute of Plant Maintenance operates newly established "assessment criteria."

There are some characteristics inherent in TPM which are not seen in other activities. "TPM activities" make the most use of these "characteristics" based on a clear understanding thereof.

We believe the effective measure of preventing TPM from losing substance is necessary to objectively evaluate, at the site of assessment, the judgment as to whether TPM activities making full use of the "characteristics inherent in TPM" are being implemented. Since minimum conditions must be satisfied, we therefore established new "assessment criteria" and clarified the requirement that matters covered by these criteria be satisfied.

We explain the details of why and how these "assessment criteria" were established, the purpose of the criteria, and the contents of applicable standards below.

First of all, we would like you to understand that everything stated in these new "assessment criteria" entails the most fundamental matters in implementing TPM activities, and is nothing new if you simply implement TPM. We believe that most of you when reading the contents may feel, "this is just common sense."

However, we had to challenge the clarification of this common sense as the "assessment criteria" mainly because the following have been exposed:

#### More objectivity required for the assessment

- Raise awareness that the assessment necessitates the judgement of "acceptability/unacceptability"
- Objective assessment criteria and judgement criteria for acceptability/unacceptability
- Assessment process based on the consent of the place of business to be assessed (assessed plant)  
=> Satisfactory assessment

In order to clarify the "assessment criteria" based on the above, the "Ad-hoc Group for Examination of Assessment Criteria of TPM Awards" was established in April 2007 as an organization subordinate to the Steering Committee for TPM Awards, for the purposes of formulating assessment criteria based on the fundamentals of TPM, feeding back information to the assessment, and clarifying the criteria for judgment of appropriateness/inappropriateness relative to the TPM Awards. The Ad-hoc Group consists of members of the Steering Committee for TPM Awards and specialists in TPM.

In operating the Ad-hoc Group, we discuss the contents of activities inherent in TPM on an ongoing basis, and submit our opinions to the Steering Committee for TPM Awards each time. We then established the criteria after related activities had been conducted for about one year.



We intend to announce and report the established and issued "assessment criteria" to all parties concerned with the TPM Awards, including member companies, the places of business to be assessed for TPM Awards, overseas assessment agencies, the assessors for TPM Awards, TPM consultants, and other parties concerned through various media.

### **Purpose, Scope of Application and Time to Commence the Application**

The purpose of these new "assessment criteria" is to understand the essence of TPM and establish the criteria for objectively evaluating whether TPM activities actually contribute to management, and with these assessment criteria being applied to all TPM awards. Whether implementing TPM activities for the first time or continuing the implementation of TPM at a higher level we will confirm that operations based on these criteria are established and are being conducted.

We will apply these "assessment criteria" to the assessment in FY2009 and thereafter. In other words, the assessment criteria will apply to the first stage assessment conducted during April-June 2009 and again during subsequent assessments. These assessment criteria will apply to companies both in Japan and in all other countries.

### **Operation of Assessment Criteria**

We will operate the new "assessment criteria" as described below:

- Used together with the existing assessment checklists (A, B, C & S)
- It is essential to satisfy the items of "assessment criteria" at a minimum, among items included on the checklist list in the assessment checklist

### **JIPM's Basic Concepts in the Assessment for the TPM Awards**

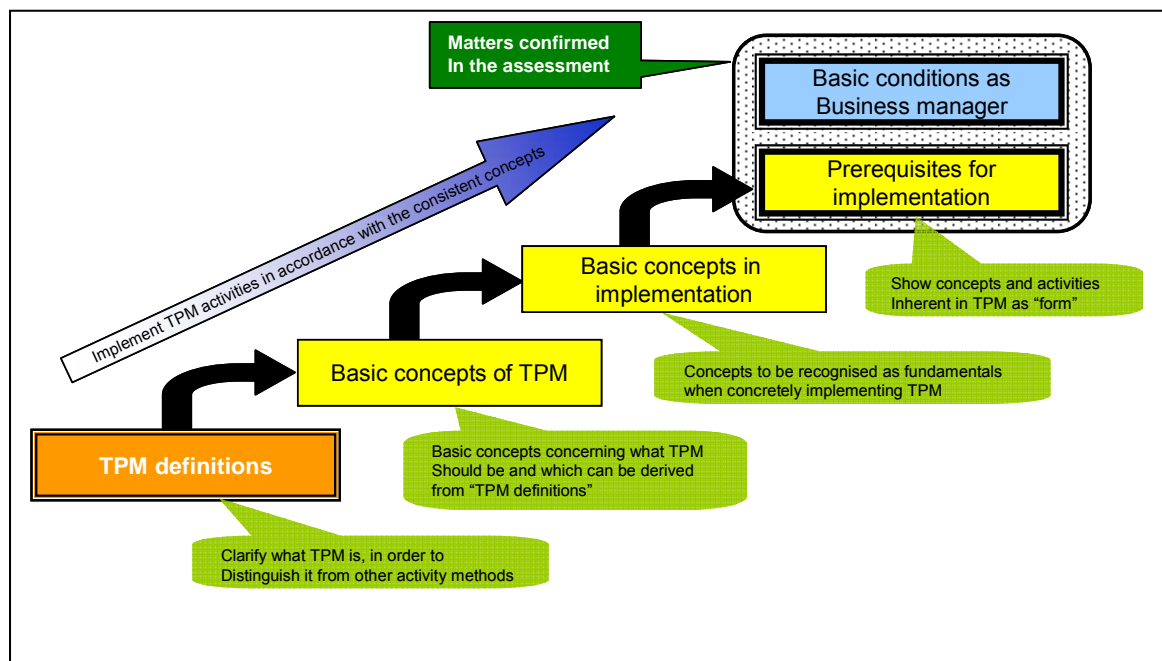
Japan Institute of Plant Maintenance has the following basic concepts for the assessment for the TPM Awards.

#### Japan Institute of Plant Maintenance

- Expects that TPM will promote the "growth of personnel and organisation," and will contribute to sustainable corporate growth;
- Requests that activities are implemented consistently based on the TPM definitions, and become established under the scheme, for the purpose;
- Confirms in the assessment for the TPM Awards whether "what is required by TPM" (i.e. prerequisites) is satisfied; and
- Confirms the basic conditions to be naturally satisfied as an operator of business activities.

When implementing TPM at a working site, it is necessary to

- Understand the "TPM definitions"
- clarify the "basic concepts of TPM" as basic concepts for what TPM should be as derived from those definitions
- make efforts to implement activities by always considering the "basic concepts in implementation". This is fundamental when concretely implementing TPM based on the "basic concepts of TPM".
- When implementing TPM in accordance with those concepts, it is also necessary to satisfy the items regarded as prerequisites. Confirming that these prerequisites are satisfied will prove that TPM is implemented based on an understanding of the TPM definitions (see Fig. 1).



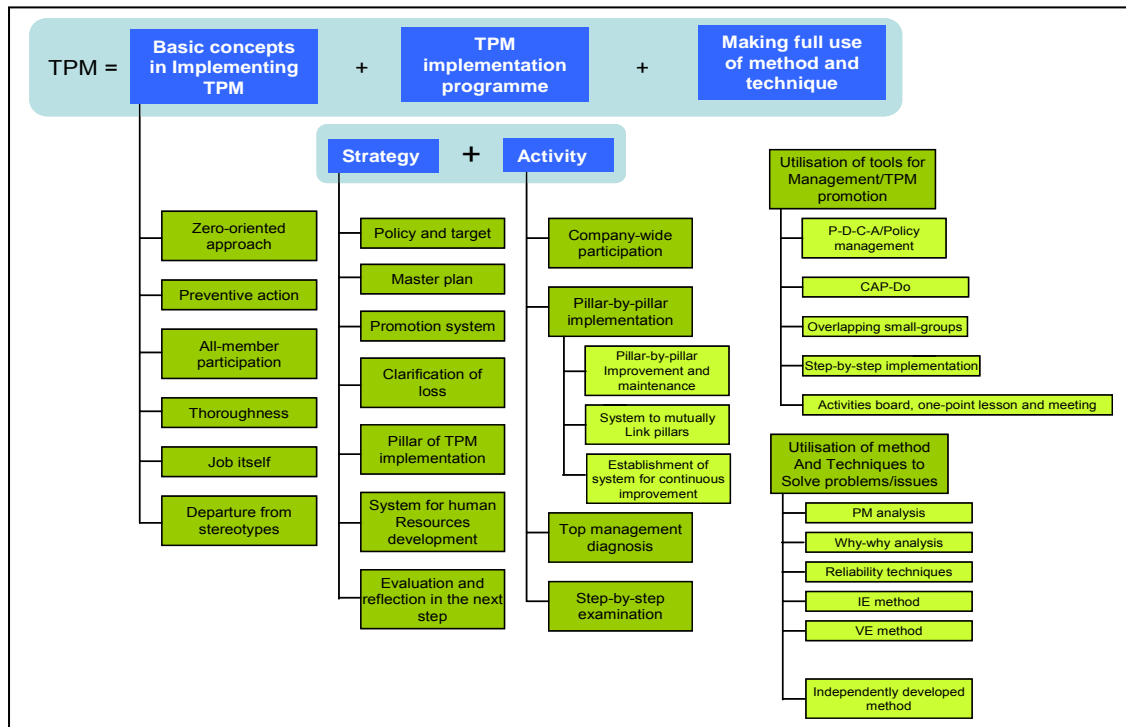
**Fig. 1 Basic Concepts in the Assessment for the TPM Awards**

### Contributing Factors to TPM

TPM has many characteristics not seen in other activities. These are the "characteristics inherent in TPM." It is necessary to satisfy the following three major elements in order to make TPM effective as having these characteristics.

- **Basic concepts in implementing TPM**  
*This refers to a consistent group of concepts adhering to TPM and which can be called the basic philosophy*
- **TPM implementation programme**  
*This refers to a methodology based on strategic proof of how to implement TPM in line with the basic concepts of TPM*
- **Making full use of methods and techniques to solve problems**  
*This refers to the expectation that achieving more cases of zeroing will be possible by making full use of various methods and techniques when concretely implementing TPM based on the basic concepts of TPM.*

Fig. 2 below shows the contributing factors in detail.



**Fig 2 Contributing Factors to TPM**

## Assessment Criteria

In the assessment for TPM Awards we will conduct evaluations and make judgments by assessing whether the items listed in Table 1, below, are satisfied as a minimum.

**Table 1 Assessment Criteria**

Assessment Criteria		Explanations
Basic conditions as business manager		The basic conditions are to fulfil the social responsibility to be exercised by an enterprise, and achieve labour and equipment safety.
Prerequisites for implementation	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."
	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.
	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.
	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.
	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.	

## Operation of Assessment Criteria

We will operate the assessment criteria as summarised in Table 2, below.

**Table 2 Operation of Assessment Criteria**

<b>Matters concerning operation</b>	<b>Explanation</b>
Commencement of application	We will begin applying the assessment criteria, beginning with the assessment to be conducted in FY2009
Scope of application	The assessment criteria will apply to all levels of award, and are used during both the first and second stage assessments
Relation with the checklist	We will use the conventional assessment checklists (each checklist of S, A, B and C) as before. However, these new “assessment criteria” clarify the minimally required items based on the purpose and contents of each item on the checklist. In other words, completely new items are <b>not</b> being established
How to conduct assessment	We will never conduct assessment using only the new assessment criteria. We will use both the checklist and assessment criteria for assessment

These assessment criteria show the basic requirements needed to properly establish TPM. We expect companies that are now implementing TPM activities or those which may consider future introduction will implement TPM activities based on these assessment criteria.

TPM Awards Committee  
Japan Institute of Plant Maintenance