



(CBM)

youngkim@poscofts.com

/ TFS Global



1.

1970 가

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가

TPM

(Machine Condition Diagnosis Technology : CDT)

(Machine

Condition)

(Condition Based Maintenance :

CBM)

『 =

[(TBM)+CBM] + BM +

CM』

(Maintenance)

PM :
(Preventive Maintenance)

CM :
(Corrective Maintenance)

BM :
(Breakdown Maintenance)

TBM :
(Time Based Maintenance)

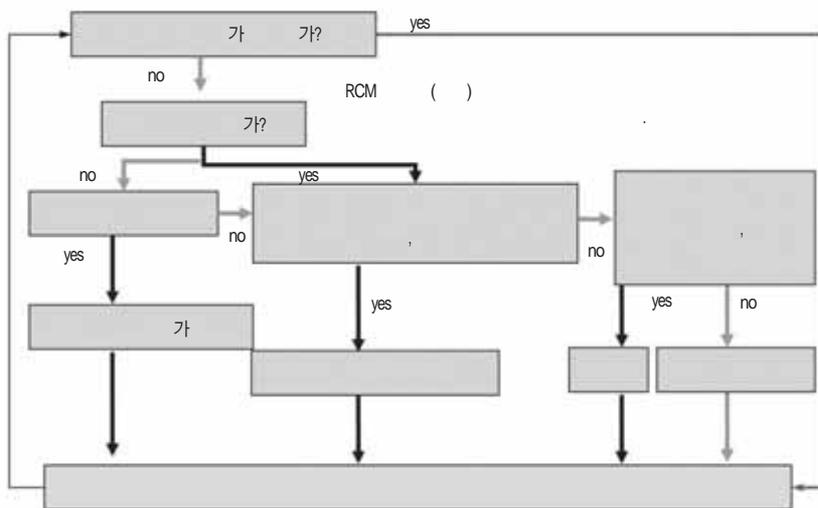
CBM :
(Condition Based Maintenance)

PBM :
(Planned Breakdown Maintenance)

EBM :
(Emergency Breakdown Maintenance)

(PM)
(Time Based Preventive Maintenance : TBM)
(Inspection & Repair)
(Machine Condition)
(CBM)
:Condition Based Preventive Maintenance : CBM

(BM) 2. (CBM)
(Planned Breakdown Maintenance (British Standard) (CBM)
PBM) (Emergency Breakdown Maintenance : EBM)
(EBM) 3가
(EBM) 3가
Maintenance carried out in response to a significant deterioration in a machine as indicated by a change in a monitored parameter of the machine condition.



Special contribution

CBM (Condition Based Maintenance) (in response to) ... ()가

Fact Data) CBM (: ... 89% CBM

CBM (Leave the smoothly running machines untouched) (가) CBM (Machine Condition) 가

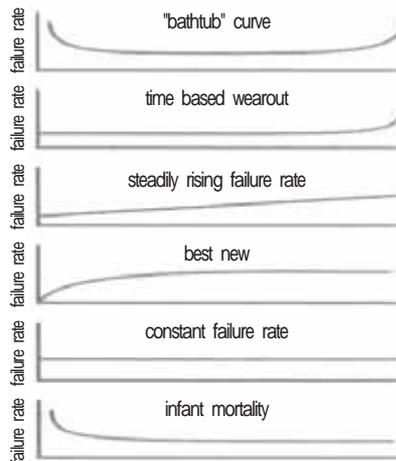
CBM (CBM) CBM 가

RCM(Reliability Centered Maintenance) , RCM

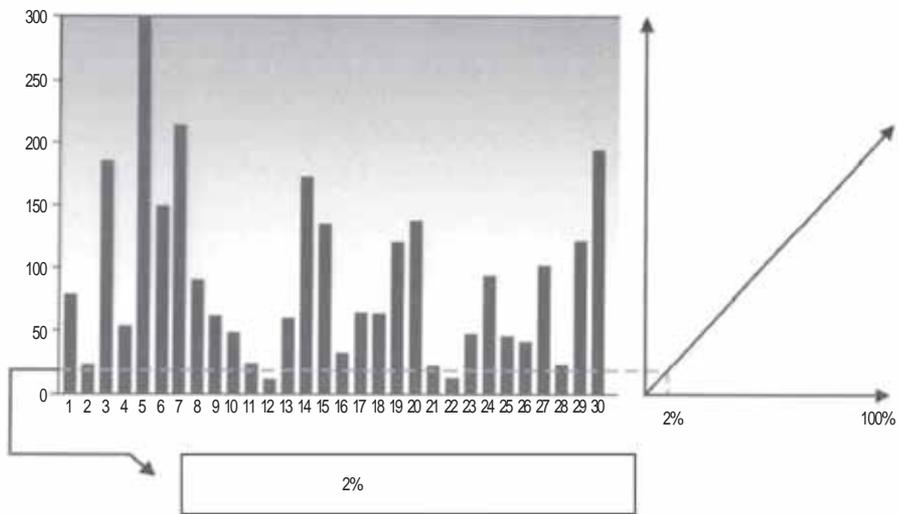
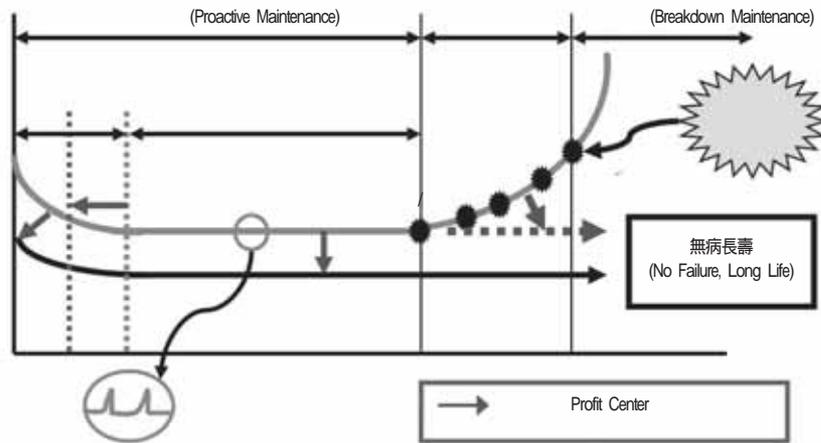
(Trend Control) 가

< 1 >

	가 (PR)	가	CBM		
			BM	TBM	CBM
(CPR)				x	
(DPR)			x	x	



< 2 > (CBM)



「 」 CBM

TBM

(CBM)

TBM CBM

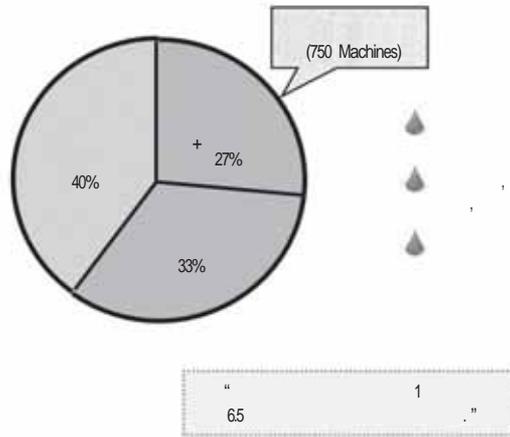
()

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가

Special contribution

가
TBM, CBM
CBM 가
BM,
TBM (CBM)
(CBM)
(CBM) CBM (BM)
(TBM)
CBM
CBM
CBM
CBM 가 CBM
(CBM 1), CBM (CBM 2), CBM
(CBM 3) 3
가 (90%). 가
CBM 가
TBM . CBM 3
가 CBM (CBM 3) :
3. 가 가
CBM . (, ,)
가
가
)가 (, 가



Ref : Vibration Institute

,가 CBM
CBM(Condition Based Maintenance)

PDA(Personal Digital Assistant)
(Paperless)

(Bar Code)

98

2003

L

Open System

PDA
(Thermography)

가

가

가

가

가

Convergence(

CBM (CBM 2) : CBM 3 가 ,)

CBM

.(-FFT, Ultrasonic, Thermography,
Oil Analyzer) ,

< 4>

(CDT)

No		
1		
2		
3	(Leak Detection)	Sealing 가
4	(Crack Detection)	* : Crack
5		가
6		Microphone
7		
8		
9		
10		
11		
12		가 Scale
13	pH	가 pH()
14		

4.

< 4>

(CBM)

(Machine Condition)

(CBM)

(

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