

Present by: Mr.Vachiravitch Mathurossuwan

Safety Measures for Machinery in Thailand

Mr. Vachiravitch Mathurossuwan

POSITION : SAFETY ADMINISTRATIVE OFFICER

COMPANY: PTT PUPBLIC COMPANY LIMITED (PTT)

Educational Background :B.Ed.(Electrical) , MBA.(General)

Working Experiences :

- ❑ Quality Safety Health & Environment
17 Year.(PTT)
- ❑ Trainer & Consultant (QSHE) 12 Year.
- ❑ Books (Safety Planed Inspections,
Internal Audit ISO14001)
- ❑ VCD (5 Story)

Cotact:

E-mail: vachiravitch.m@pttplc.com

MB: 6681-738-1643

OFFICE: 662-239-7963



Purpose of the presentation

- To present the method to measure safety for machinery in Thailand and showing the result from measurement in 3 last year.

Presentation Plan

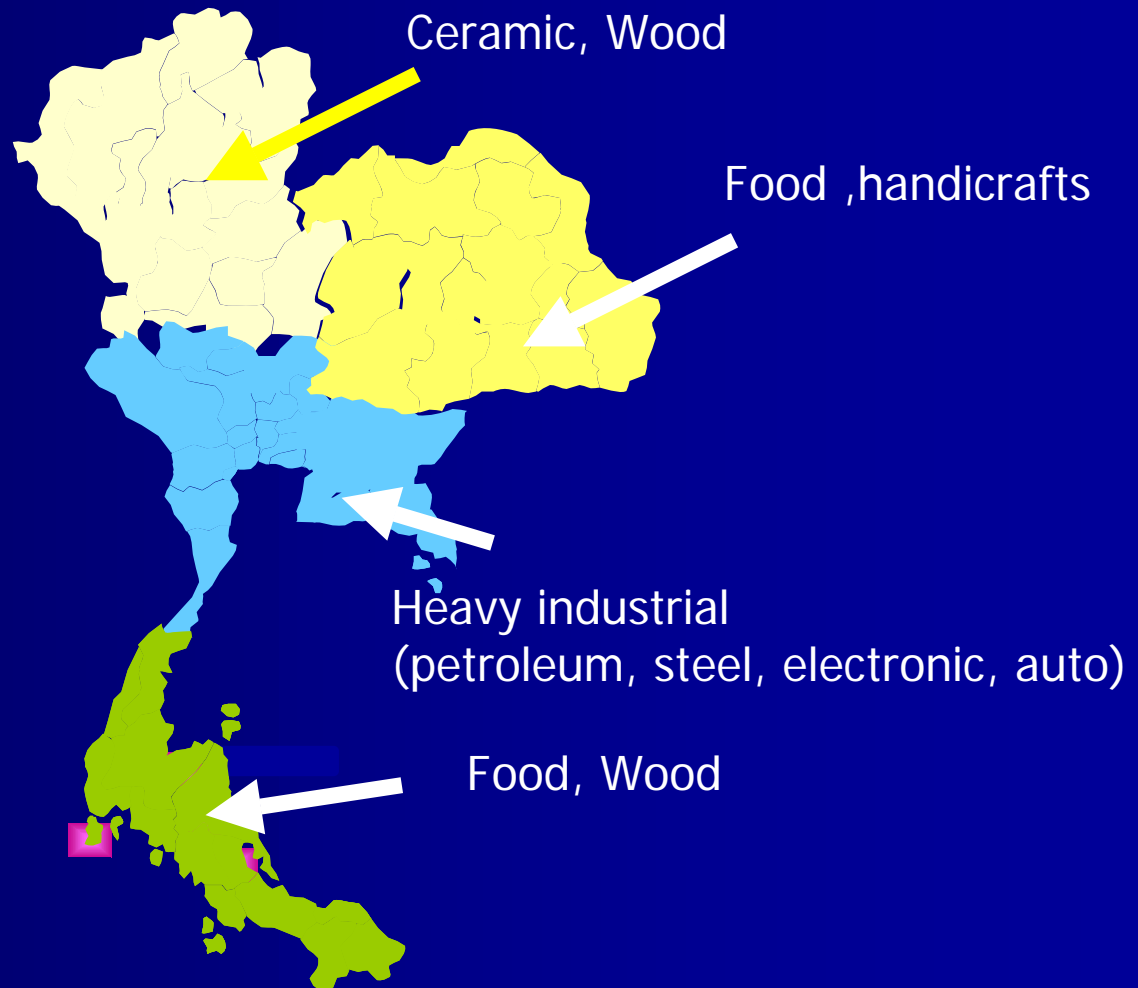
- Thailand industrial Background
- Accident & incident in Thailand
- The method to measure safety for machinery
- Report Procedure
- Situations in PTT.
- Q&A

Background of the industrial in Thailand

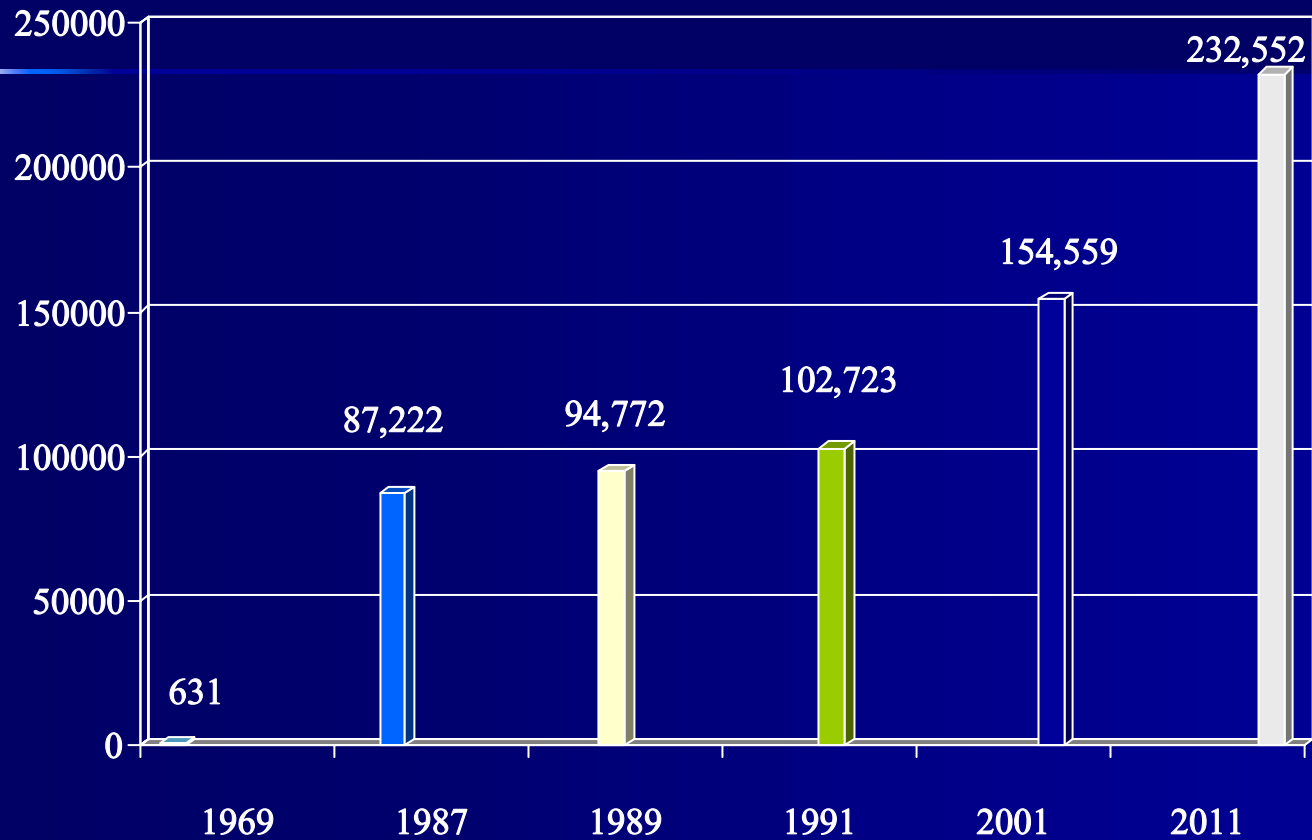
❑ THE PAST
- Agriculture

❑ THE PRESENT
- Industrial

❑ IN FUTURE



Number of Factory



Factory Growth Trend in Thailand

Accident & incident in Thailand

Year	Number of injury & occupation disease rate
1996	245,616
1997	230,376
1998	186,498
1999	171,997
2000	179,566
2001	189,621
2002	190,979
2003	210,673
2004	215,534
2005	214,235

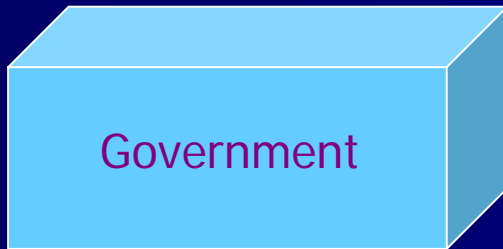
Major Accident Record

Year	Type of Accident
1999	Refinery Explosion & Conflagration
1997	Hotel Conflagration
1993	Doll Factory Conflagration
1990	LPG Truck Explosion & Conflagration

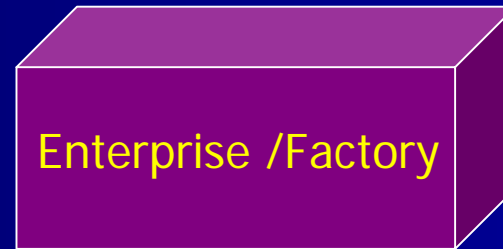
The method to measure safety for machinery

- The method to measure safety for machinery in Thailand has 2 type

A



B



The method to measure safety for machinery

GOVERNMENT

- The accident number from machinery cause to compare other cause
- To compare part record

The method to measure safety for machinery

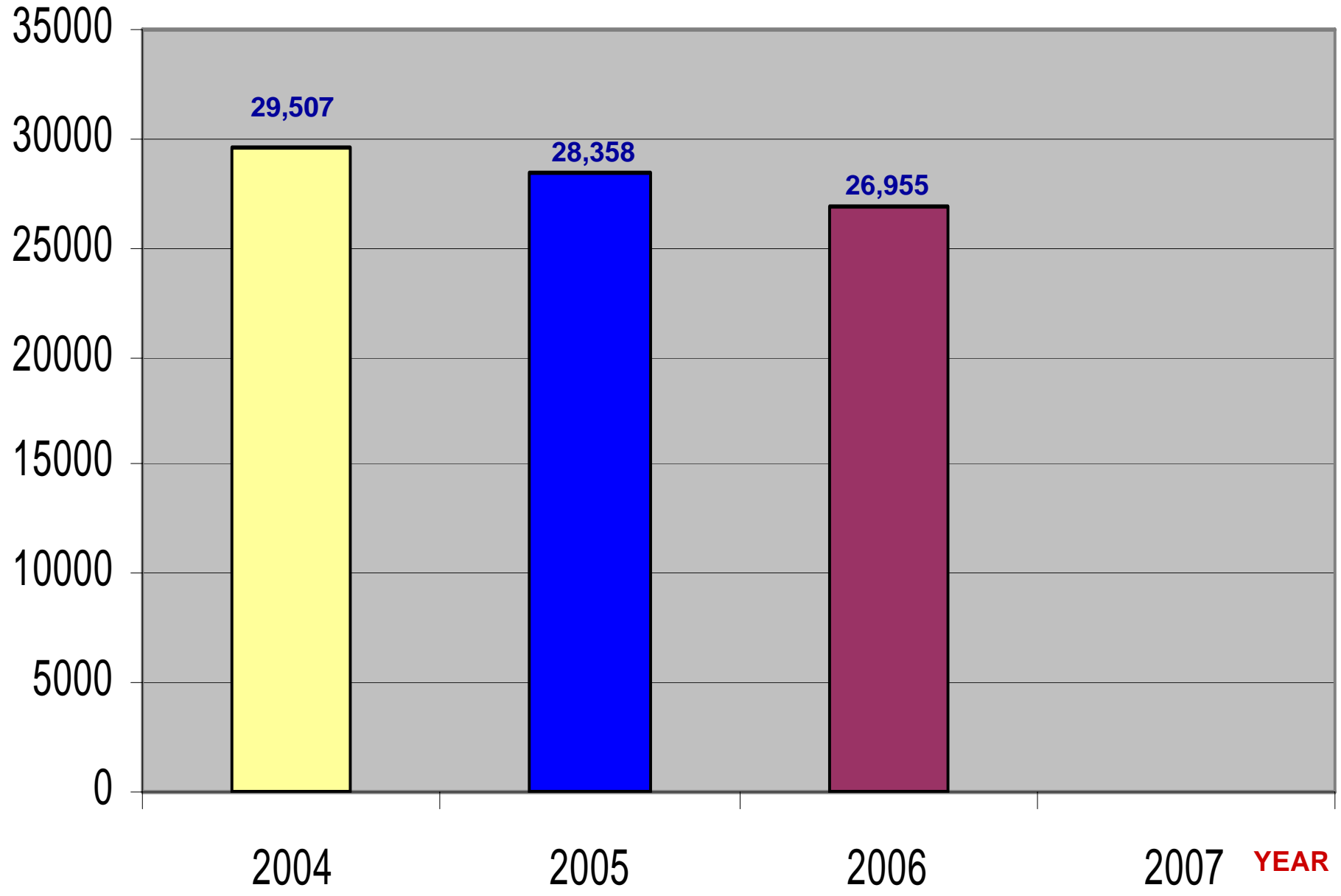
Year:2006

CAUSE OF ACCIDENT	SERVERITY					
	DEATH	DISABLED	LOSS ORGAN	LOST TIME MORE THAN 3 DAYS	LOSS TIME LESS THAN 3 DAYS	TOTAL
1.TOOL	1	-	414	7,093	17,980	25,488
2.MACHINERY	57	1	2,095	11,609	13,193	26,955
3.CONSTRUCTION	90	8	35	3,163	5,123	8,419
4.MATERIAL	57	4	673	19,891	77,491	98,116
5.ERGONOMIC	-	-	11	1,092	5,987	7,090
6.TRANSPORTATION	396	3	79	4,090	4,790	9,358
7.EXPLOSIVE	7	-	1	20	12	40
8.GAS	4	-	1	71	107	183
9.BOILER & VESSEL	-	-	-	25	26	51
10.ELECTRICAL EQUIPMENT	100	1	35	713	1,520	2,369
11.CHEMICAL , TOXIC	-	-	3	660	9,159	9,822
12.ENVIRONMENT	29	3	64	3,206	11,545	14,847
13.NATURAL CALAMITY	28	-	-	1	34	63
14.DISEASE GERMS	3	-	-	2	107	112
15.PEOPLE / ANIMALS	20	1	2	236	922	1,181

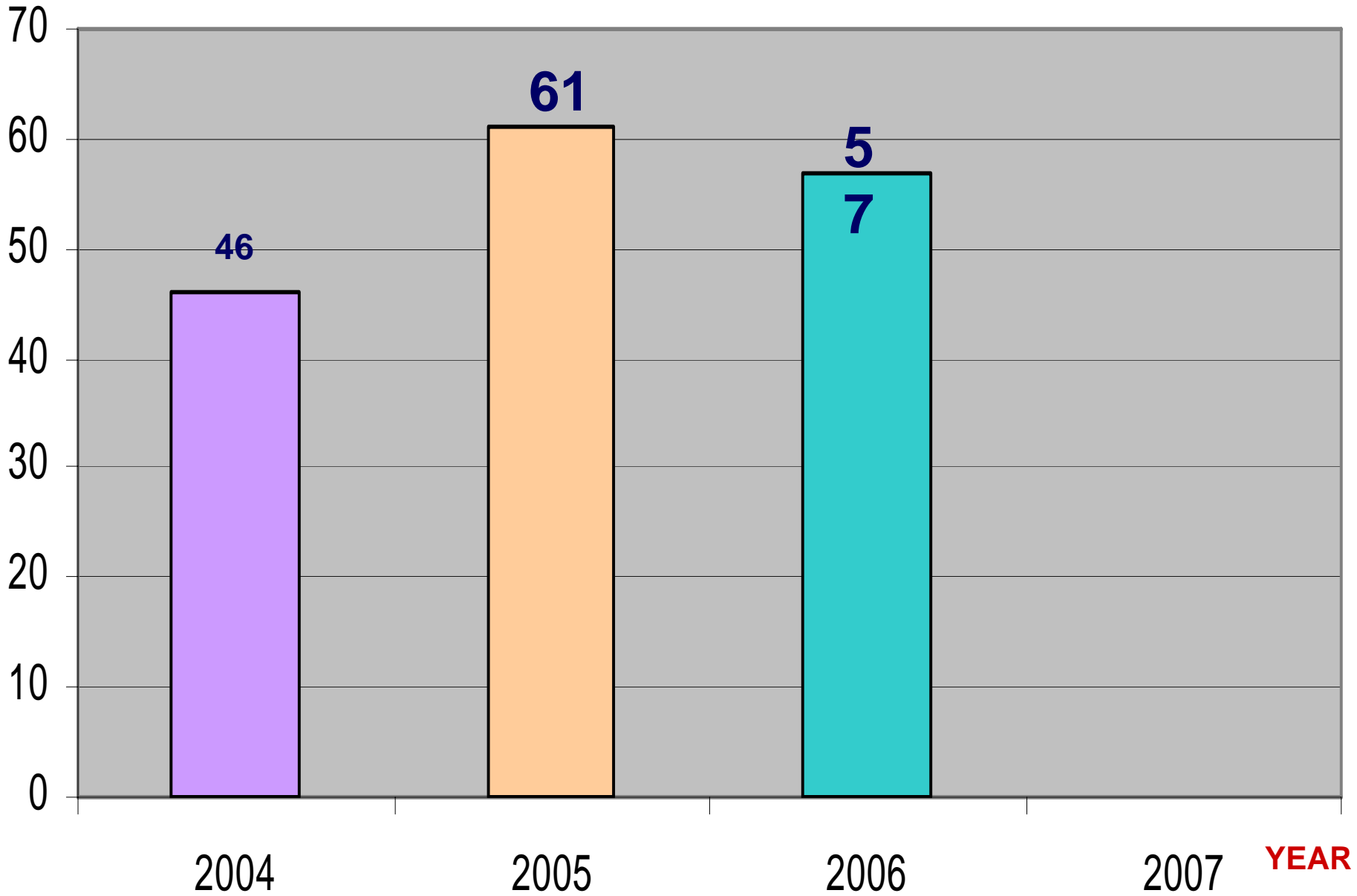
The method to measure safety for machinery

CAUSE OF ACCIDENT FROM MACHINERY (YEARS)	SERVERITY					TOTAL
	DEATH	DISABLED	LOSS ORGAN	LOST TIME MORE THAN 3 DAYS	LOSS TIME LESS THAN 3 DAYS	
2006	57	1	2,095	11,609	13,193	26,955
2005	61	5	2,123	12,079	14,090	28,358
2004	46	1	2,228	12,118	15,114	29,507

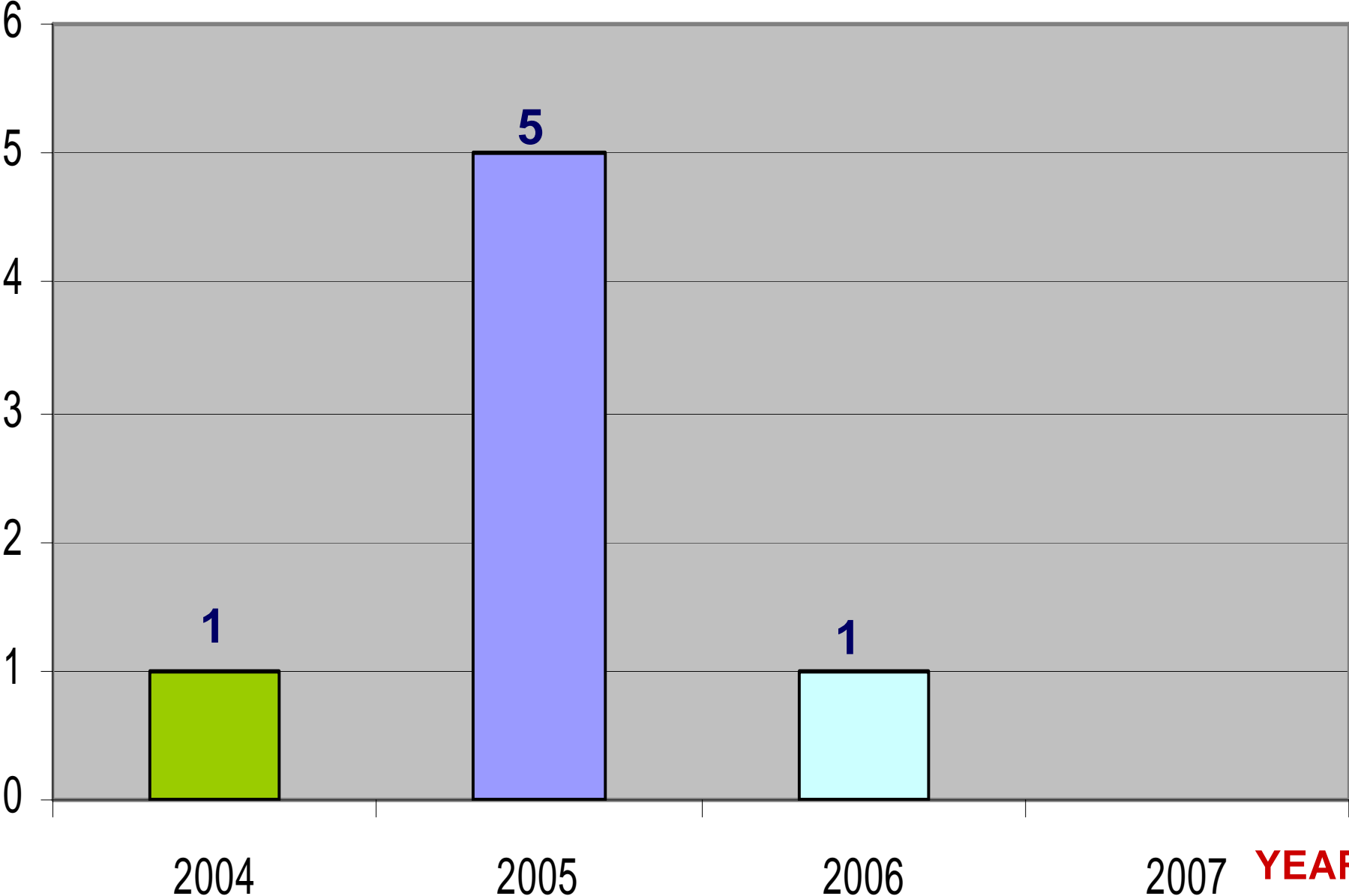
TOTAL CASES



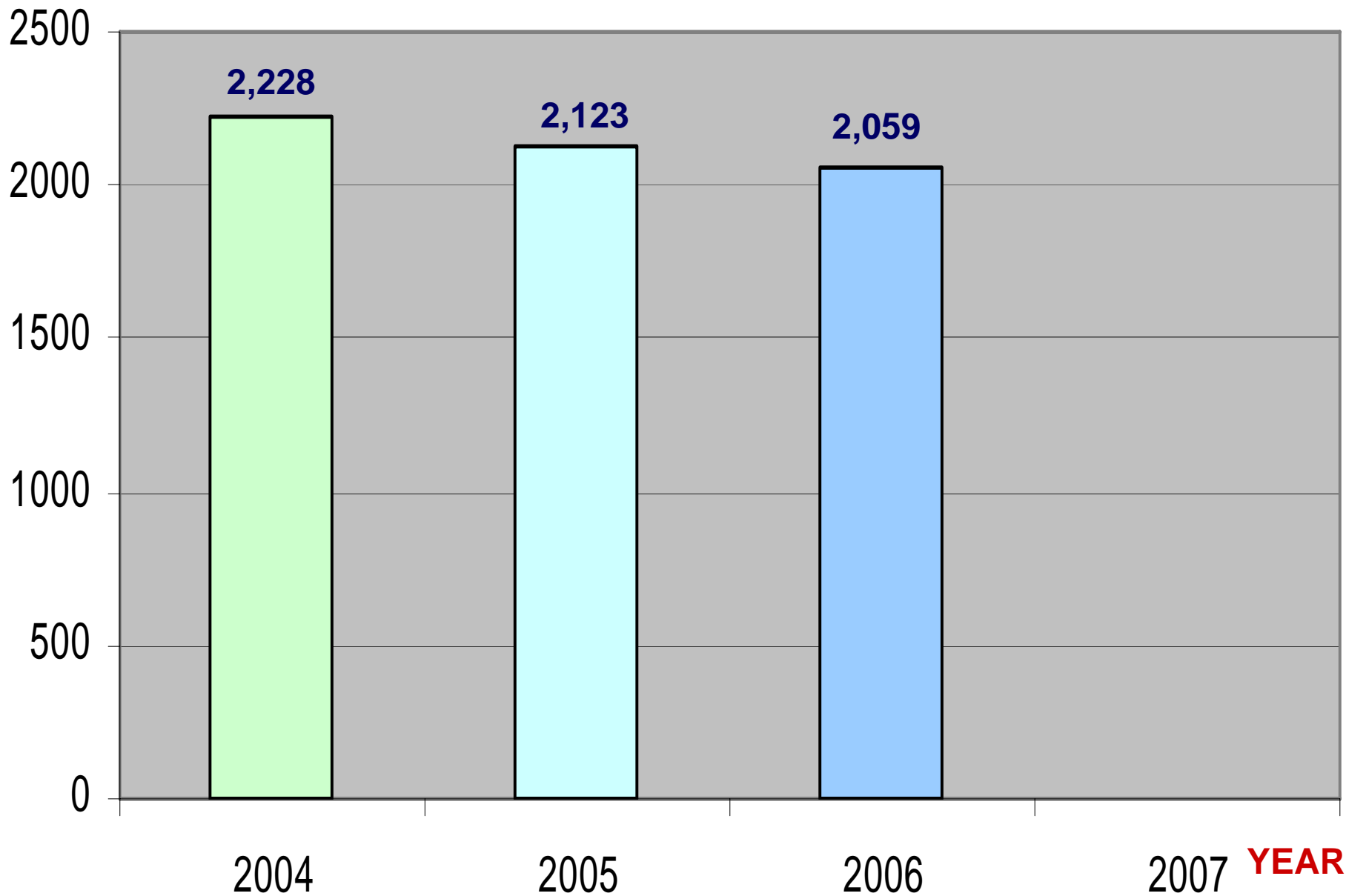
DEATH



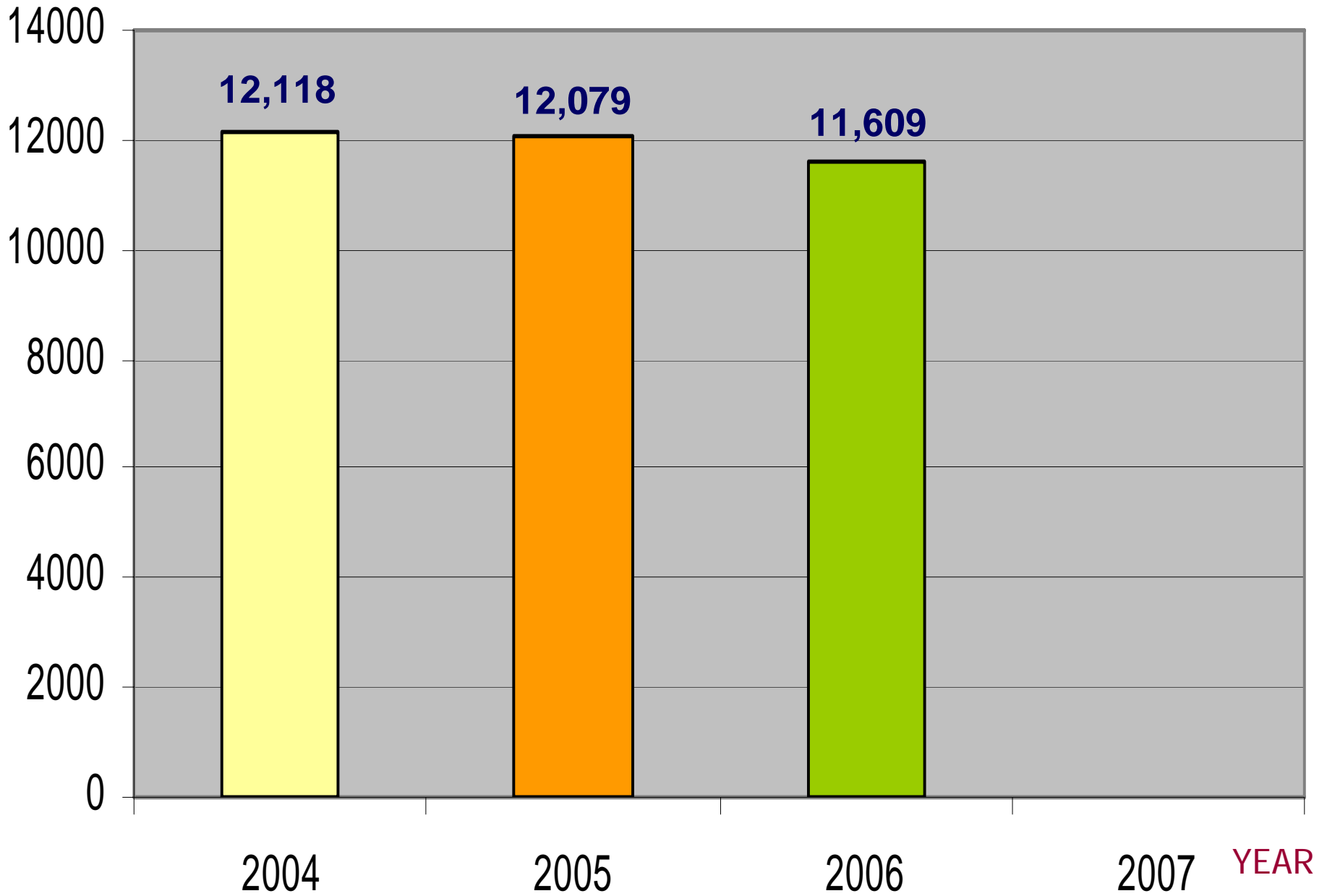
DISABLED



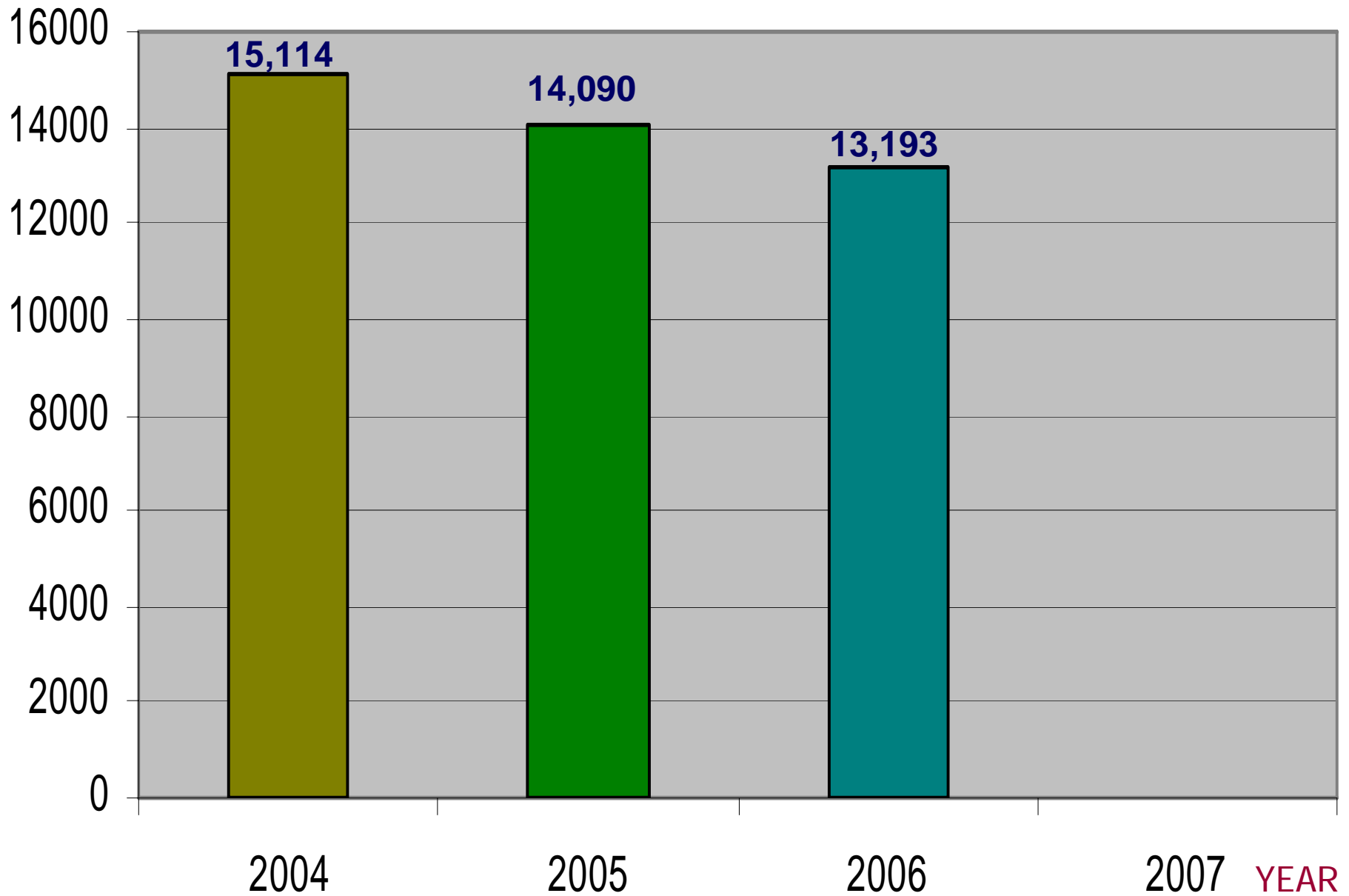
LOSS ORGAN



LOSS TIME MORE THAN 3 DAYS



LOSS TIME LESS THAN 3 DAYS

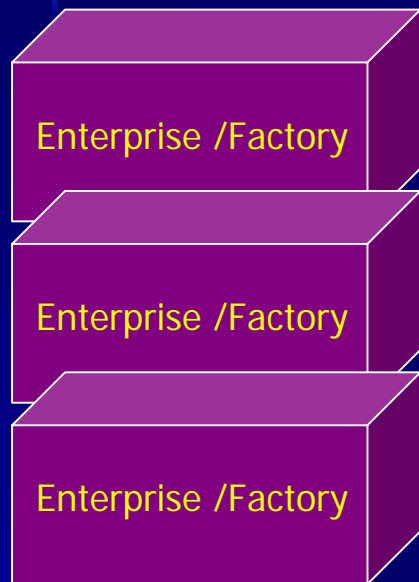


The method to measure safety for machinery

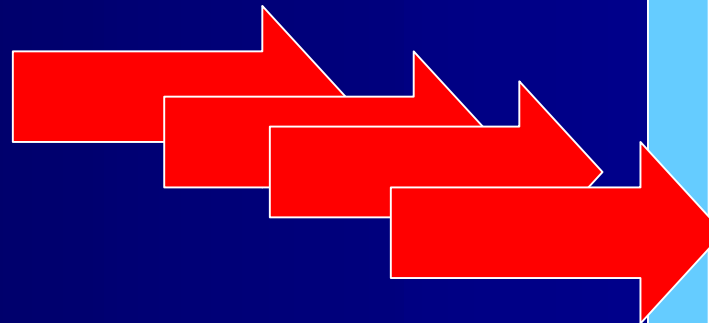
ENTERPRISE/FACTORY

- The accident number
- The cause of accident

Procedure for report



HR, Safety officer



Situations in PTT.

- Type of business is petroleum
- 4 business group
(oil,gas,petrochemical,supportor)
- Type of equipment (focus for oil business)
 - Equipment in process
 - Single Equipment

Situations in PTT.

- Process machinery
 - Motor
 - pump
- Single machinery
 - Generator
 - Fire engine diesel
 - Machinery in maintenance workshop

Situations in PTT.

MANAGEMENT SYSTEM

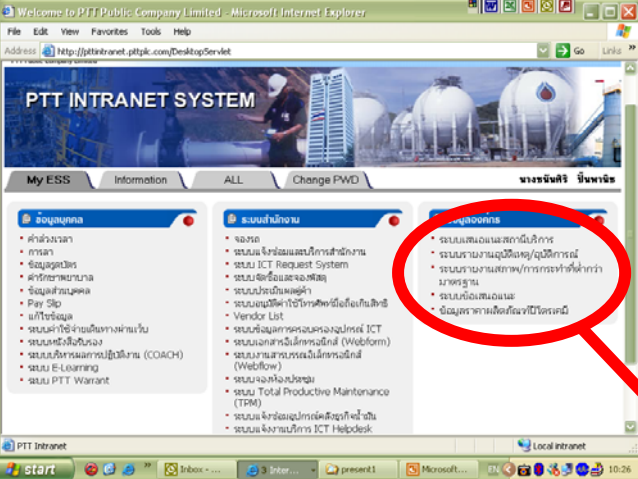
- Used the Safety Management System
 - TIS18001:1999/OHSAS18001:1999
 - ISO14001:2004
 - ISO9001:2000
 - Productivity (5S, QC, TPM-JIPM, ODOP)

- Procedure safety measurement for machinery
 - Accident & Incident Investigations Procedure
 - Accident & Incident Investigations Web Application
 - Management Review
 - Top Management (2 Time/year)
 - Middle Management (4 Time/year)
 - First Management (6 Time/year)

Situations in PTT.

Type of Measurement

- Number of accident
 - monthly report
 - Quarterly report
- Type of cause from accident
 - Loss time accident
 - Property loss
 - Transportation
- KPI



WEB ACCIDENT SYSTEM

บริษัท ปตท. จำกัด (มหาชน) - Microsoft Internet Explorer

Address: http://hq-web-s03/accident/mainmenu.cfm

ระบบรายงานอุบัติเหตุดูแลความปลอดภัย

บริษัท ปตท. จำกัด (มหาชน).

• รัสเซีย • Home • PTT Home • back

ผู้ใช้	380055 : นาง ชนนศิริ บินพานิช
ตำแหน่ง	น.บริหารความปลอดภัย
หน่วยงาน	53001010 : ส่วนนโยบายคุณภาพความปลอดภัยฯ

กรอกรายงาน

- อุบัติเหตุในการทำงาน
- อุบัติเหตุยานพาหนะ
- อุบัติการณ์
- ติดตามการรายงาน

ส่งข่าวอุบัติเหตुर่งด่วน

<<< ส่งข่าวอุบัติเหตुर่งด่วน

[ขั้นตอนดำเนินงาน เรื่อง ระบบรายงานและสอบสวนอุบัติเหต \(SP-ฝคณ.-002\) << คลิกที่นี่](#)
[ขั้นตอนดำเนินงาน เรื่อง การรายงานอุบัติการณ์ \(SP-ฝคณ.-013\) << คลิกที่นี่](#)

แจ้งปัญหาหรือข้อผิดพลาด (Error) ของระบบ โทร.2955
สอบถามวิธีการใช้งานของระบบ โทร. 2475

Local intranet

ACCIDENT & INCIDENT REPORT

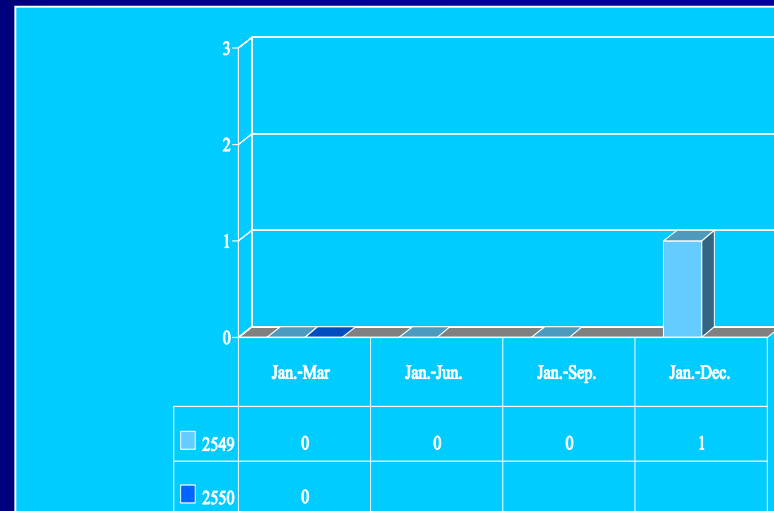
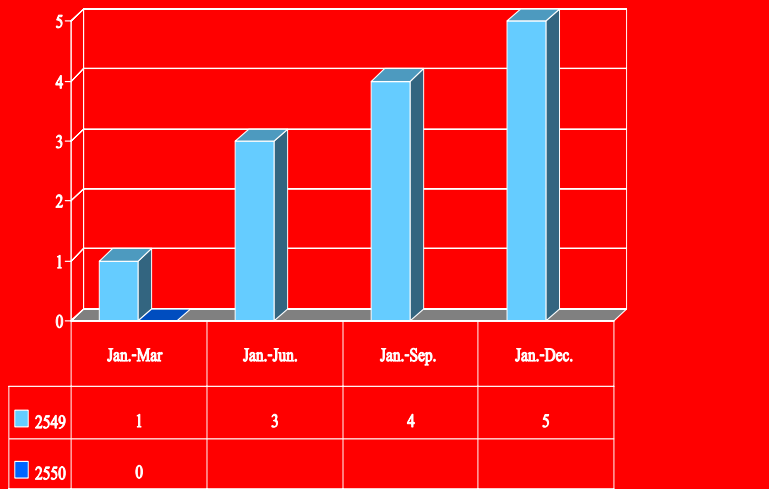
OIL OPERATION 2007

DETAIL TIME	ACCIDENT			PREVENTIVE REPORT			RESULT					
	MAJOR	MINOR	728	Near Miss	Sub Standard	TOTAL	Loss Time Accident	Property Loss	REPORT / EMPLOYEE	% CORRECTIVE ACTION	CAR ACCIDENT = > 100,000	CHEMICAL / SPILL
JAN-MAR	2	26	28	137	243	380	0	0	13.57 / 1.64	69.44	0	10
APR-JUN												
JUL-SEP												
OCT-DEC												

JANUARY - MARCH 2007

Loss Time Accident

Property Loss



Q & A