

## BanP/POKA YOKE

“Poka Yoke” means “*Fail safing*” or “*Mistake proofing*”

‘YOKE’RU is TO AVOID  
‘POKA’ is INADVERTENT MISTAKES

- Developed by Dr. Shigeo Shingo.
- It is a simple technique to avoid simple human error at work.
- Part of “Zero Defect Quality Control”.
- Identifying defects at the source lowers the cost.



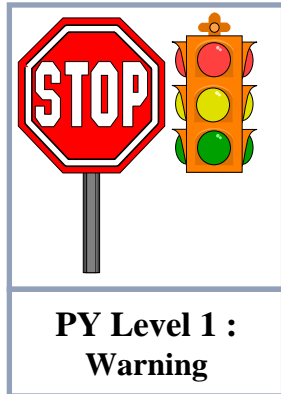
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## Analogy: Railway Crossing



### Poka-Yoke Level 1 :

Example :

Check-list at work station

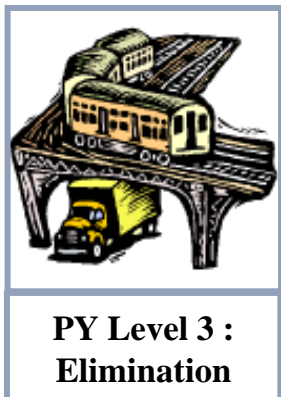
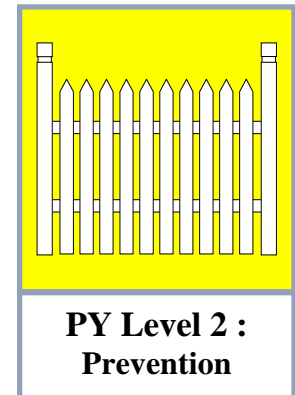
Warning light

### Poka-Yoke Level 2 :

Example :

Laser detecting broken tools

Measurement sensor

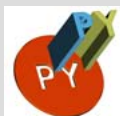


### Poka-Yoke Level 3 :

Example :

Design change

Mechanical stop



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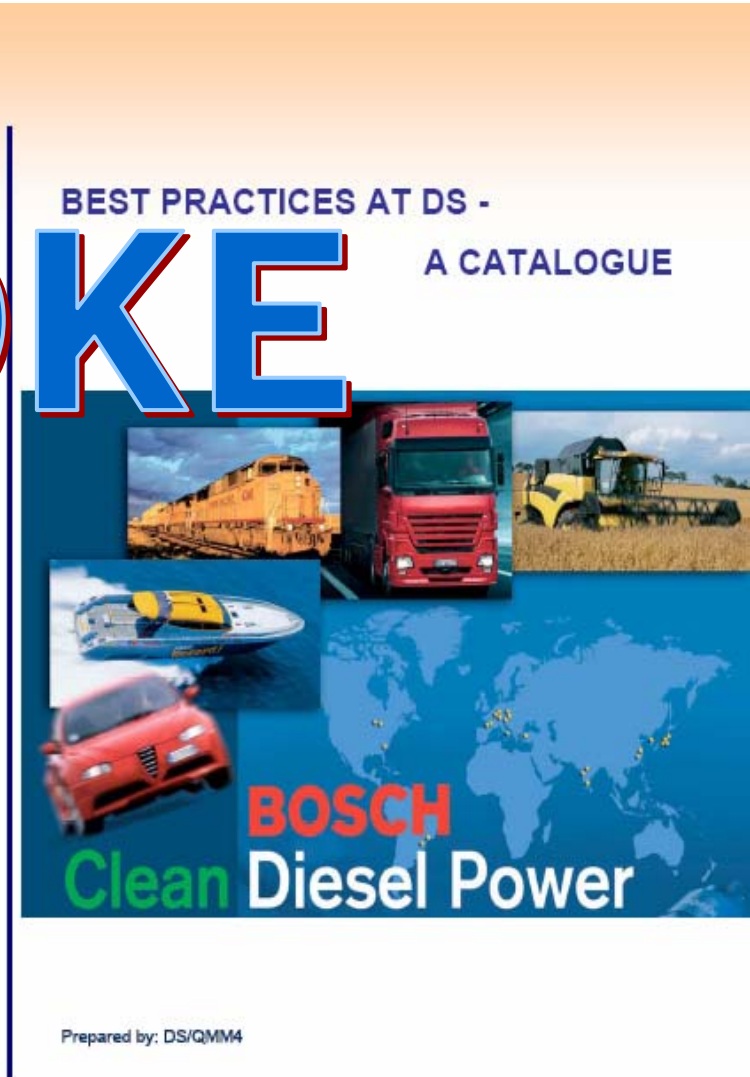


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# POKA-YOKE

in

# BanP



Prepared by: DS/QMM4

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# BanP/POKA YOKE

3. Best Practices
DS Plants

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### 3.5 Poka Yoke

**Implementation Date:** September 2002 in MICO/BanP & JD

**Overview:**

Data base for Poka-Yokes and defined Organization structure for periodical review.

Need	Solution
<ul style="list-style-type: none"> <li>Effective function of the system with the team work and continuous monitoring</li> <li>Information exchange across departments. Horizontal deployment of projects</li> <li>Easy accessibility of information for follow-up, Audit etc.</li> <li>Organization structure – closed loop system for fixing and achieving targets</li> <li>To educate and generate awareness among associates about Poka-Yoke</li> </ul>	<ul style="list-style-type: none"> <li>Targets fixed in the year beginning</li> <li>Monthly and quarterly review meetings with range co-ordinators and plant management</li> <li>Interplant visits to exchange information</li> <li>The Innovative projects discussed during review meetings for better information exchange</li> </ul>



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**Results**


- Each customer complaint is addressed with a poka-yoke solution and continuously monitored to eliminate re-occurrence
- Internal customers satisfied with defect free product/component

**Do's and Dont's**

- Educate associated about Poka Yoke concept
- Continuous Improvement in Poka Yoke projects from Level 1 to level 2 to level 3
- Look for simple ideas and design based Poka-Yoke's so that possibility of mistakes is minimised

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3. Best Practices
DS Plants

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**Flow Chart:**

```

graph TD
    Start([Start]) --> IDP[Identification of the Problem]
    IDP --> PA[Problem Analysis]
    PA --> IG[Idea Generation]
    IG --> IO[Implementation of Idea]
    IO --> DPY[Documentation of Poka Yoke]
    DPY --> QSGA[QSG Audit of PY stations-]
    QSGA --> DB[Deviations- To Be rectified.]
    DB --> CM[Continuous monitoring by shop]
    
```

→ Identification of team including associates, Brainstorming, QPS, Learntest

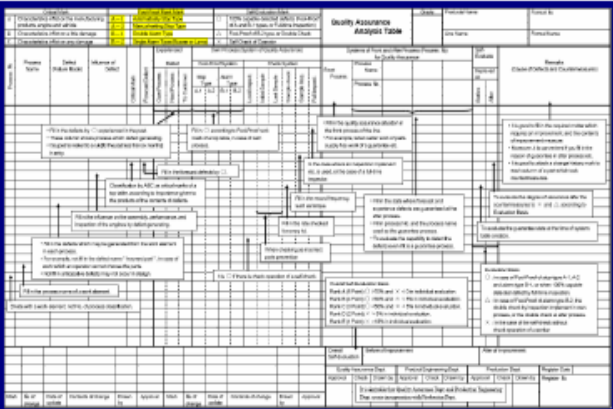
→ Identification of team including associates, Brainstorming, QPS, Learntest


→ If necessary with TEF, R & D and Tool Design

→ By shop or concerned Engineer, Cost of proposal and projected Yield are important

→ Registering PY with central agency TEF as per format and a registration number is allotted.

**Poka Yoke Quality Assurance Analysis Table in JD:**







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# BanP/POKA YOKE

Project number : PY-PE-00037

Machine : KFMG Calibration benches

Product : PE pump

Component : PE Pump

Operation : Calibration

**Problem** : No monitoring for inlet pressure  
2000±300millibar

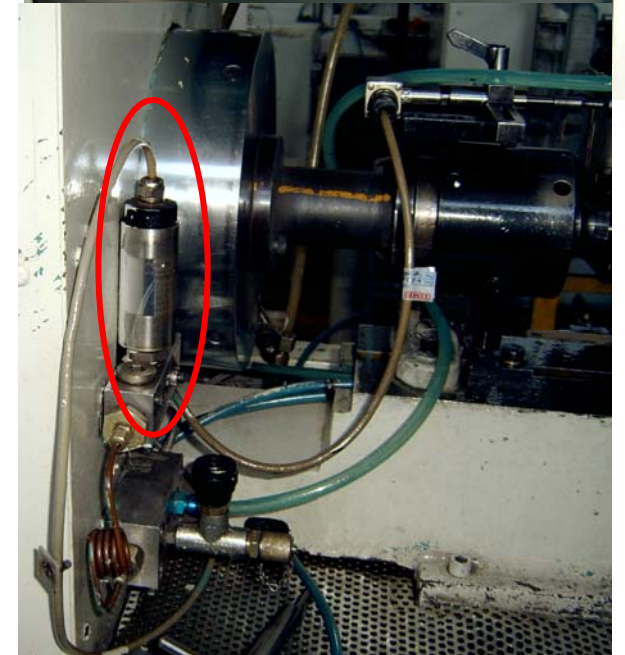
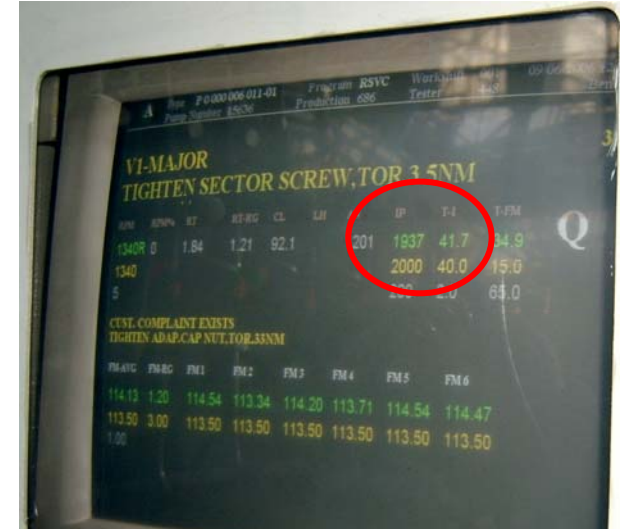
**POKA-YOKE** : Pressure switch introduced in  
on all the KFMG benches  
interlock with the program to  
work with in the inlet specification.

**Yield** : Better working condition with  
set inlet pressure.

**Level 1:** Inlet pressure value was displayed to facilitate  
operator to notice the variation,

**Level 3:** Introduction of pressure switch and interfaced with  
the machine to stop incase of variation in pressure.

**Level 1 to Level 3,  
Implemented on  
53 Benches**



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