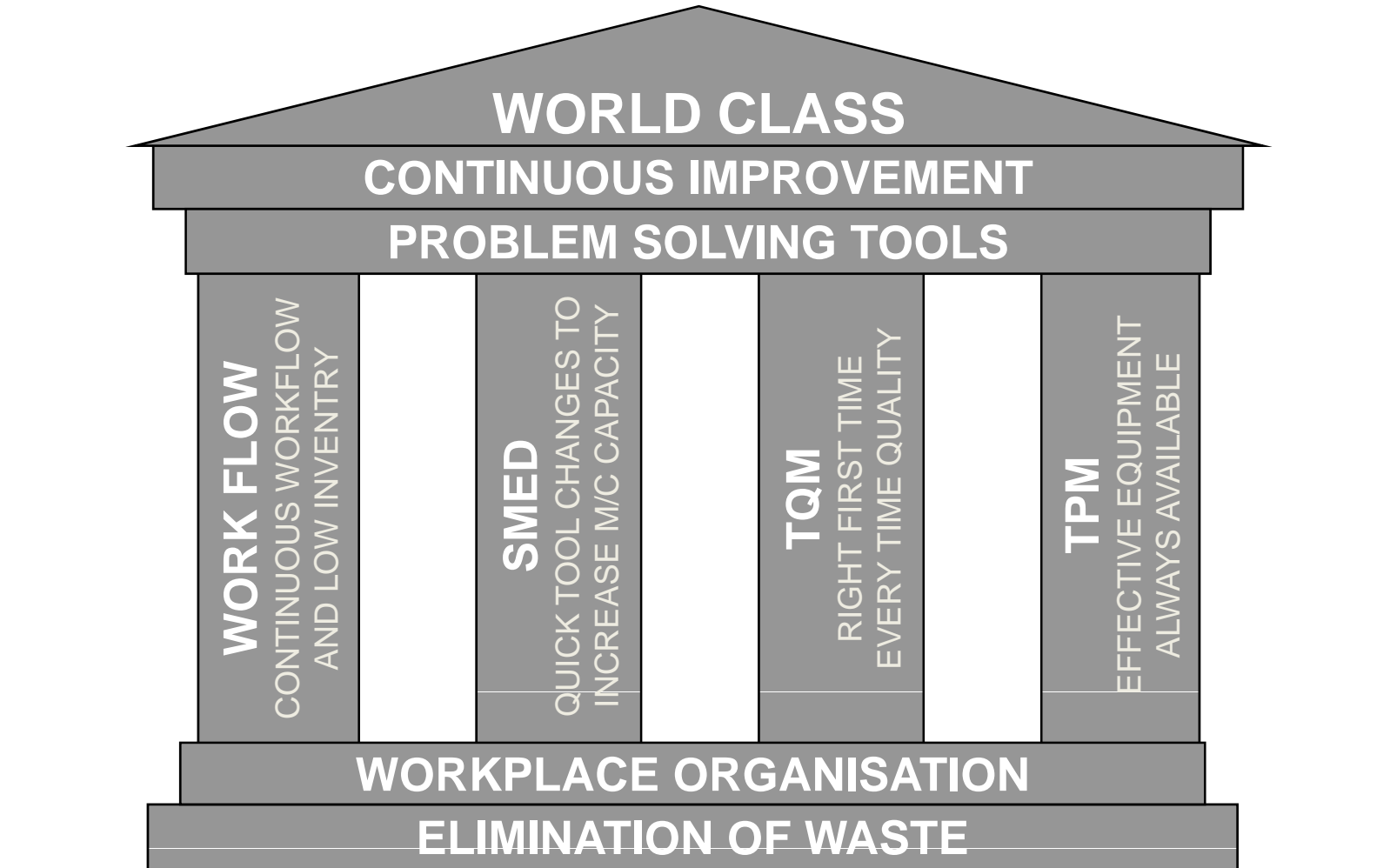


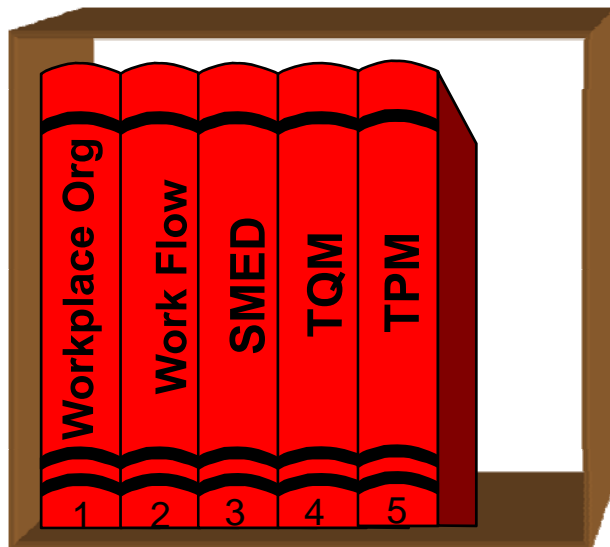
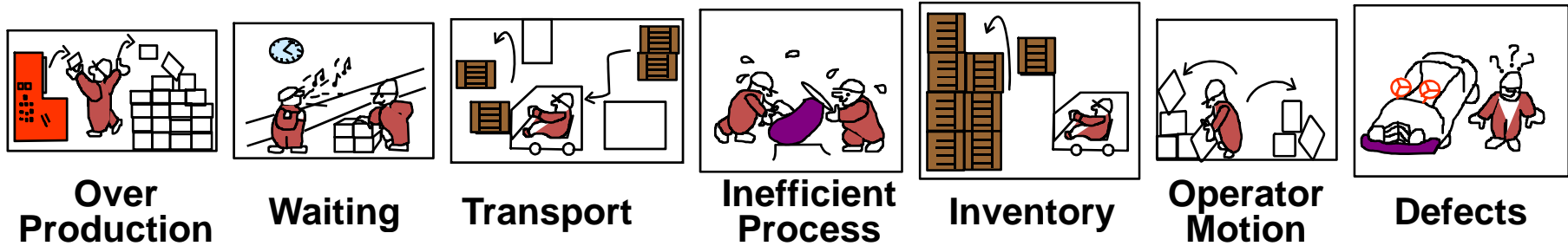
Kaizen Modules

An overview

The House of Kaizen

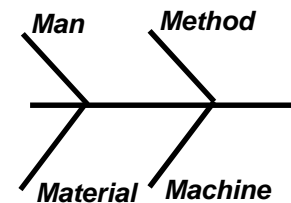
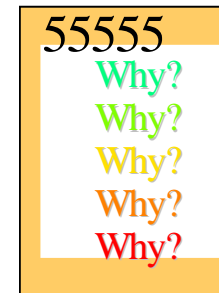


Waste Elimination



5 Core Modules

- Operation
- Delay
- Inspection
- ▼ Storage
- ➔ Transportation



Problem Solving Tools

Workplace Organisation

Workplace Org

- 5S Housekeeping
- Standard Ops.
- Visual Controls
- Skill Monitoring

Establish norms and respect them 5S -Housekeeping

50 recipes

50 results (deviations)

ONE recipe documented

Quality the first time (no variation)

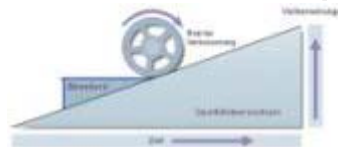
Example : Skills matrix
ELECTRO MECHANICAL SPECIALISTS

| Work Station #/S | 4101 | 4102 | 4104 | 4105 | 4106 | 4107 | 4108 | 4109 | 4116 | 4118 | 4111 | Wrt. Headings | The Wrap |
|------------------|--------------|-----------|---------------|---------------|--------------|------------|---------|-----------|-------|--------------|----------|---------------|----------|
| Work Description | Buff. Cheryl | Buff. Top | 28 GA Headers | 14.5L Headers | 1822 Headers | 9 GA. Pins | PC Pins | Honey Wax | Paint | Silb. Screen | Pack Out | Tap | Licensed |
| Dorothy H. | ☒ | ☒ | ☒ | ☒ | ☒ | ☒ | ☒ | ☒ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Ellen B. | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Pat M. | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| LeRoy W. | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Steve H. | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Bill B. | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Lawrence D. | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Diane M. | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Rhea F. | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |
| Glenda M. | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

Legend :
 ☐ None/Basic Training
 ☐ Can Do With Help
 ☐ Can Do Without Help
 ☐ Can Teach Someone Else
 ☒ Can Improve the process

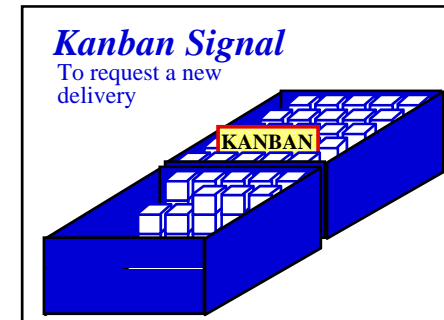
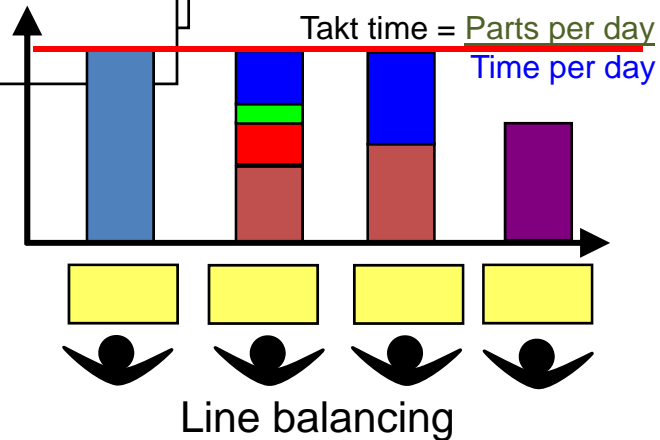
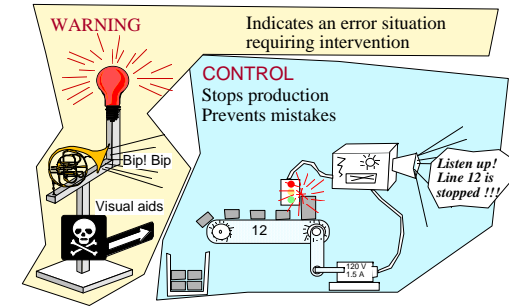
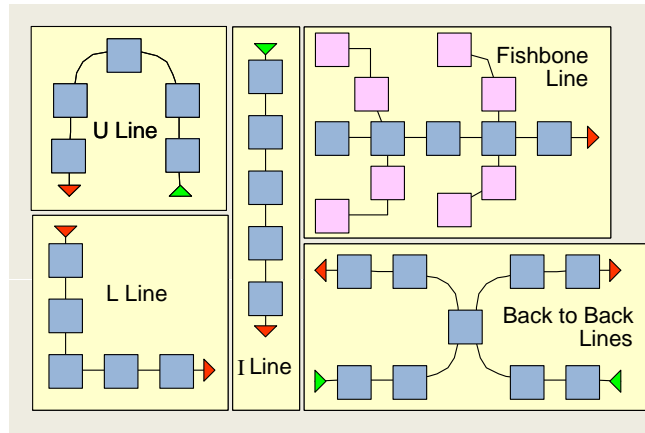
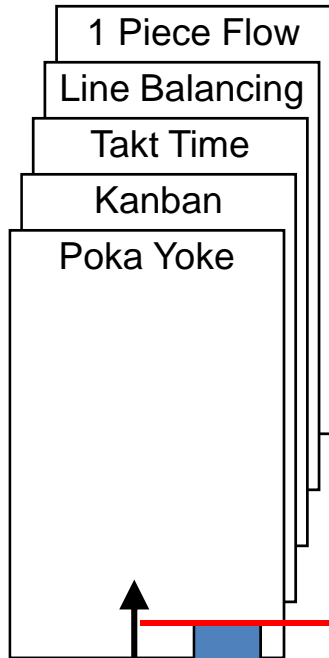
Visual Controls

Standard Ops.

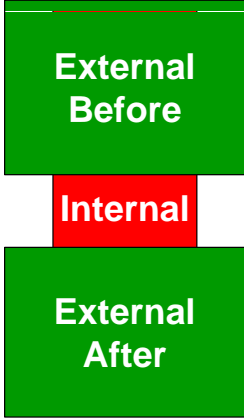
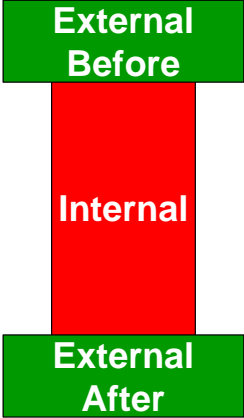
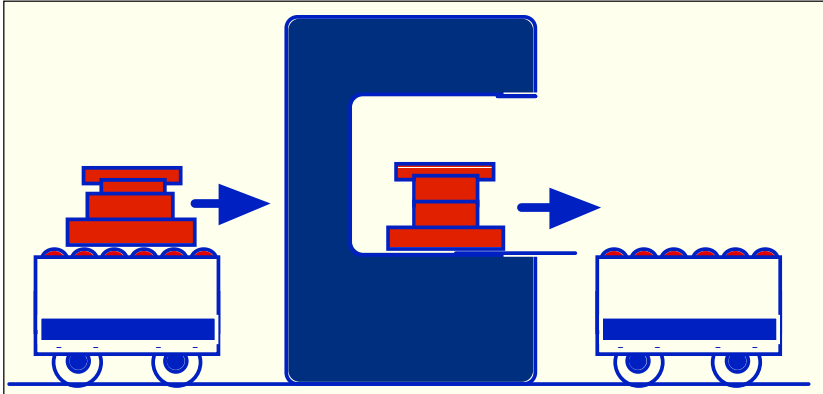
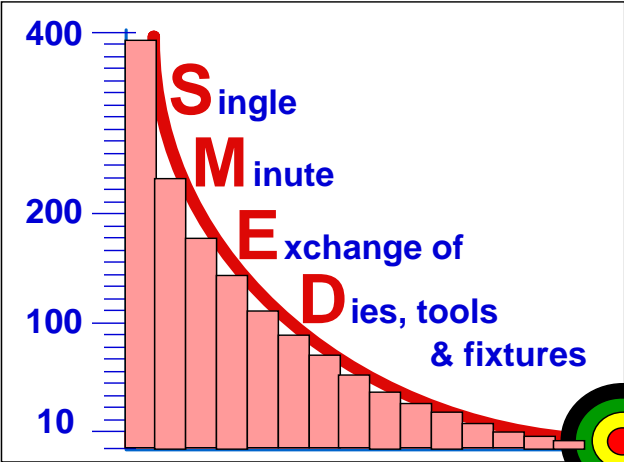
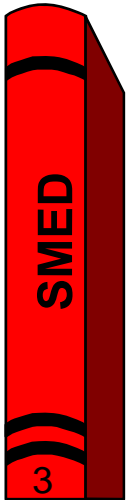


Kaizen Introduction

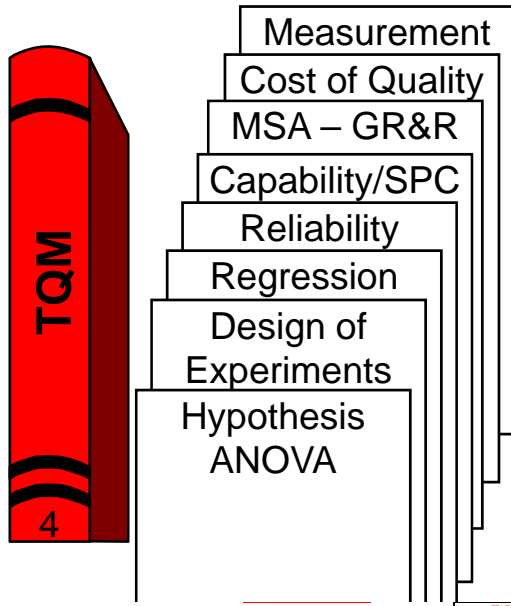
WorkFlow



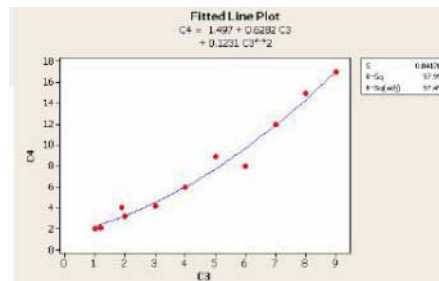
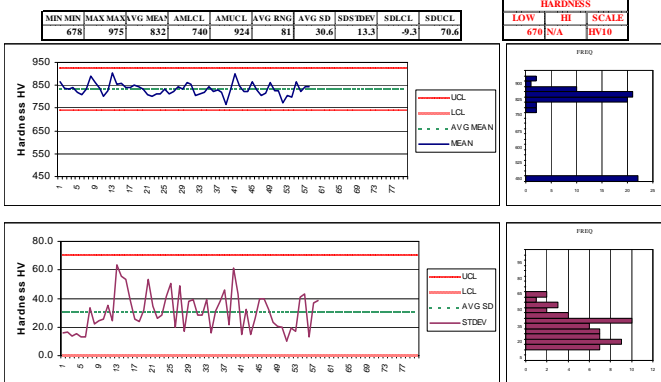
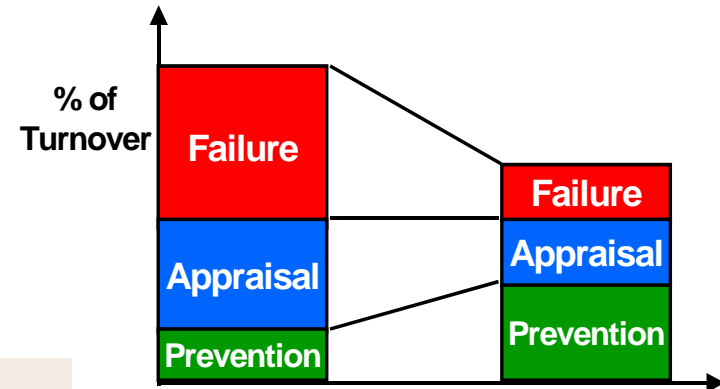
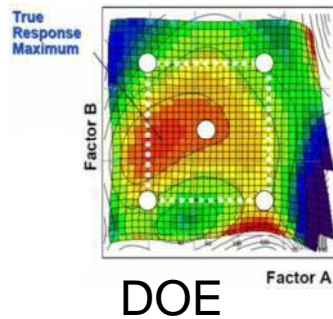
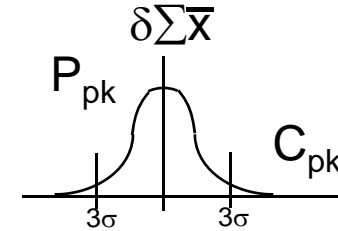
SMED - Quick Tool Changeovers



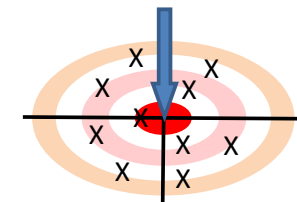
Total Quality Management / Six-sigma



| Project Name: | Process: | Date: | | | | |
|----------------|------------|-----------|-----------|-----------|-----------|------------|
| Defective Item | Mon | Tue | Wed | Thu | Fri | Total |
| Cracks | ### /// | ### | ### /// | /// | ### | 31 |
| Porosity | /// | /// | /// | /// | /// | 14 |
| No flux | ### | /// | /// | /// | /// | 17 |
| Pinholes | ### ### // | ### /// | ### /// | ### // | ### /// | 45 |
| Other | // | /// | /// | / | /// | 12 |
| Total | 31 | 22 | 27 | 17 | 22 | 119 |
| % Defect | 6.2% | 4.4% | 5.4% | 3.4% | 4.4% | 4.8% |

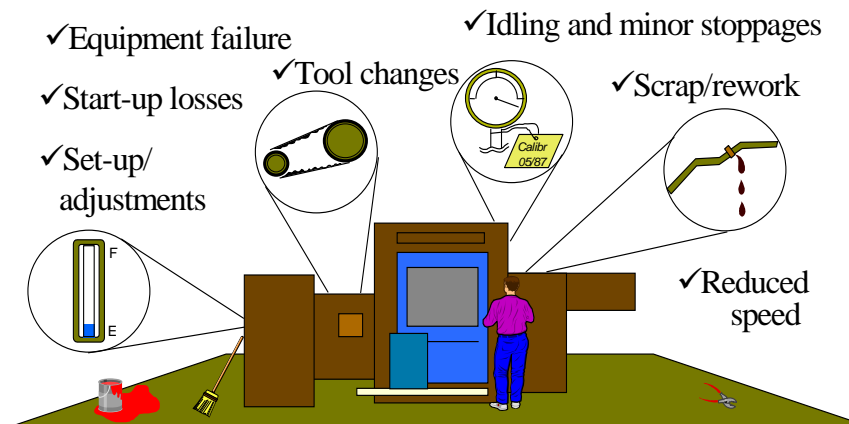
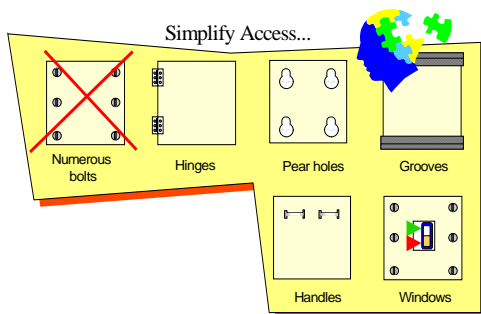
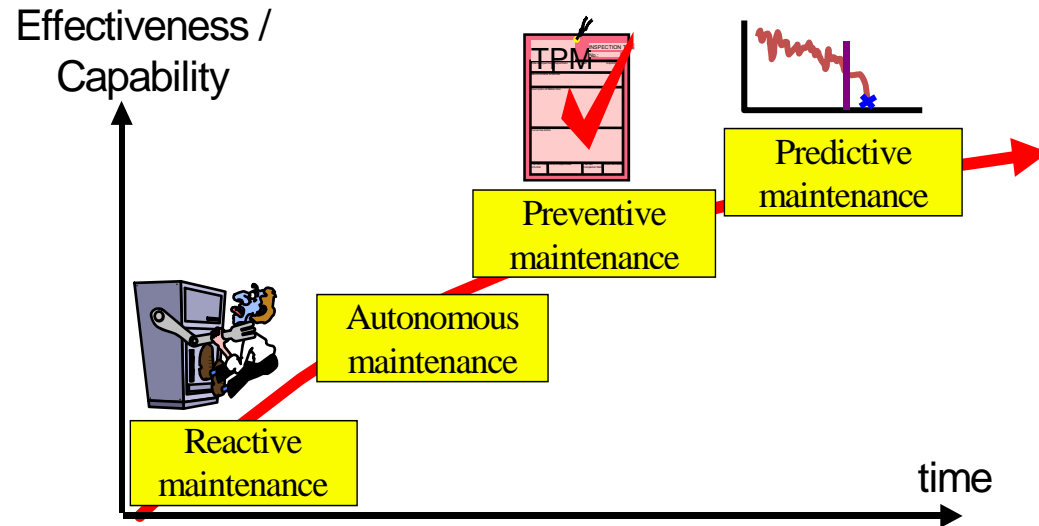
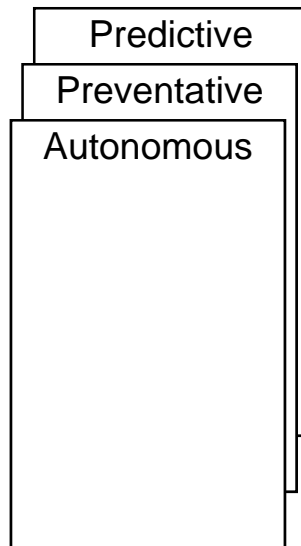


Regression Analysis



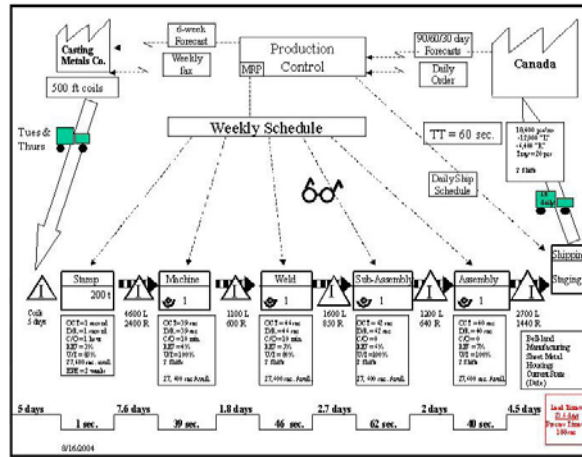
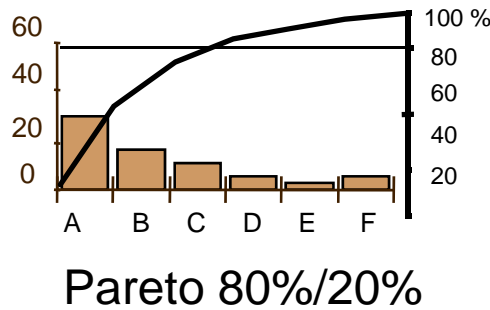
MSA - GR&R

Total Preventative Maintenance

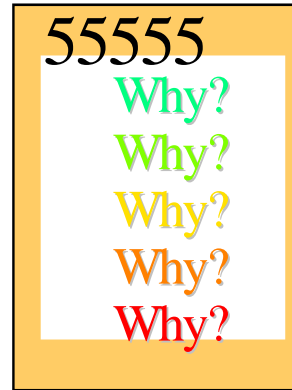


TPM = **elimination of waste** + **continuous improvement**

Tools - Problem Solving Tools

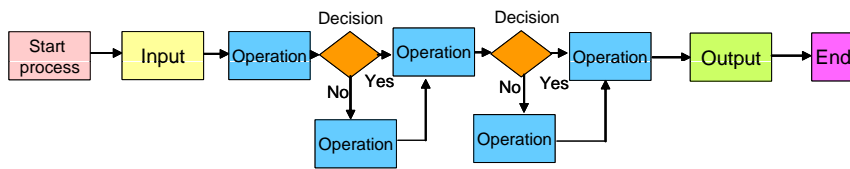


Value Stream Mapping

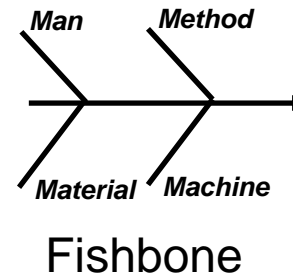


5 Why Root Cause

- Operation
- Delay
- Inspection
- ▼ Storage
- ➔ Transportation



Process mapping



| Process Step | Key Process Input | Potential Failure Mode | Potential Failure Effects | S E V | Potential Causes | C O C O |
|--------------------------|--------------------------------|---|--|-----------------------------------|--|----------------------------------|
| What is the process step | What is the Key Process Input? | In what ways does the Key Input go wrong? | What is the impact on the Key Output Variables (Customer Requirements) or internal requirements? | How Severe is the failure? (1-10) | What causes the Key input to go wrong? | How often does this or FM occur? |

FMEA



Brainstorm