

# SENCON



*Policing Quality  
on canmaking lines*

Luc Nelen

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## *" Quality "*

A set of parameters that canmakers agree with their customers





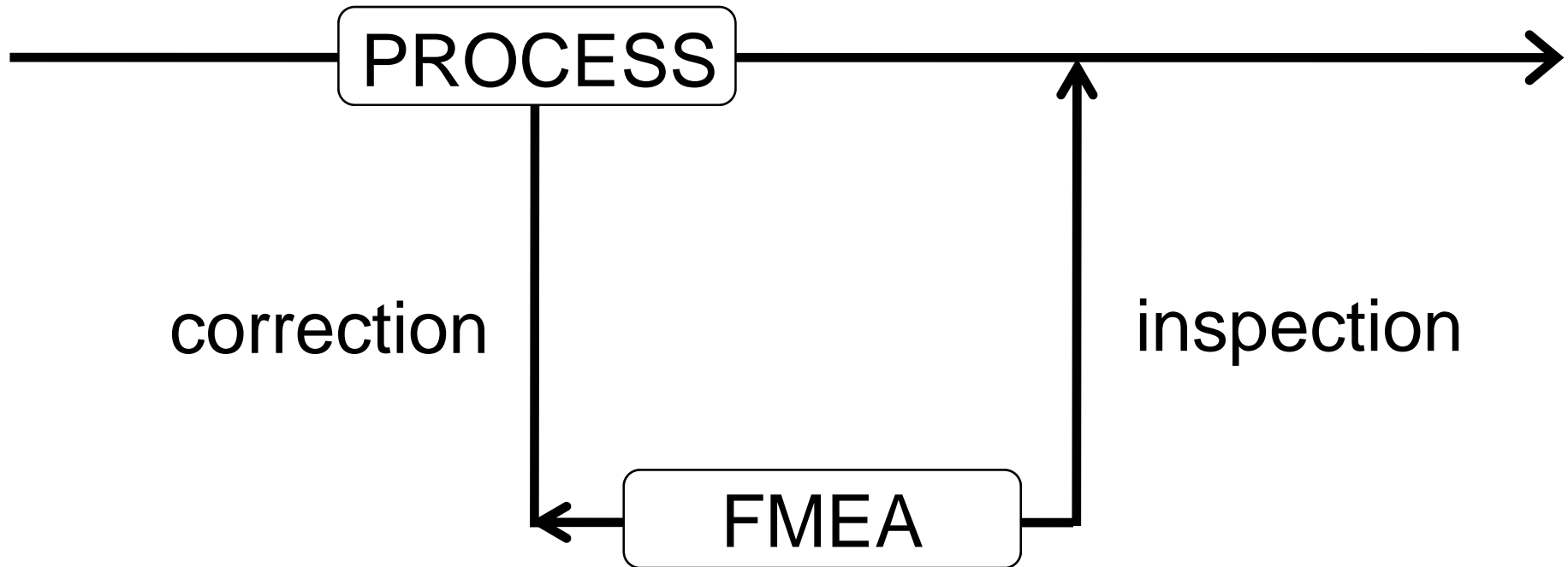
*How do you achieve quality?*

1. Prevention

2. Detection

# *FMEA*

## Fault Mode and Effects Analysis





Process correction starts off easy ...



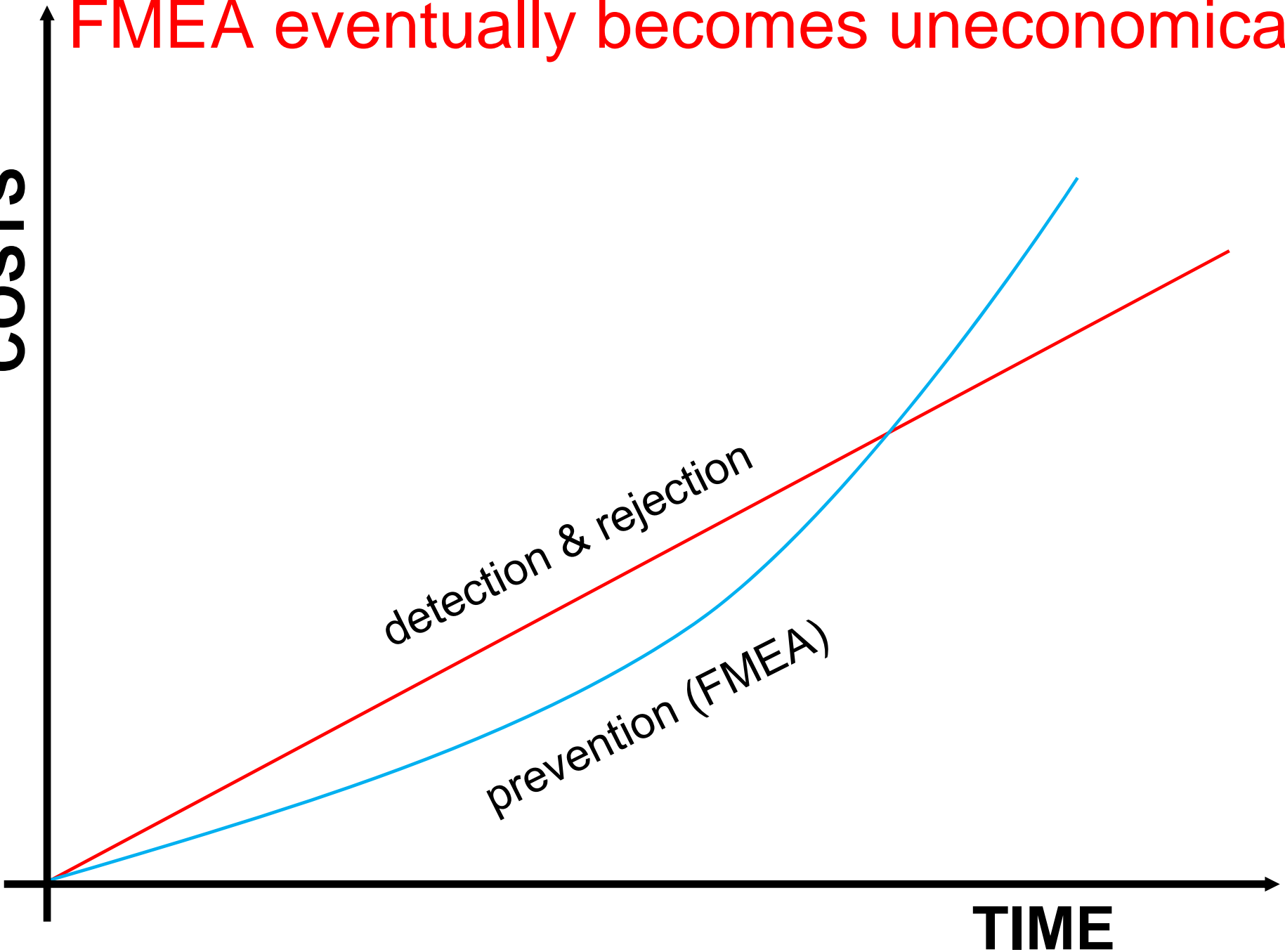
Then it gets harder as progress is made ...



Finally only little steps can be taken ...

# FMEA eventually becomes uneconomical

**COSTS**



detection & rejection

prevention (FMEA)

**TIME**

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when

$$\text{COST}_{\text{PREVENTION}} > \text{COST}_{\text{DETECTION}}$$

then ...

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... you have to find the offending cans!



## *Sensors*



- Cheaper
- More flexible

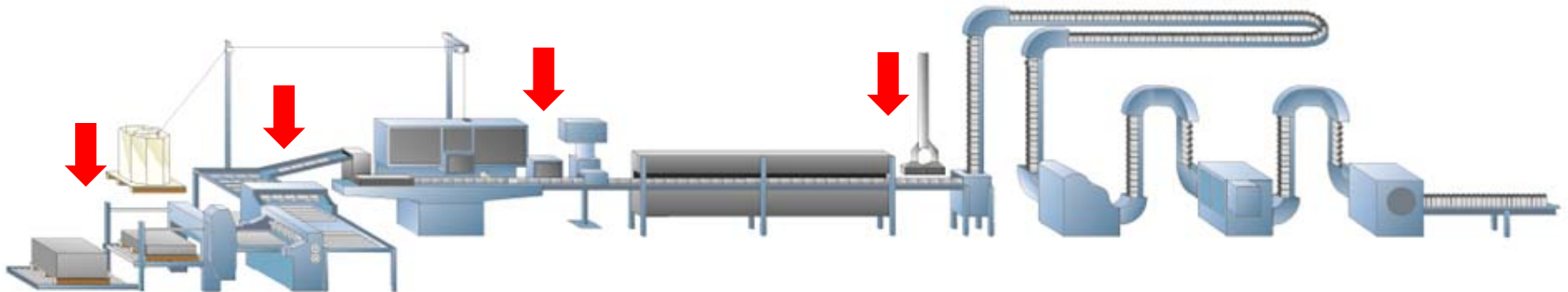


## *Double Sheet Detector*



- Press infeeds

- Oven runouts



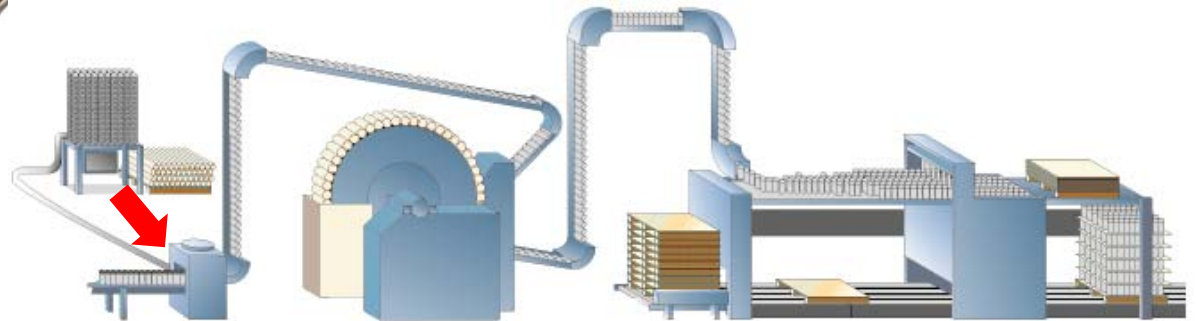
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## *Double End Detector*



- At the seamer



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## *Inverted Blank Detector*

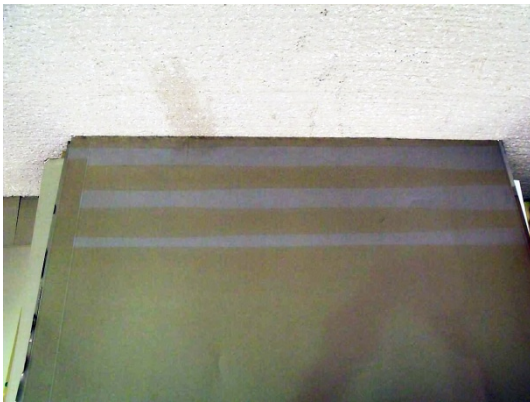
- Can lines





## *Missing Lacquer Detector*

- Lacquering lines





## *ULTP* upgrade for Reynolds RT5/RT6

- Better detection of pinholes in cans
- Reduces maintenance frequency
- Increases throughput
- Both food and beverage
- Over 200 installed worldwide
- Virtually world standard

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## *ULTP* LED lighting array upgrade





## *ELTP* End Light Tester Package

- Detects pinholes in ends
- 100% inspection on up to 4 lanes
- At speeds of up to 800/min/lane
- Both food and beverage
- Over 400 installed worldwide
- Virtually world standard

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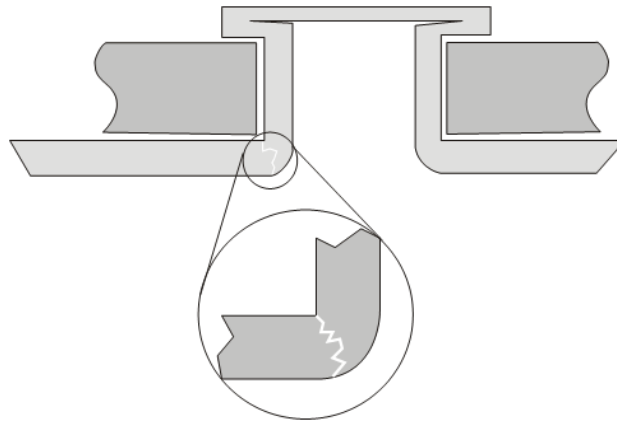
## *ELTP* End Light Tester Package





## *MLT* Micro Leak Tester for ends

- Detects defects with no light path



- Uses gas pressure differential
- Sampling system



## *AIR or HELIUM ?*

### Helium

- Sniffer test
- Very accurate
- Affected by quality of seal
- Affected by local gas contamination
- Risk of false rejects
- Expensive to run

### Air

- Pressure differential test
- Accurate enough
- Seal quality not an issue
- No gas contamination problems
- Very low false rejects
- Not expensive to run

**Sencon's MLT**

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*MLT* online or offline sampling





## *Conclusions*

- Reduce quality costs by FMEA.
- Make sure improvements remain cost effective.
- **Catch the last offending products with sensors / systems specifically designed for the purpose.**



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*Thank you*

**ขอบคุณมาก**

- For your custom
- For listening to me today