

Zoeterwoude, 10 June 2011

Heineken



TPM: A proprietary tool for delivering world class performance

Christopher Kerr

Director Global TPM

- 1 Introducing TPM**
- 2 Case Study: Poland
- 3 Expanding TPM

Vision: Develop a world class Supply Chain **Heineken**

Global TPM roll-out introduced in 2006

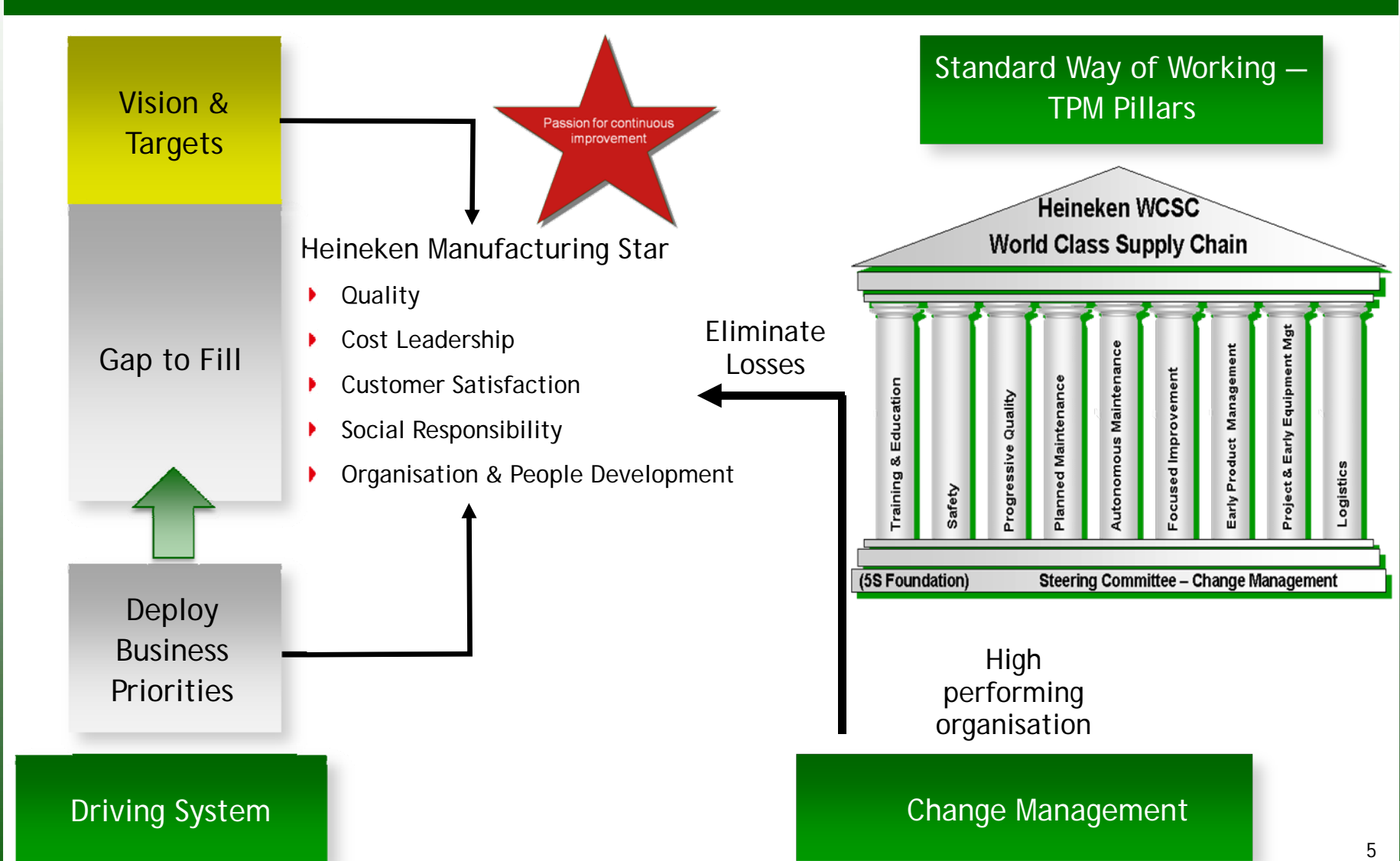
TPM is Heineken's management system to drive improved sustainable performance and cost leadership by developing our people and organisation



Heineken TPM Management System



A holistic approach to driving business excellence

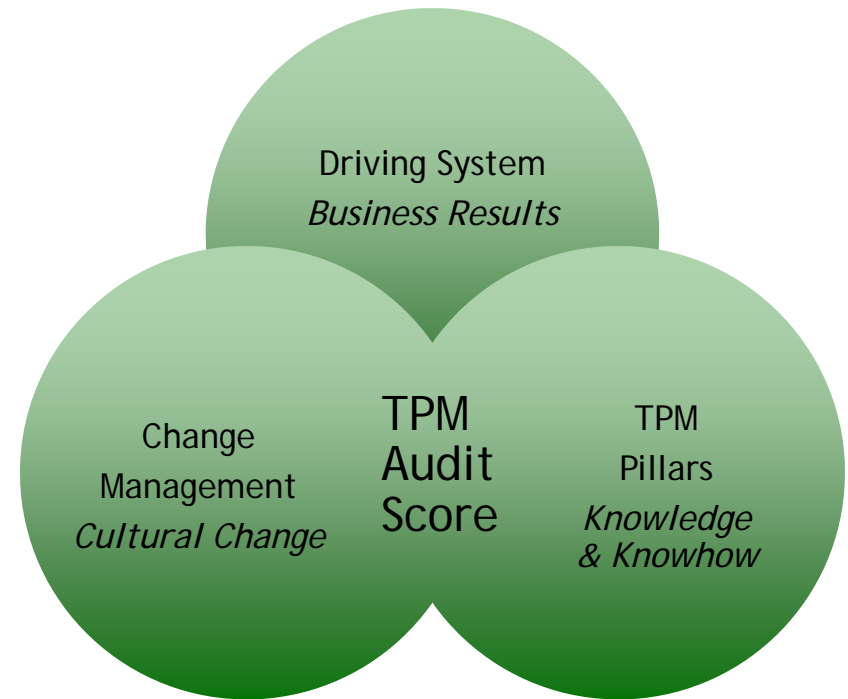


Global Audit and Diagnostic Programme

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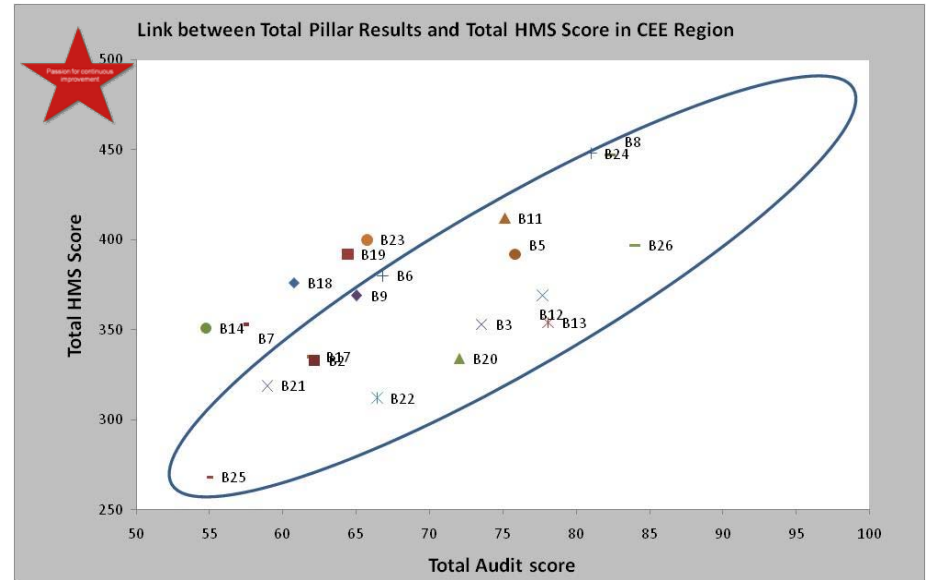
Monitoring brewery performance and validating the improvement process

- ▶ Every Heineken brewery is audited twice a year
- ▶ More than 200 audits per year
- ▶ High level of transparency
- ▶ Assessment & report on results, approach and sustainability
- ▶ Integral part of personal target setting



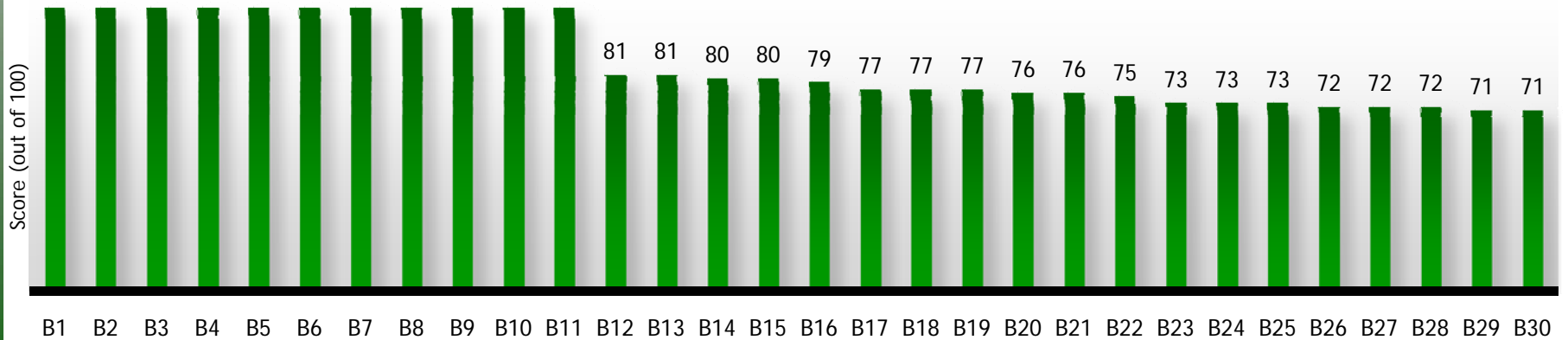
Benchmarking brewery performance highlights improvements opportunities

- ▶ Correlation of TPM Audit Score and absolute results
- ▶ Benchmarking and raising performance



Brewery Ranking: Total score 2010

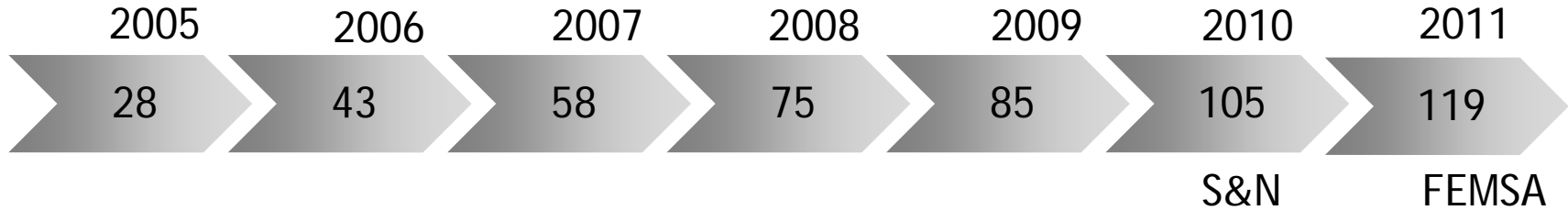
11 breweries bronze certified level represents 35 Mhl



Expanding TPM rollout

Programme also applied to acquired companies

Cumulative number of breweries adopting TPM



- ▶ More than 70% of production employees are involved in TPM
- ▶ More than 20,000 project have been completed since starting TPM
- ▶ We have run over 2,500 training courses



Applying TPM to acquired companies

Source of efficiency improvement for S&N UK brewing operations

- ▶ TPM established as a core improvement programme
- ▶ Investing in capability building
- ▶ 295 TPM projects ongoing across the UK
- ▶ Focused on product line efficiencies and filtration improvement
- ▶ Tracking of TPM financial benefits
- ▶ Supporting overall network reorganisation through efficiency improvements

Number of improvement activities by plant



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Case study: Zywiec Brewery, Poland

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Significant efficiencies realised since introduction of TPM in 2003

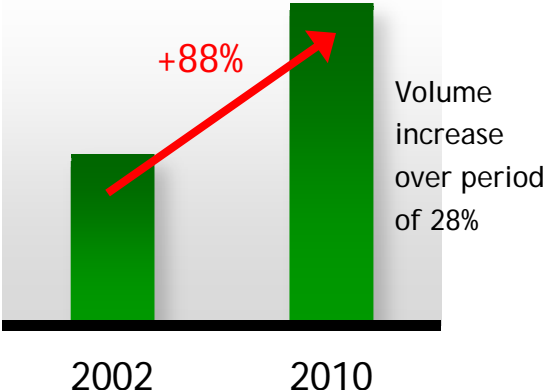


Case study: Zywiec Brewery, Poland

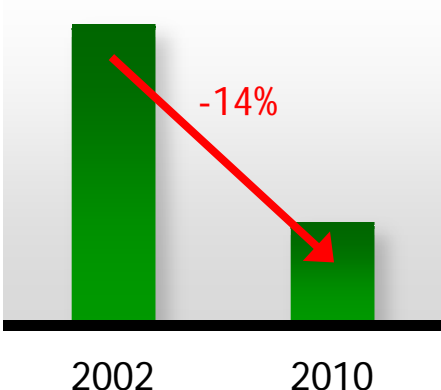


Increased productivity and performance at lower cost

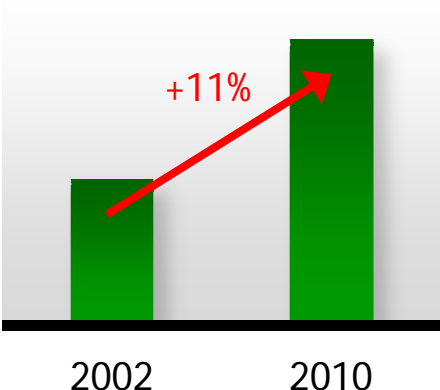
Production Productivity (hl/FTE)



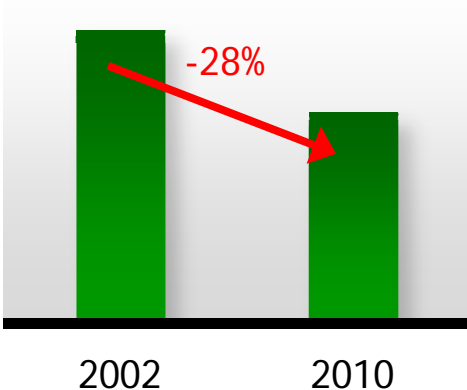
Fixed Costs (PLN/hl)



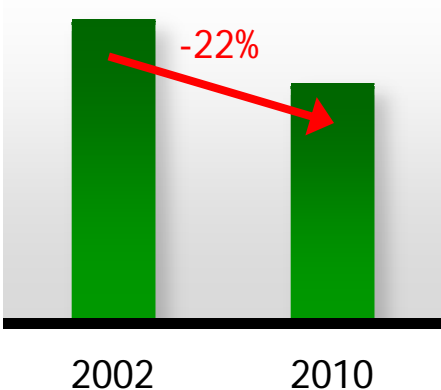
Bottling Line Efficiency (%)



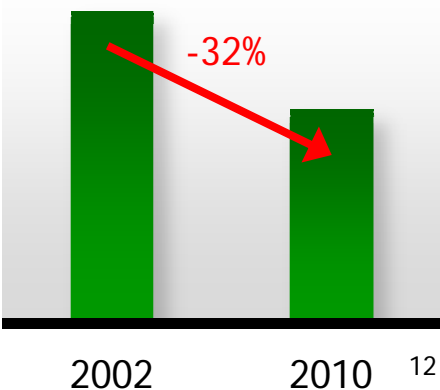
Water Consumption (hl/hl)



Extract Losses (%)



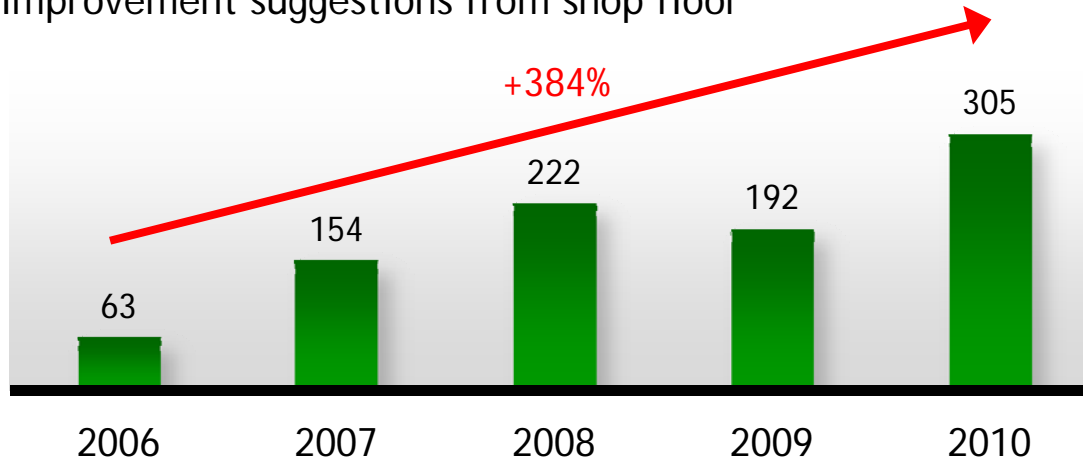
Thermal Energy Consumption (MJ/hl)



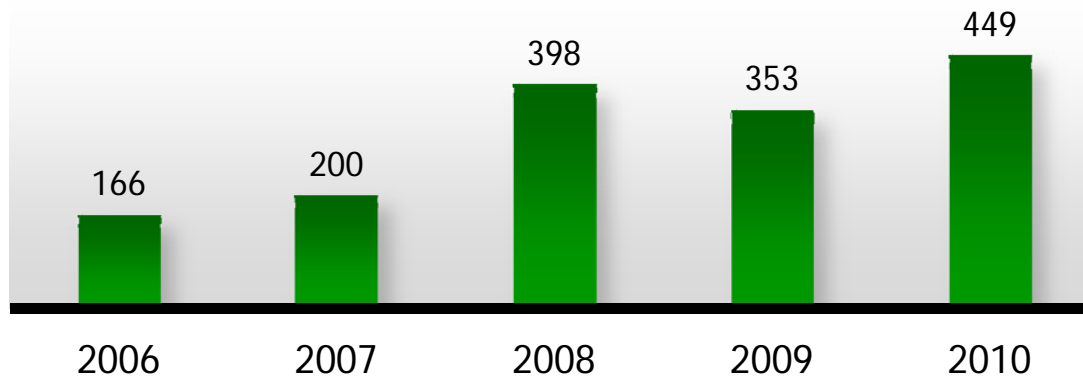
Case Study: Zywiec Brewery, Poland

From generating ideas to delivering results

Improvement suggestions from shop floor



Annual savings generated by the improvement & Kaizen teams (€K)



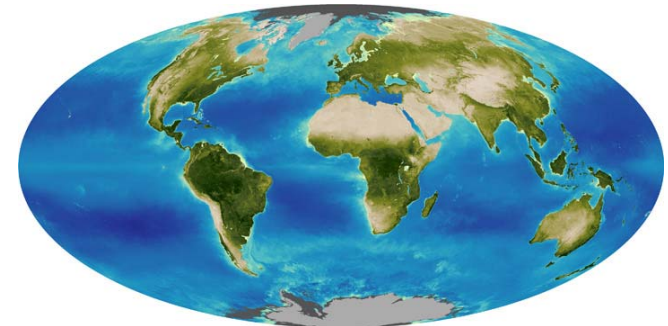
- ▶ Pilot project on Kegging Line yielded efficiency improvement of 14.3%
- ▶ TPM Pillars applied to all disciplines of manufacturing
- ▶ Expanded to new products, equipment and logistics
- ▶ 100% of people now involved

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Global expansion of TPM in manufacturing **Heineken**

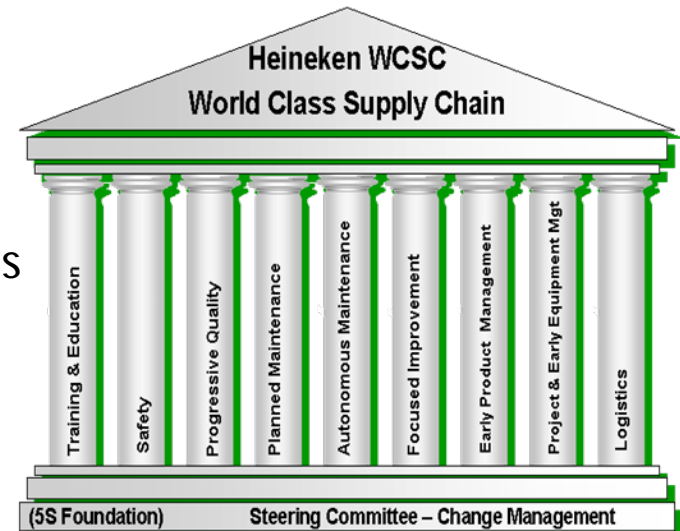
Driving performance globally using TPM as a framework

- ▶ Centrally managed, cross regional Global Pillar Network of Senior Management and Functional Experts



Responsibilities:

- ▶ Global performance deployment
- ▶ Methodology development
- ▶ Good practice management leading to standards
- ▶ Loss definitions and measurement methods

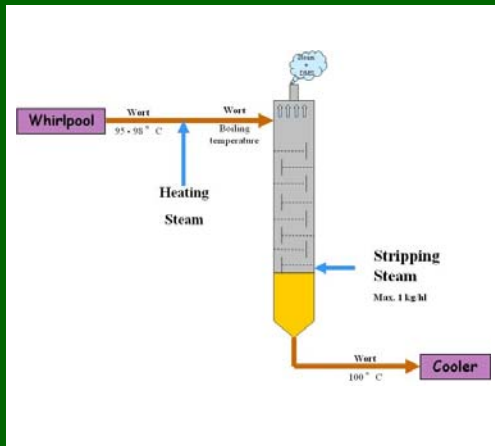


Manufacturing best practice example

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Energy reduction by reducing evaporation rate

Feasibility



Stripper:

- New equipment developed by Heineken R&I
- designed to reduce energy consumption in brewhouse (-70% during boiling phase)

Development



Stripper at the pilot plant

Industrialisation



Stripper installed in France, The Netherlands, Romania and Italy

- ▶ Potential saving for Heineken (Fuel): > €5m/ year
- ▶ Impact environment: -4% thermal energy consumption

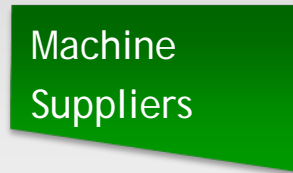
Implementation

Expansion of TPM across the wider Supply Chain

2006
Embedded



2009
Established



2011
*Process &
Capability
Development*



2012+
*Future
Opportunity*



Expanding TPM outside of Supply Chain

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Leveraging TPM in the marketplace

- ▶ Further developing capabilities to provide our customers and consumers:
- ▶ Right product quality (packaging and freshness) on the shelf
- ▶ Full product availability at optimal inventory levels
- ▶ Creating value for our customers and consumers



- ▶ TPM is a proven process for driving world class performance within Heineken's Supply Chain
- ▶ TPM fully embedded in breweries and is being further expanded across the entire Supply Chain and newly acquired businesses
- ▶ Evaluating opportunities to adopt TPM in the marketplace to deliver joint benefits for Heineken, its customers and its consumers