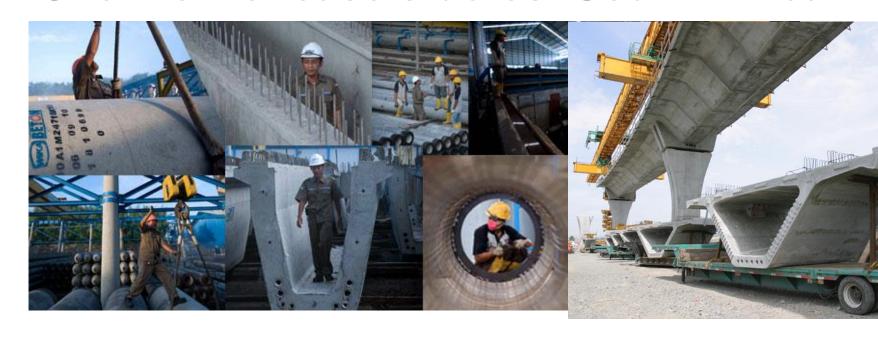
### Overview of case studies: South Africa



Case study: Pretoria Portland Cement Company (PPC Cement) (May 2011)



### **Summary**

- Example of application of the ISO methodology
  - PPC Cement, cement company
- Credits
  - SABS Project team: Mr. Terrance Moodley, Head of Marketing & Sales, Ms. Praneshri Pillay, Researcher
  - Prof. Ian Jandrell, Head of the School of Electrical and Information Engineering, University of Witwatersrand, South Africa
  - Mr. Reinhard Weissinger, ISO, Manager of Research, Education, and Strategy



### The company overview - 1

- PCC Cement was founded already in 1892.
- Main market is South Africa, but it also exports to Botswana,
  Namibia and Zimbabwe.
- The company has 8 manufacturing plants and 3 milling depots.
  The head offcie is in Pretoria.
- Annual production capacities are almost 18 mill. tons of cement.
- The total sales revenue in 2009 is Rand 5.4 Bill. The construction market in South Africa is currently in a downturn following the global financial crises and the a drop after the heavy investments due to the soccer World Cup in 2010.



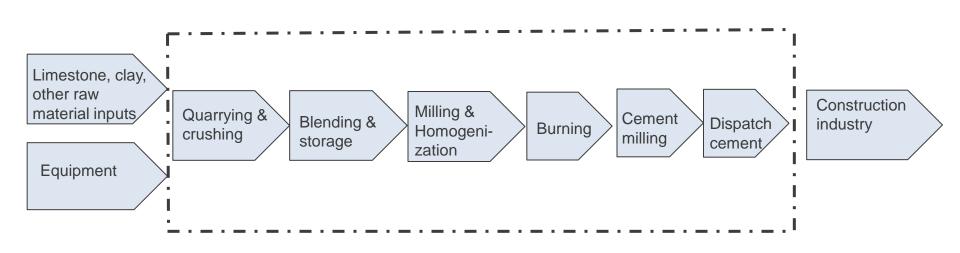
### The company overview – 2

- The company serves mainly the construction industry. Key sectors are the residential market as well as large infrastructure projects.
- The most important target market for PPC is retail, by supplying cement to the building and construction industry, to concrete product manufacturers, hardware stores and Do-It-Yourself (DIY) centres.



### **Industry value chain (simplified)**

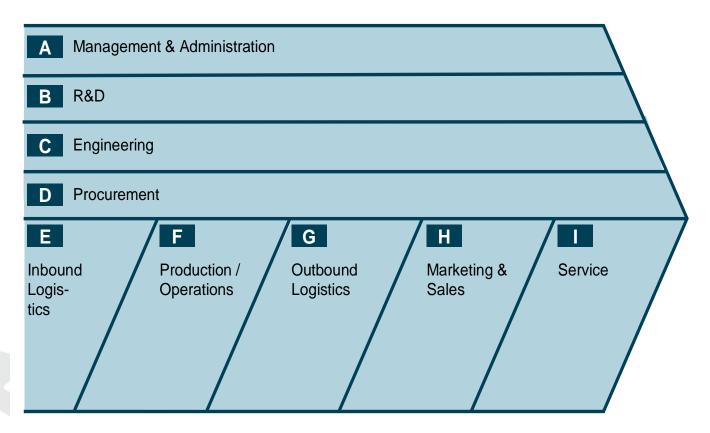
SUPPLIERS CUSTOMERS



$$-\cdot -\cdot -\cdot = PCC$$
 Cement



### Model of a company value chain (M. Porter)



A company value chain & the business functions « A » to « I » that constitute the Value Chain



### **Key value drivers in PCC Cement**

- Based on interviews with staff in PCC the following araes of company operations have been identified as key value drivers:
  - Sales effectiveness
  - Relationship building with suppliers
  - Quality of products
  - Efficiency of production
  - Quality & reliability of the production process
  - R&D effectiveness
  - Reduction in maintenance costs



### **Attitude of PCC Cement towards standards**

- PCC Cement is activley involved in standards committees in SABS and is an active user of standards.
- Overall the use of standards is wide spread in the cement industry in South Africa and simply the use of standard does not constitute a competitive advantage.
- The company is certified against ISO 9001:2008 and applies a number of other key management system standards, such as ISO 14001:2005, OHSAS 18001: 2007, SANS 17025:2005 (identical with ISO/IEC 17025) as well as a number of other standards related to cement, such as SANS 50197 (identical with EN 197) and SANS 50196 (identical with EN 196) and SANS 1841.

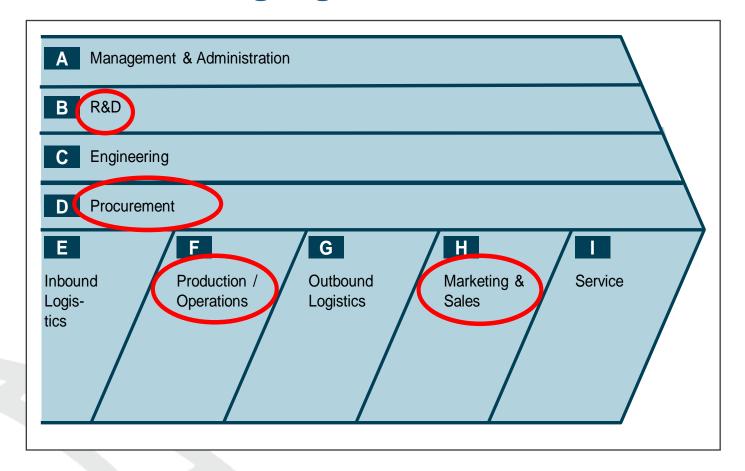


### **Preliminary analysis of the Standards Impact**

- Based on a preliminary analysis (supported by the Standards Impact Map) and interviews with staff in PCC the following four business functions have been selected for the assessment:
  - Research & Development
  - Procurement
  - Production/Operations
  - Marketing & Sales



# Value chain of PCC Cement -- Business functions selected for the assessment of the impacts of standards are highlighted





### **Research & Development**

- Time needed to collect information about products of suppliers and customer requirements can be saved
- Time could be saved in communicating information about products and services
- Information transfer between departments is easier and more reliable

Total savings (per year): 14,3% of costs for R&D



#### **Procurement**

- Time could be saved and misunderstandings have been avoided in passing on information and requirements between PCC and its suppliers
- The preparation of contracts has been made easier with the possibility to reference external standards

Total savings (per year): 0,2% of costs for procurement



### **Production/Operations**

- Key impacts are the streamlining of the production process resulting in reductions of the production costs
- Staff training was made easier, more consistent and less costly by being able to reference external standards

Total savings (per year): 1,3% of costs of production



### Marketing & Sales

- For the preparation of sales contracts, systematic reference is made to standards, which results in important savings
- Due to the use of standards, PCC has built a reputation for consistency and reliability

■ Total savings/benefits (per year): 14,1% of costs for M&S



## Summary: Standards EBIT impact of the selected business functions (2009)

| <b>Business Functions</b> | % of savings/benefits of the costs of the business functions |
|---------------------------|--|
| Research & Development    | 14,3%  |
| Procurement               | 0,2%   |
| Production/Operations     | 1,3%   |
| Marketing & Sales         | 14,1%  |

- The contribution from standards in 2009 amounts to
  - 2,5% of the company sales or turnover (ZAR 5,9 bill.) and
  - 5,8% of the company EBITA (ZAR 2,5 bill.)



### **Qualitative considerations**

- Qualifications of suppliers has been raised due to the systematic use of standards by PCC
- The use of ISO 14001 has resulted in lower energy consumption and a better environmental record
- The use of OHSAS 18001 has created a safer working environment for the employees and, indirectly, the safety of the public
- Taken together, the measures above have contributed to increasing the reputation of PCC in the eyes of its customers



### Thank you for your attention!



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