Content	
Foreword	7
General Reports	9
Fit for Purpose Market-oriented Cements	10
Jesper Sand Damtoft, Duncan Herfort	
Raw Material Extraction and Grinding Technologies  Giovanni Battista Auxilia	15
Burning Technology Rainer Nobis	21
Environmental Technology and Sustainability	34
Eamon Geraghty	
Theme Session: Future-oriented Projects	39
Presentation of the new Greenfield Plant – 12,000 TPD clinker,	
FLS Technology – Holcim (US) Inc. at Ste. Genevieve, Missouri, USA	40
Jacques Bourgon	10
First Experiences with the new Kiln Line in Woessingen Gernot Kirchner	46
Aditya Birla Group - Trust in Large Capacity Plants	50
Brijesh Gangwar, P.V.R. Murthy, Andreas Hand	
Kiln Project and first Experiences at Beremend Cement Plant	56
László Szabó, Tibor Csoerge, Thomas Braig	
Buñol White Cement Line, Challenges and Achievements  Emiliano I. Quiroga Morales, José de la Vega	63
Vertical Cement Grinding with the Polysius Mill –	
Concept and Industrial Realisation	72
Robert Schnatz, Frank Ruoss	
Theme Session: Cements	77
Trends in the Field of Low CO <sub>2</sub> Cements	78
Albrecht Wolter	
Control of Product Quality during the Use of Secondary Materials  Hendrik Moeller	83
Production and Properties of Composite Cements  Horst-Michael Ludwig	89
Experience with the Production of Chromate Reduced Cements	
and Cement Containing Preparations  Walter Wassing	96
Cements and Innovation	104
Karen Scrivener	10
Interaction of Cement with modern Concrete Admixtures Roberta Magarotto	108
Theme Session: Raw Material Extraction and Grinding Technologies	113
Environmentally Friendly Mining of Raw Materials  Juergen Thormann, Stefan Schaefer	114
Modern Raw Material Preparation of Chalk - Get out of the wet?	121
Michael Kapphahn, Burkhard Wolf  Latest Technology for Lafarge French Flagship	126
Christophe Bouf	
Development und Experiences with Wear Protection on Roller Presses Gerhard Gudat, Otto Menner	130
Best Practice Ball Mill Optimisation within CRH Colm Hofler	136
Optimisation of the Ball Charge from Mills for Cement Grinding Stefan Woywadt, Philipp Fleiger	140

Theme Session: Substainability and Use of Energy Energy Efficiency of Cement Plants Klaus Bauer, Volker Hoenig	<b>147</b> 148
IEA/CSI Technology Roadmap for the Cement Industry Cecilia Tam, Rob van der Meer	155
CO <sub>2</sub> Emission and Energy Consumption of the Cement Industry (WBCSD/CSI-GNR)  Bruno Vanderborght	158
Experiences of Cement Sector Action through the Asia Pacific Partnership on Clean Development and Climate Yoshito Izumi, Toshio Hosoya	162
Waste Heat Recovery Power Generation (WHRPG) for Cement Plants Tatsuo Ino	166
Waste Heat Power Generation at HeidelbergCement  Jan Theulen	174
Waste Heat Recovery for the Drying of Sewage Sludge  Johann Trenkwalder	176
Theme Session: Burning Technology Burners for Alternative Fuels Utilisation – Optimisation of Kiln Firing Systems for Advanced Alternative Fuel Co-firing Ruediger Wirthwein, Bernhard Emberger	<b>183</b>
Optimisation of the Combustion of Secondary Fuels by O <sub>2</sub> Enrichment  Christopher Ehrenberg, Tilo Meissner, Stefan Laux, Markus Webel,  Dirk Oberschelp, Ralf Schaefer, Peter Wrampe	190
Criteria for the Selection of Precalciner Kilns Stefan Schaefer, Volker Hoenig	194
Experiences with Retro-fitting of Planetary and Rotary Coolers to Grate Coolers Thomas Braig, Ulrich Mrowald, Holger Rosemann, Marius Seglias	200
Innovations in Kiln Gas Bypass Systems Stefan Federhen	208
Key Aspects for Refractory Performance in Waste Fuel Operated Cement Kilns Hans-Juergen Klischat, Ulrich Zielinski	214
Theme Session: Environmental Technology BAT in the European Cement Industry, Outcome of the BREF Revision – Dust, NO, Abatement, Energy Efficiency, Trace Elements,	221
Alternative Fuels and Materials Claude Loréa	222
Reverse SCR System for NH <sub>3</sub> Removal on Semidry Kiln and its new Placement in the Dry Process  Giovanni Cinti, Eugen-Dan Cristea, Fabio Ferrari and Carlo Ferrario	226
Monitoring of Mercury and its Behaviour in the Clinker Burning Process  Martin Oerter, Stefan Schaefer	232
CO <sub>2</sub> Capture and Storage – an Option for the Cement Industry?  Volker Hoenig	234
Oxy-fuel Combustion and CO <sub>2</sub> Capture Technology for Cement Kilns Stefan Laux, Kristina Koring, Volker Hoenig	242
CO <sub>2</sub> Storage and Transportation – A must in Power Generation and an Opportunity for other Industries? Christian Bernstone	248
<sup>14</sup> C-Method for Biomass Determination and its Potential to be applied at Stacks Rob van der Meer, Martin Oerter	249