

2008 IEEE CEMENT INDUSTRY TECHNICAL CONFERENCE RECORD

**Miami, FL
18–22 May 2008**



**IEEE Catalog Number:
ISBN:**

**CFP08CEI-PRT
978-1-4244-2080-3**

Table of Contents

Climate Hot Spots: Status of GHG Regulations and Implications for the Cement Industry	1
<i>Katherine N. Blue, Arron Heinerikson and Mike Remsberg</i>	
Production Facilities Maintenance Outage Planning, Execution & Continuous Improvement Program	9
<i>Guillermo Haberer and Eric Clerk</i>	
Dust Collector Design and Safety	35
<i>Andrew F. Hollingshead, P.E.</i>	
Heavy Metals in the Cement Industry: A Look at Volatile Cycles and Simple Mitigation Techniques	48
<i>Peter Paone</i>	
The Final Frontier Safety By Design: Emerging Standards and Designs In Low-Voltage Motor Control Assemblies	59
<i>David B. Durocher and Daleep Mohla</i>	
Simplifying and Enhancing Automated Source Transfer Using Protection with PLC Capabilities	70
<i>Wayne G. Hartmann</i>	
Wind Generation Applications for the Cement Industry	86
<i>Nicholas W. Miller, Dillip Guru and Kara Clark</i>	
Considerations for Implementing MV Drives in a Cement Plant	96
<i>George Seggewiss, P.E., Nathan Schachter, P.E., Gregory Obermeyer, P.E., and Gary Bankay</i>	
Protection Solutions to Reduce Arc-Flash Hazards	107
<i>Jim Buff and Karl Zimmerman</i>	
Using Infrared Sightglasses to Enable Predictive Maintenance of a High Voltage Motor System and Comply with NFPA70E Safety Requirements	115
<i>Antony J. Holliday, John A. Kay and Lyndon Mason</i>	
Automation to Improve Quality Control	127
<i>Luis Velasquez and Felix D'Souza</i>	
The Applicability of Wireless Technologies for Industrial Manufacturing Applications Including Cement Manufacturing	138
<i>Martin Hanssmann, Sokwoo Rhee and Sheng Liu</i>	

Table of Contents

Mercury Emission Monitoring for the Cement Industry	144
<i>Michael L. Jones, Dennis L. Laudal and John H. Pavlish</i>	
Advanced Computational Tools for Cement Plants	154
<i>S. Suhail Akhtar, Dr. Tahir Abbas and Prof. F.C. Lockwood</i>	
Pack Set and the Effect on Pneumatic Conveying of Cement	170
<i>Louis S. Schwartz, P.E.</i>	
New Reasons for Installing a Chloride By-Pass. Interaction Between Chloride and Sulphur	178
<i>Ebbe Jons, Soren Hundebol and Kim Clausen</i>	
Beneficial Uses of Cement Kiln Dust	193
<i>Wayne S. Adaska and Donald H. Taubert</i>	
Energy-Saving Pneumatic Conveying Pipe System	212
<i>Mario Dikty, Peter Hilgraf and Ray Worthington</i>	
Labor and Energy Issues in Cement Manufacturing from the 1st Cement Industry Technical Conference to the 50th	224
<i>Richard P. Bohan, P.E., FACI</i>	
Selecting Inching Drives for Mill and Kiln Applications	233
<i>Glen Cahala and Frank C. Uherek</i>	
Concepts, Configurations, & Benefits of Motor Starting and Operation with MV AC Adjustable Speed Drives	241
<i>William J. Horvath, P.E.</i>	
Selection of AC Induction Motors for Cement Plant Applications	258
<i>Barton J. Sauer</i>	
Sleeve Bearing Design for Slow Speed Applications in Cement Plants	266
<i>Sumit Singhal</i>	
A Review of Cleaning Methods for Motor Windings	274
<i>I. M. Culbert</i>	
Author Index	281