The technical journal for the cement industry

German ABC audited 4000 copies worldwide

The technical journal for the cement industry
Editorial staff:

Prof. Dr. Friedrich W. Locher
Prof. Dr. rer. nat. Friedrich Wilhelm Locher studied mineralogy and obtained his doctorate with a work on deep sea sediments. He worked for over 35 years at the German Research Institute of the Cement Industry as head of the cement chemistry and cement technology department and member of the management of the German Cement Works Association. Prof. Dr. rer. nat. F. W. Locher is acknowledged throughout the world as an expert in the fields of the production and application of cement. He was a member of numerous committees and working groups of the European Cement Industry and the German Committee for Reinforced Concrete.

Prof. Dr. Siegbert Sprung
Prof. Dr.-Ing. Siegbert Sprung studied at the non-metallic minerals faculty of the Technical University of Clausthal. 1961 he started his professional activities at the Research Institute of the German Cement Works Association (VDZ). He obtained his doctorate with a work on the “Reactions of sulfur during the burning of cement clinker” at the TU Clausthal and qualified 1982 as a university lecturer at the RWTH Aachen with a work on “Technological problems and their solution during the burning of cement clinker”, followed by an appointment as appl. Professor of Cement and Inorganic/Non-metallic Binder Technology. 1988 he was appointed divisional director of the main cement technology department of the Research Institute. From then until his retirement in 1999, Prof. Sprung was a member of the management team of the VDZ, finally acting as its speaker and head of the Research Institute.

Prof. Dr. Dietbert Knöfel
Prof. Dr. rer. nat. Dietbert Knöfel studied mineralogy. After completing his studies as Dr. rer. nat. he worked at HeidelbergCement AG. He qualified as a lecturer on the subject of “Portland cement clinker — with regard to the elements present in low concentration”. In 1993 he was appointed Professor of Construction and Materials Chemistry. Dietbert Knöfel was a member of many organizations, including as head of the “Concrete attack and concrete protection” Working Committee in the Association of German Concrete Engineers as well as chairman of the “Construction Chemistry” Technical Group of the Association of German Chemists.

Official organ:

CEMENT INTERNATIONAL is the official organ of the Vdz. (German Cement Works Association) and of the BDZ. (Federal German Association of the Cement Industry) and of the Hungarian Cement Association

Contents and target groups:

CEMENT INTERNATIONAL is the specialist practice-oriented technical journal covering the field of manufacture, properties and applications of cement and other binders. As the official organ of the VDZ (German Cement Works Association), of the BDZ (Federal German Association of the Cement Industry) and of the Hungarian Cement Association, it is of the highest standard and represents an important forum for communication with your clients.

CEMENT INTERNATIONAL appears every two months in English and German on at least 100 four-colour pages. The modern and attractive format is aimed specifically at the needs of the reader and makes CEMENT INTERNATIONAL a profitable advertising medium.

The wide range of detailed, practical and objectively presented contributions covers all the subject areas relevant to the cement and binder industries. Starting with raw material extraction, progressing through the burning and grinding processes and ending with the properties of

Subscriptions — quality at a fair price
Close partnership:
CEMBUREAU, the European parent organization of the cement industry

Close contacts:
PCA – North American Cement Association
FICEM – Latin American Cement Association
APCAC – Caribbean Cement Association
AFCM – Asian Cement Association
NCB – Indian Cement Association
AUCBM – Arabian Cement Association

Dr. Stefan Deckers
Dr. rer. nat. Stefan Deckers studied chemistry with the emphasis on construction materials chemistry. He completed his dissertation on the “Influence of hydraulic binders on the properties of hydrothermally hardened lightweight concretes”. Afterwards Dr. Deckers worked as publishing manager and editor of a public newspaper. From 2000 he was employed by the former Bauverlag GmbH as editor-in-chief of the specialist journal ZKG International. Since 2002 he has been working at the publishing house Verlag Bau+Technik where he manages the specialist journals concrete and CEMENT INTERNATIONAL.

Editor-in-chief:

Publisher:

Dr.-Ing. Fritz Feige
Dr.-Ing. Fritz Feige studied mechanical engineering with the emphasis on conveying technology. He completed his doctoral work on “The movement and stress characteristics of a granular layer in the roller gap”. As head of the main research and development department of ZAB Dessau (a leading manufacturer of cement plants in the former GDR) Dr. Feige was heavily involved for a period of 30 years in many significant developments in cement process and equipment technology. From 1991 to 1999 Dr. Feige worked as editor-in-chief of ZKG International and then from 2000 to 2002 he occupied the position of publisher.

Advertising Manager:

Günther Jung
Günther Jung started work in 1969 at the former Bauverlag GmbH where he was trained in the publishing business. During his work G. Jung carried out various functions for different journals, including Concrete Plant + Precast Technology (BFT) and ZKG International. From January 1990 he worked as head of production for the journal ZKG International, for which he sometimes also undertook the advertising sales.

The subscription price for CEMENT INTERNATIONAL shows that quality does not have to be costly. Annual subscription rate abroad € 208 including postage costs. Single issue price € 35 including postage costs.

Easy ordering at www.verlagbt.de

CEMENT INTERNATIONAL appeals to everyone involved with cement as well as with the necessary environmental precautions. The technical and practice-oriented observations, detailed descriptions of processes and accounts of practical experience from works and research institutes mean that CEMENT INTERNATIONAL makes a substantial contribution towards publicizing important research results and innovations among the experts of the international cement and binder industries. The quality of the contributions is ensured by an experienced editorial staff, supported by a top-flight editorial advisory board. In the industrial section CEMENT INTERNATIONAL provides topical information on interesting events, trends and developments.

CEMENT INTERNATIONAL is a “must” for everyone involved with cement: plant engineers, machinery and plant construction engineers, technologists, cement chemists, mineralogists, geologists, sales engineers, marketing experts and businessmen.
**CEMENT INTERNATIONAL** offers readers topical and well-substantiated technical articles from all areas of cement technology, selected by its highly competent editorial team and is thus counted as the No. 1 source of information for everyone concerned with the manufacture and properties of the binders cement, lime and gypsum and ready-mixed mortar. As a result of the factual and informative reporting, **CEMENT INTERNATIONAL** is mainly addressed to the specialized management responsible for decision making in the technical area and for the planning of new investments, current measures and modernization projects.

**TARGET GROUPS:**
- Plant operators in the binder and mortar industries
- Research and test institutes
- Plant suppliers and ancillary industries
- Universities
- Public authorities and associations

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**Readership by business sector:**
- Shippers, traders, analysts: 2%
- Equipment manufacturers: 14%
- Construction: 1%
- Mortar, ready-mix: 5%
- Lime manufacturing: 8%
- Cement and lime headquarters: 22%
- Cement plants: 48%

**Circulation analysis:**
Copies per issue on an annual average (01.07.2006 – 30.06.2007)
- Print run: 4,167
- Number of copies actually distributed: 3,948
- Number of subscription copies:
  - Regular subscribers: 441
  - No. of copies sold: 311
- Free copies: 3,507
- Remainder-, archive- and voucher copies: 219

**Content analysis 2006 = 6 issues**
- Format: DIN A4
- Total content: 694 pages = 100%
- Editorial matter: 499 pages = 72%
- Advertisements: 195 pages = 28%
  - of these:
    - Classified ads: 9 pages = 5%
    - Bound inserts: 26 pages = 13%
    - Loose inserts: 2 copies

**German ABC audited**
4,000 copies worldwide
CEMENT INTERNATIONAL is a reader-friendly journal, as a result of its appealing and attractive layout, which has been proved by the results of a questionnaire. Readers spend an average of 1.20 hours reading CEMENT INTERNATIONAL before it is forwarded on, mostly through the firm’s circulation system to several co-workers. Due to this internal circulation, it reaches approximately 10 readers per issue, i.e., 10 readers \( \times \) 3,948 distribution copies = 39,480 reader contacts per issue! After reading, CEMENT INTERNATIONAL is not discarded, but saved and filed for future reference.

Geographical distribution analysis according to copies

<table>
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<th>Area of business</th>
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International circulation breakdown according to copies

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Reprints

… of articles can be provided in English/German on request. (Minimum print run 200 copies)

Write or phone, we would be pleased to submit our detailed price quotation.

Tel.: +49 (0) 211 / 92499-40, eMail: ci@verlagbt.de

www.verlagbt.de
Advertisement sizes (examples)

1/1 page in type area
(172 mm wide x 265 mm high)

1/2 page in type area
(172 mm wide x 130 mm high)

1/3 page in type area
(54 mm wide x 267 mm high)

1/4 page in type area
(84 mm wide x 130 mm high)

1/8 page in type area
(54 mm wide x 65 mm high)

1/8 page in type area
(54 mm wide x 100 mm high)

1/3 page in type area
(54 mm wide x 267 mm high)

1/2 page bleed
(216 mm wide x 303 mm high)

1/4 page bleed
(216 mm wide x 130 mm high)

1/8 page bleed
(216 mm wide x 65 mm high)

DIN A 4, 210 mm wide x 297 mm high

172 mm wide x 265 mm high

216 mm wide x 303 mm high

only 4 colour
214 mm wide x 210 mm high

left or right page opposite to
the index, back cover, inside back
cover and other special positions

per colour, per page (European range)
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Fumbeck process

per mm line (84 mm wide)
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50% discount for situations wanted ads

Verlag Bau+Technik GmbH, Advertising Department, Steinhof 39, 40699 Erkrath, Germany, Telefon +49 (0) 2 11 / 9 24 99-35
**Advertisement formats and rates (Euro / US$ net):**

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</table>

Your direct line to the **Cement International** advertising department

**In Canada:**

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Tel.: +49 (0) 6123-605-193  
Fax: +49 (0) 6123-605-194  
eMail: jung@verlagbt.de
### Issue No. | List of topics | Special distribution
--- | --- | ---
1 | **Modern burning and grinding technology**
- Design and performance data of modern kiln plants
- Efficient primary and secondary burners
- Processing, storage and handling of primary and secondary fuels
- Crushers and mills for coarse and fine comminution of limestone, cement clinker, granulated blastfurnace slag and other cement constituents
- Wear protection in vertical roller mills, high-pressure grinding rolls and ball mills
- Refractory schemes for rotary kilns, calciners and cyclone separators

**Conveying, storing, packaging and despatching of cement**
- Storage for cement raw materials and cement clinker
- Hopper extraction systems, metering and weighing technology
- Bagging, palletizing and shrinkwrapping technology
- Despatch automation
- Loading and unloading of bulk tanker vehicles and ships
- Dedusting technology

The selection of the editorial contents of the journal is made after discussion with our Chinese partner. The hand-picked technical articles cover the entire range of topics concerning cement manufacture and in particular also take into consideration the specific information requirements of the Chinese cement manufacturer.

**Process technology of cement production**
- Control technology and information management systems
- Instrumentation and control, recording and processing of information
- Water, compressed air and electricity supplies
- Motors and gear units
- Laboratory automation and quality control

**Environmentally friendly burning, grinding and cooling technology**
- Multi-channel burners for thermal utilization of secondary fuels
- Energy requirement and energy consumption of crushers and mills
- Energy-efficient, low-wear clinker coolers
- Abatement of emissions and immissions of dust, gas, noise and vibration
- Selection, processing, storage and metering of secondary raw materials and fuels

The selection of the editorial contents of the journal is made after discussion with our Ukrainian partner. The hand-picked technical articles cover the entire range of topics concerning cement manufacture and in particular also take into consideration the specific information requirements of the cement manufacturer in the states of the former Soviet Union.

**Production and utilization of lime and gypsum products**
- Plants for producing lime and gypsum
- Energy-saving and resource conservation in the lime and gypsum industries
- Use of secondary fuels for burning lime
- Process control and quality assurance
- Properties and utilization of lime and gypsum products

**Plants and machinery for cement manufacture**
- Operating results of modern kiln plants
- Burner technology and kiln systems
- Advances in clinker cooling
- Grinding processes, drive technology and wear protection
- Experience with the use of alternative fuels and raw materials
- Refractory lining and emission checks

The selection of the editorial contents of the journal is made after discussion with our Chinese partner. The hand-picked technical articles cover the entire range of topics concerning cement manufacture and in particular also take into consideration the specific information requirements of the Chinese cement manufacturer.
### SCHEDULE 2008

<table>
<thead>
<tr>
<th>Issue No.</th>
<th>List of topics</th>
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<tr>
<td>4</td>
<td><strong>Plant and equipment for the handling of mineral bulk materials</strong></td>
<td>Stein Expo 2008, Homberg/Niederofleiden, Germany (03.-06.09.2008)</td>
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<td></td>
<td>• Silos and hoppers for storing cement, lime, gypsum and premixed dry mortars</td>
<td>Fachtagung Schüttgutförder-technik 2008, Munich, Germany (18.-19.09.2008)</td>
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<td>• Conveying and metering of cement, lime, gypsum and premixed dry mortars</td>
<td>Powtech 2008, Nuremberg, Germany (30.09.-02.10.2008)</td>
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<td>• Loading and unloading of bulk tanker vehicles and ships</td>
<td>XXV. APCAC Technical Conference, Location of the event to be announced later (October 2008)</td>
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<td>• Dedusting technology during the handling of bulk materials</td>
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<td>• Bagging, palletizing and shrinking wrapping technology</td>
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<td>• Chemical analysis and particle measurement technology</td>
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<td><strong>Maintenance in the cement industry</strong></td>
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<td>• Modern maintenance and repair schemes</td>
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<td>• Diagnostic techniques and maintenance management</td>
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<td>• Strategies for raising plant availability</td>
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<td>• Increasing the service life of refractory linings in rotary kilns, calciners and cyclone separators</td>
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<td>• Innovative wear protection schemes to raise the service life of mills and crushers</td>
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<td><strong>Modernizing and raising the capacity of existing kiln and grinding plants</strong></td>
<td>15th Arab-International Cement Conference and Exhibition, Location of the event to be announced later (November 2008)</td>
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<td>Arabic</td>
<td>• Operating results of modernized kiln and grinding plants</td>
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<tr>
<td>Edition</td>
<td>• Possible ways of raising the output of kiln plants</td>
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<td>PD: 29.08.08 AD: 12.08.08</td>
<td>• Possible ways of lowering the energy consumption of kiln plants</td>
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<td>• Modernization of crushers, mills and classifiers</td>
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<td>• Experience with the implementation of modifications</td>
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<td>5</td>
<td><strong>Influence of process technology on the production of market-oriented cements</strong></td>
<td>15th Arab-International Cement Conference and Exhibition, Location of the event to be announced later (November 2008)</td>
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<tr>
<td>Sept/Oct.</td>
<td>• Requirements for the performance of market-oriented cements</td>
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<td>PD: 30.10.08 AD: 10.10.08</td>
<td>• Machinery and plants for producing market-oriented cements</td>
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<td>• Influence of burning and cooling on the properties of cement clinker</td>
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<td>• Influence of grinding and mixing on the properties of cement</td>
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<td>• Selection and processing of secondary raw materials</td>
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<td>• Composition, properties and utilization of cements with several main constituents</td>
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<td><strong>Chinese Edition</strong></td>
<td>Bauma China 2008, Shanghai, China (25.-28.11.08)</td>
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<td>Edition</td>
<td>The selection of the editorial contents of the journal is made after discussion with our Chinese partner. The hand-picked technical articles cover the entire range of topics concerning cement manufacture and in particular also take into consideration the specific information requirements of the Chinese cement manufacturer.</td>
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<td>PD: 20.11.08 AD: 31.10.08</td>
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<td><strong>Plants and machines for the production of cement, lime, gypsum and premixed dry mortars</strong></td>
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<td>Nov./Dec.</td>
<td>• Processing and extraction of raw materials for the cement, lime, gypsum, concrete and premixed dry mortar industries</td>
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<td>• New developments in the analysis and homogenization of raw materials for the cement, lime, gypsum, concrete and premixed dry mortar industries</td>
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<td>• Burning and cooling of cement clinker and quicklime</td>
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<td>• Crushers and mills for producing cement, lime, gypsum and premixed dry mortars</td>
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<td>• Mixers for the cement, concrete and premixed dry mortar industries</td>
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<td><strong>Conveying, storing, packaging and despatching of mineral bulk materials</strong></td>
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<td>• Silos and hoppers for holding cement, lime, gypsum and premixed dry mortar</td>
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<td>• Hopper extraction systems, continuous conveyors and metering equipment</td>
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<td>• Loading and unloading bulk tanker vehicles and ships</td>
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<td>• Dedusting technology when handling bulk materials</td>
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</table>
Cement – principles of production and use

Chapter 1: Classification of cements Composition, physical, chemical and engineering properties as defined in the European, German and ASTM standards.

Chapter 2: History of cement Basic principles of hydraulic binders, technical development of the clinker burning process, of the combination of raw materials and cement, and of environmental protection. Use of granulated blastfurnace slag as a latent hydraulic cement constituent. Development of cements with special properties and of the cement standards.


Chapter 4: Other main cement constituents Glassy (granulated) blastfurnace slag as a latent hydraulic constituent, pozzolanas, natural, e.g. volcanic, rock or synthetic rock, e.g. fly ash, silica fume, calcined clay, inert substances, e.g. ground limestone, as fillers.

Chapter 5: Grinding the cement Process technology of grinding, characterization of fineness, particle size distribution of the cement, energy requirement, energy balance and efficiency of cement grinding, grindability, grinding aids, their effect and their bonding to the cement.

Chapter 6: Environmental protection during the manufacture of cement Emission of dust and of constituents vaporized from the kiln feed and fuel, such as alkalies, sulfur, fluorine, chlorine, bromine, iodine and environmentally relevant trace elements, in particular nickel, chromium, arsenic, antimony, zinc, lead, cadmium, thallium and mercury. Ambient pollution due to the vaporized constituents and their effect on the environment. Emission of carbon dioxide, carbon monoxide, polychlorinated dibenzodioxins (PCDD) and polychlorinated dibenzofurans (PCDF). Formation and emission of nitrogen oxides and methods of NOx abatement.

Chapter 7: Cement hardening Products of cement hydration: calcium silicate hydrates, calcium aluminate hydrates, C4AH13, calcium ferrite hydrates, hydrates containing sulfate and related compounds, AFm compounds in hardened cement, syngenite, hydrogarnet, gehlenite hydrate. Hydration reactions of the different types of cement. Setting, reactions, sequence, causes, influencing factors. Hardening, cause and sequence, influence of the clinker and cement composition, of the fineness and particle size composition of the cement, of the water/cement ratio, influence of admixtures, influence of temperature.

Chapter 8: Constitution and properties of hardened cement paste Water combination in the hardened cement paste, specific surface area, particle size of the hydration products in the hardened cement paste, microstructure of the hardened cement paste, models of the hardened cement paste, void filling, “external” and “internal” hydration products, contact zone between hardened cement paste and aggregate. Porosity and methods for measuring porosity. Strength, influence of porosity, specific strength of the hardened cement paste. Hardening, influence of the water/cement ratio and of the degree of hydration. Dimensional stability: elastic modulus, shrinking and swelling, creep, thermal deformation. Factors affecting the impermeability of hardened cement paste, mortar and concrete. Resistance to chemical attack, dissolving attack, expansive attack, attack by seawater, soil, gases. Assessment of the level of attack, preventive structural measures. Discolouration, efflorescence, alkali-aggregate reaction, alkali-carbonate reaction, resistance to freeze-thaw and to freeze-thaw with de-icing salt.

Chapter 9: Standard cements with special properties, special cements Cements with high sulfate resistance, cement with low heat of hydration, cement with low active alkali content, quick-setting cement, expanding cement, oil-well cement, water repellent cement, ultra-fine-grained binders, cement for sprayed concrete, plaster and masonry binders, supersulfated cement, high alumina cement.