

THE WORLD RESOURCE FOR CERAMIC MANUFACTURING AND TECHNOLOGY

AMERICAN
CERAMIC
SOCIETY

BULLETIN

November 2001
www.ceramicbulletin.org

Focus on Refractories

Unitecr 2001

Corporate Connection: Saint-Gobain

Ref: PF 120201/05 Df: 2774509
AMERICAN CERAMIC SOCIETY BULLETIN
01.11.01 Vol. 80 No. 11
0002-7812 22101144 14.11.0
LIBRIS - C2
144 BOULEVARD KRIM BELKACEM
ALGER
ALGERIE

CONTENTS

Volume 80, Number 11, November 2001

feature articles

60 Suspension Processing, Microstructure and Mechanical Properties of Alumina-Platelet-Reinforced 3Y-TZP, Part 1

3Y-TZP containing Al_2O_3 platelet reinforcements were fabricated by suspension processing and pressureless sintering to >95% of theoretical density. The effect of platelet size on the green and fired microstructures was determined. There was improvement in mechanical properties using smaller platelets, but loss in fracture strength using larger platelets.

Isaac K. Cherian and W.M. Kriven

Focus on Refractories

31 U.S. Refractories Demand to Improve

34 High-Alumina Multifunctional Refractory Castables

Versatile multifunctional castables can be installed using ramming, vibrating and self-flowing methods by changing the water content used during their preparation.

A.R. Studart, R.G. Pileggi, V.C. Pandolfelli and J. Gallo

41 Refractory Helps Cure Furnace's Recurring Bellyache

47 Drying Behavior of Refractory Castables

Knowledge of the drying behavior of castables is an important factor to help manufacturers of refractories optimize their heating programs, thus minimizing the time and energy costs involved in the replacement of damaged pieces in the manufacturing process.

M.D.M. Innocentini, C. Ribeiro, J. Yamamoto, A.E. Paiva, V.C. Pandolfelli, L.R.M. Bittencourt and R.P. Rettore

57 Alafar Hosts Unitecr 2001

corporate connections

76 St. Gobain Ceramics and Plastics Inc.—Sustaining Corporate Member

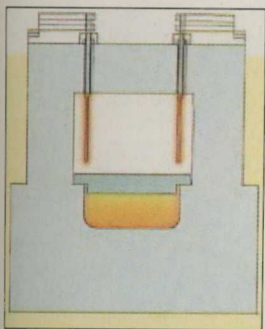
manufacturing briefs

68 High-Temperature-Resistant Heating Elements in the Glass Industry

Lars-Jöran Frisk and Bengt Linder



Refractory Helps Cure . . .



manufacturing briefs . . .

CONTENTS

Volume 80, Number 11, November 2001

product focus

72 High-Temp Furnaces

news & views

4 up front
Business as Usual . . . Somewhat
Patricia A. Janeway, Editor

11 global news
*Siam Guardian Glass Forecasts
Tough Year/12
O-I Closes on Canadian Glass/13*

13 technology briefs
Greg Geiger, Technical Editor

16 refractory hot line
Charles G. Marvin, Contributing Editor

25 brick business
*Interviews with Industry Giants—Larry
Myers, The Belden Brick Co.
Denis Brosnan, Contributing Editor*



global news . . .

departments

6 calendar

14 business stats

26 names in the news

85 product news

88 on-line business directory

109 business services

119 career opportunities/classified ads

120 ad index

society business

56 statement of ownership

81 section notes

83 NICE news

Diane C. Folz, NICE Director

84 members network

Get Involved with Your Local ACerS Student Branch!
Garry Moon, Membership Manager

ACerS Meeting Information

91 ECD/Cocoa Beach Meeting
Program



product news . . .

THE AMERICAN CERAMIC SOCIETY BULLETIN covers news and activities of the Society and its members, includes items of interest to the ceramic community, and provides the most current information concerning all aspects of ceramic technology, including research and development, manufacturing, engineering and marketing.

AMERICAN CERAMIC SOCIETY BULLETIN (ISSN No. 0002-7812). ©2001 PUBLISHED MONTHLY, 12 TIMES A YEAR. PRINTED IN THE UNITED STATES OF AMERICA.

EDITORIAL AND SUBSCRIPTION OFFICES: P.O. Box 6136, WESTERVILLE, OH 43086-6136. SUBSCRIPTION INCLUDED WITH AMERICAN CERAMIC SOCIETY MEMBERSHIP. NONMEMBER SUBSCRIBER RATES: NORTH AMERICA, 1-YEAR \$50; INTERNATIONAL (AIR MAIL ONLY), 1-YEAR \$100. BACK ISSUES: NORTH AMERICA, \$9 PER ISSUE; INTERNATIONAL, \$12 PER ISSUE. ALL RATES INCLUDE SHIPPING CHARGES. OUR STANDARD DELIVERY METHOD OUTSIDE NORTH AMERICA IS VIA BULK AIR MAIL PROVIDED BY AN INTERNATIONAL RE-MAIL CARRIER.

POSTMASTER: PLEASE SEND ADDRESS CHANGES TO AMERICAN CERAMIC SOCIETY BULLETIN, P.O. Box 6136, WESTERVILLE, OH 43086-6136. PERIODICAL POSTAGE PAID AT WESTERVILLE, OHIO, AND ADDITIONAL MAILING OFFICES. ALLOW SIX WEEKS FOR ADDRESS CHANGES.

ACSBA7, Vol. 80, No. 11, pp 1-120