



IBRACON
Instituto Brasileiro do Concreto

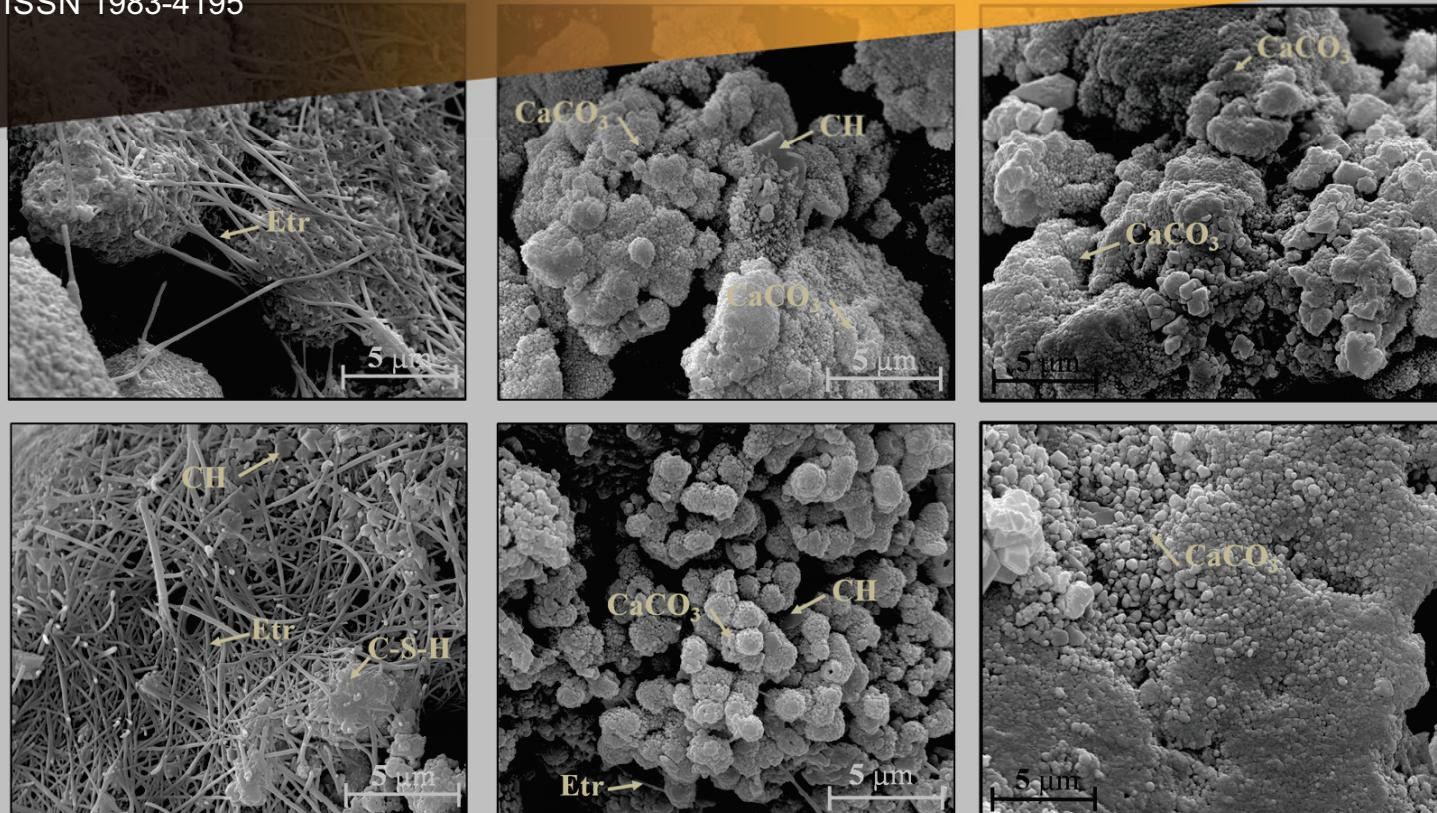
REVISTA IBRACON DE ESTRUTURAS E MATERIAIS

IBRACON STRUCTURES AND MATERIALS JOURNAL

Volume 12, Number 1

February, 2019

ISSN 1983-4195



Contents

Analysis of the brazilian federal bridge inventory

C. B. L. OLIVEIRA, M. GRECO and T. N. BITTENCOURT

Analytical study of cylindrical tanks including soil-structure interaction

R. L. C. SILVA, G. B. MARQUES, E. N. LAGES and S. P. C. MARQUES

Geometric optimization associated with the use of high-strength concrete in viaducts

E. V. W. TRENTINI and C. H. MARTINS

Effects of *Bacillus subtilis* biocementation on the mechanical properties of mortars

N. SCHWANTES-CEZARIO, M. F. PORTO, G. F. B. SANDOVAL, G. F. N. NOGUEIRA, A. F. COUTO and B. M. TORALLES

Numerical study of the behaviour of loop bar splicing in joints of reinforced concrete structures

T. D. L. VASCONCELOS and V. G. HAACH

Experimental analysis of load capacity in beams with steel fiber reinforcement on the compression face

C. C. DEGHENHARD, B. V. SILVA and F. PELISSER

Strut-and-tie models for linear and nonlinear behavior of concrete based on topological evolutionary structure optimization (ESO)

R. M. LANES, M. GRECO and M. B. B. F. GUERRA

Pervious concrete: study of dosage and polypropylene fibers addiction

S. E. PILZ, P. OLIVEIRA, F. REGOSO, V. A. PAULON and M. F. COSTELLA

A numerical analysis of a concrete slab breaching using high explosives

M. L. COSTA NETO and G. N. DOZ

Comparative analysis among standards of the area calculation of transversal reinforcement on reinforced concrete beams of high resistance subjected by shear force

D. H. L. BRAZ, R. BARROS and J. N. DA SILVA FILHO

Behavior of the self-compacting mortar with sugarcane bagasse ash in the fresh and hardened state

V. C. SANTOS, R. D. VANDERLEI, K. K. MORAES, E. T. D. F. ROSINA and G. M. BALBINO

Analysis of strengthening procedures of reinforced concrete highway bridges: a brazilian case study

D. M. CARVALHO and J. M. F. CALIXTO