

2nd International Conference on Stone and Concrete Machining 14.-15.11.2013

Welcoming Words and Key Speeches - Lecture Hall 15/16

November 14th, 2013

08:30 Registration

09:30 Opening

09:45 Adaptation of diamond drilling technology for deep underground tunnel excavation
A. Kossolapov - National Concrete Drilling and Sawing Association of Russia

10:30 Cutting versatility with diamonds aggregates
C. Sheridan - C.E.O. Foxmet S.A.

11:15 Coffee Break

Hall 15: Session 1: Machining Processes

Chairman: A. Kossolapov

11:45 Characterization of the strength and the abrasiveness of stones based on a scratching test
F.Dagrain

12:15 Optimization of the cutting design of chain saw machines by experimental approach in laboratory
F. Dagrain, P. Marchandise

12:45 Lunch

13:45 Investigation of relationships between some physico-mechanical properties of natural stones and swarf grain size in circular sawing
Y. Ozcelik, E. Yilmazkaya, F. Bayram, N.E. Yasitli

14:15 Characterization of the performances of small diameter drill bits for the optimization of the drilling parameters
F. Dagrain, L. Etienne, R. Delwiche, N. Golard

14:45 Coffee Break

15:15 Long-term behaviour of circular saws: testing new matrices for cutting porriño granite
L.G. Rosa, C.A. Anjinho, A. Coelho, P.M. Amaral

15:45 Cut-off grinding of natural stone - increased efficiency by means of electro-contact-discharge-dressing
B. Denkena, F. Seiffert, B. Konopatzki, J. Köhler

16:15 New technological approach for the increase of productivity in quarries
I. Frazão; J. Frazão

17:00 end of seminar day 1

18:20 transfer to conference dinner
(meeting point: entrance of the conference center)

Hall 16: Session 2: Tool Manufacturing

Chairman: W. Tillmann

11:45 Production of versatile abrasive and wear resistant Ni-diamond composite layers by HVOF spraying
W. Tillmann, C. Schaak, J. Nebel

12:15 Sinter cladding of metal matrix composites: a novel approach for the production of wear resistant tools
M. Blüm, W. Theisen

12:45 Lunch

13:45 Materials saving by compaction of MMC chips via electro-discharge-sintering
M. Windmann, A. Röttger, W. Theisen

14:15 Direct hot pressed diamond-metal matrix composites with optimized metallic bond hardness
D.R. Romera, S. Regnard, N. da Silva

14:45 Coffee Break

15:15 Production of thin diamond wire
U. Funk, T. Böltz (Dr. Fritsch GmbH)

15:45 Fully-automatic cold press for the production of green compacts for diamond wire saws
U. Funk, T. Böltz (Dr. Fritsch GmbH)

19:00 conference dinner

22:30 transfer back to the conference center

Conference Secretary

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Organization

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Partner



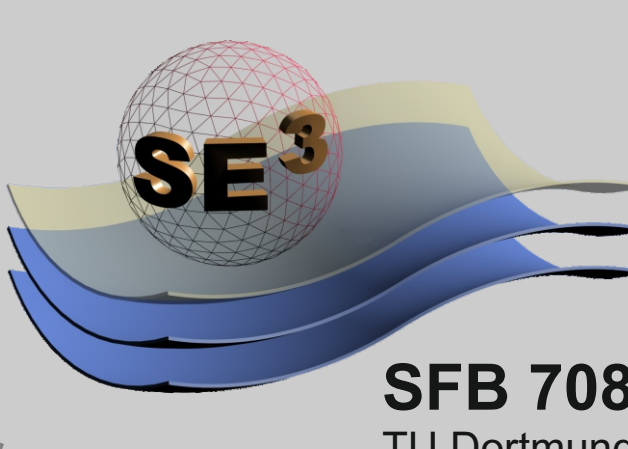
DIWT

Dortmunder Interessengemeinschaft für Werkstofftechnologie e.V.



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2nd International Conference on Stone and Concrete Machining 14.-15.11.2013

Lecture Hall 15/16: November 15th, 2013

- 09:30 Economic situation of the natural stone industry in Germany**
R.Krug - DNV e.V.
- 10:00 Selective and Sustainable Exploitation of Ornamental Stones Based on Demand**
R.Krug - DNV e.V.

Hall 15/16: Session 3: Process Monitoring Chairman: W. Theisen

- 10:30 The numerical simulation for lost foam casting of Al-based matrix diamond grinding wheels**
Q. Dai, Y. Tang, L. Canbin, F. You

11:15 Coffee Break + Table Tops in combination with: 6th public colloquium of the Collaborative Research Centre (SFB) 708

- 12:00 A research about dynamic characteristic of thermocouple when measuring the grinding temperature of granite**
F. You, Q. Dai, X. Xu

12:30 Lunch

Chairman: C. Schaak

- 13:30 Material removal simulation of wire cutting processes for an adapted tool design**
B. Denkena, A. Ermisch, J. Köhler
- 14:00 Use of air permeability apparatus to determine the durability of natural building stones**
M. Yurdakul, F. Bektas, H. Akdas
- 14:30 Diamond impregnated cutters testing methodology developed on vertical turret lathe**
N. da Silva, S. Regnard, D. R. Romera
- 15:00 Graphitization effects on diamonds sintered in two component metal matrix systems**
W. Tillmann, M. Tolan, M. Ferreira, A. Steffen

16:00 End of Seminar Day 2

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6th public colloquium of the Collaborative Research Centre (SFB) 708 Lecture Hall 8

09:00 Keynote - „Thermal spraying“

09:45 Keynote - „Machining“

SFB 708 - 3D-Surface Engineering

- 10:30 Design and simulation-based manufacturing of adapted forming tools for the compensation of springback**

- 11:45 Improving robot application in thermal spray coating**

- 12:05 Technological developments in nozzle design for twin wire arc spraying to improve the variety of application**

- 13:30 Keynote „Simulation“**

- 14:00 Acquisition and application of three dimensional spray footprints in coating simulations**

- 14:20 Simulation and optimization of mechanical contact problems**

- 14:40 Characterization of thermal spraying process by means of optical techniques**

- 15:00 Thermo-mechanical homogenization of HVOF thermal-sprayed WC-Co coatings**

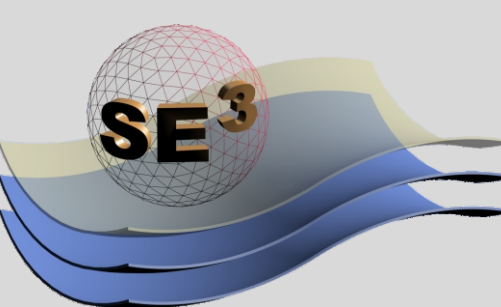
- 15:35 Keynote „Press hardening“**

- 15:55 Surface finish of wear resistant coatings by ball burnishing and grinding - Process, simulation, and application**

- 16:15 Optimization of the robot based, force controlled grinding of thermal sprayed surfaces**

- 16:35 Springback reduction of deep drawn parts by the use of tools with adjusted stiffness based on numerical simulations**

- 16:55 Optimization of the process chain for the efficient manufacturing of forming tools with complex 3D surfaces**



Partner



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