



INTERNATIONAL WROUGHT COPPER COUNCIL

TECHNICAL SEMINAR 2018
CHICAGO, 4-8 MARCH

HOT & COLD DEFORMATION

PAPERS LIST

Monday 5 March

Session 1 – Introduction

1. The North American Copper Industry, Thom Passek, President & CEO, Copper Development, Inc.

Session 2 – Industry 4.0 (the ‘Internet of things’)

2. The future of IoT, Don DeLoach, Co-Chair, Midwest IoT Council
3. Implementation and Infra-structure Issues, Bob Voss, Senior Principal Research Engineer, Panduit Corp
4. Benefits and solutions through big data analysis and machine learning with ACHENBACH OPTILINK® Technology, André Barten, Achenbach Buschhütten GmbH & Co. KG

Refreshment Break

Session 3 – Computer Simulation

5. Process simulation for hot & cold deformation of copper and copper alloys, Dirk Helm, Fraunhofer-Institut für Werkstoffmechanik IWM
6. Fast rolling models as a versatile tool for pass schedule calculation, optimization and design, Alexander Krämer, Institut für Bildsame Formgebung (IBF), RWTH Aachen University
7. Simulation of the continuous rotary extrusion process by Deform, Denise Willems, Aurubis Belgium nv/sa

8. Understanding metal flow in the extrusion of asymmetric shapes, Prof. Wojtek Misiolek, Loewy Institute on Materials Forming and Processing, Lehigh University (paper to be confirmed)

Lunch

Session 4 – Flat Products

9. Optimizing the design of reroll material for minimizing losses, Bettina Schmitz, Wieland-Werke AG
10. Latest achievements in the rolling of thin gauge copper and copper alloy strip for high-tech applications, Geminiano Chiesa, MINO S.p.A.
11. Cold rolling process for copper foil, Atsushi Nakamura, JX Nippon Mining & Metals Corporation

Refreshment Break

12. Fine grained phosphor bronzes, Michael Koehler, Diehl Metal Applications, Sundwiger Messingwerke GmbH & Co. KG
13. Modernization of a high precision reversing cold rolling mill, Jürgen Jestrabek, Aurubis AG
14. Efficient manufacture of copper flat bars and special shapes by using the integrated UPCAST®-technology and latest continuous rotary extrusion equipment, Hendrik Busch, Mansfelder Kupfer und Messing GmbH

Technical Seminar Adjourns

Tuesday 6 March

Session 5 – Measurement & Inspection

15. Non-contact measurements on copper production and processes, Martin Dumberger, μ -Epsilon
16. New Situation in Cold Rolling Mills: Since VTLG thickness measurement with laser is possible, Elke Roller, Friedrich Vollmer Feinmessgeraetebau GmbH
17. Surface inspection for copper and copper alloys – Realizing the full potential for quality improvement process, Marius Westermann, AMETEK Surface Vision

18. Detection of surface defects and inclusions in continuous cast wire rod with eddy currents, Rainer Sailer, Institut Dr. Foerster GmbH & Co. KG

Refreshment Break

Session 6 – Wire Rod, Wire & Tube

19. Fine copper wire: Copper rod breakdown operation saving 100% of annealing energy, Giuseppe Marcantoni, Properzi International USA
20. Cold deformation process of the metal slide fastener, Takamitsu Takagi, YKK Corporation
21. Best practice in copper tube and wire rod manufacturing, Markus Ecker, SMS Group

Lunch

Session 6 – Wire Rod, Wire & Tube – Continued

22. Ultra-conductive copper with hot extrusion alloying, co-presented by Prof. Frank Kraft and Dr. Keerti S. Kappagantula, Ohio University
23. Pioneering advancements of CRE for copper and its alloys: Creating high quality tubes and bars using innovative continuous rotary extrusion equipment, Johannes Sieberer-Kefer, ASMAG Anlagenplanung und Sondermaschinenbau GmbH
24. Danieli technological packages for the non-ferrous tube eccentricity reduction and classification/certification applied on high speed drawing lines, Andrea Scalas, Danieli & C. Officine Meccaniche S.p.A.
25. Inner grooved tube, (Title and speaker to be confirmed), Hailiang Group
26. Trend of copper tube development in Japan and associated manufacturing technology, Hirokazu Tamagawa, UACJ Copper Tube Corporation

Chair's closing remarks followed by refreshments

15 January 2018