



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, Thomas Passek, President, Copper Development Association Inc (CDA)

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

2. The Future of IoT, Don DeLoach, Co-Chairman, Midwest IoT Council
3. IoT Infrastructure, Robert Voss, Senior Principal Research Engineer, Panduit Corp
4. Benefits and solutions through big data analysis and machine learning with ACHENBACH OPTILINK® Technology, André Barten, Managing Director/ CEO, Achenbach Buschhütten GmbH & Co.KG

Refreshment Break

Session 3 – Computer Simulation

5. Process simulation for hot and cold deformation of copper and copper alloys, Dirk Helm, Head of Business Unit, Manufacturing Processes, Fraunhofer Institute for Mechanics and Materials IWM
6. Fast rolling models as a versatile tool for pass schedule calculation, optimization and design, Alexander Krämer, Research Associate, Institute of Metal Forming, RWTH Aachen University
7. Simulation of the continuous rotary extrusion process by Deform, Denise Willems, Research & Development Manager, Aurubis Belgium nv/sa

8. Understanding metal flow in the extrusion of asymmetric shapes, Wojciech Misiolek, Professor and Chair, Materials Science & Engineering & Director, Loewy Institute, Lehigh University

Lunch

Session 4 – Flat Products

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

Refreshment Break

12. Fine Grained Phosphor Bronzes, Michael Köhler, Director of Technology, Diehl Metal Applications, Sundwiger Messingwerke GmbH & Co. KG
13. Modernization of a high precision reversing cold rolling mill, Jürgen Jestrabek, Vice President, Aurubis Stolberg GmbH & Co. KG
14. Modern production route for the efficient manufacture of copper flat bars and special shapes by using the UPCAST®-technology and new developments in the CRE technology, Hendrik Busch, Manager Technology & Process Development, MKM Mansfelder Kupfer und Messing GmbH

Technical Seminar Adjourns

Tuesday 6 March

Session 5 – Measurement & Inspection

15. Non-contact Measurement for the Copper Industry, Martin Dumberger, Managing Director, Micro-Epsilon America
16. New Situation in Cold Mills: Since VTLG thickness measurement with laser is possible, Elke Roller, Sales Manager, Friedrich Vollmer Feinmessgeraetebau GmbH

17. Surface Inspection for Copper and Copper Alloys – Realizing the full potential for quality improvement process, Marius Westermann, Business Manager, Ametek Surface Vision
18. Detection of surface defects and inclusions in continuous cast wire rod with eddy currents, Rainer Sailer, Head of Sales, 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, General Manager, Properzi International, Inc.
20. Cold deformation process of the metal slide fastener, Takamitsu Takagi, Senior Engineer, YKK Corporation
21. Best practice in copper tube and wire rod manufacturing, Markus Ecker, Product Manager, SMS Group

Lunch

Session 6 – Wire Rod, Wire & Tube – Continued

22. Ultra-Conductive Copper (UCC) Technology for Wire and Cable Applications, co-presented by Frank Kraft, Professor, and Keerti Kappagantula, Assistant Professor, 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, Director, Technology & Strategy, 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, Product Manager, Danieli & C. Officine Meccaniche S.p.A.
25. The Development of Inner Grooved Tubing in Hailiang, Mr. Dong Zhiqiang, Vice General Manager, Technical, Zhejiang Hailiang Co., Ltd.
26. Trend of Copper Tube Development in Japan and their Manufacturing Technology, Hirokazu Tamagawa, Supervisor, UACJ Copper Tube Corporation

Chair's closing remarks followed by refreshments

19 February 2018