

**INTERNATIONAL WROUGHT COPPER COUNCIL**

**IWCC TECHNICAL SEMINAR
DOWNSTREAM PROCESSES
SHANGHAI & TONGLING
3-8 MARCH 2019
PAPERS LIST**

The order and titles of the papers in this list are correct at the date of being published and are subject to change.

Monday 4 March**Session 1: Introduction**

The copper industry in China

Speaker: Li Lan, BGRIMM Lilan Consulting, Beijing

Session 2: Thermal treatments

Fully automatic operating cranes for bell-type annealing plants

Speaker: Peter Wendt, Tenova LOI

HICON SABER® meets REVOLVER® - A fully automated bell annealing facility

Speaker: Florian Oberreiter, Ebner

Comparison between vertical and catenary continuous annealing lines

Speaker: Klaus Schmitz, Otto-Junker

Refreshment break

Design principles for continuous heat treatment plants for thin and thick copper alloy strip and examples of plants in industrial production

Speaker: Thomas Kramer, WSP

Continuous annealing and surface treatment of very thin copper alloy strips and foils

Speaker: Johannes Wissen, WSP

Thermal treatments (Title to be confirmed)

Speaker: Andrew Keep, Inductoheat (Australia)

Lunch

Session 3: Surface Treatments and Technologies

Influence of surface pre-treatment on corrosion resistance of copper alloy for heat exchangers

Speaker: Tanaka Noriyuki, Dai-Dan Co., Ltd

Surface treatment and improvements, including latest developments in surface grinding

Speaker: Norman Ruckert, Osborn

Tin Coatings on Copper and Copper Alloy Strip – Plating Options and Recent Improvements in Technology

Speaker: Dr. Ulrich Lorenz, Aurubis

Refreshment break

Latest developments in hot-dip tinning of copper alloy strips

Speaker: Jüegen Rosenfeld, Otto Junker

Effects of tin plating methods on the properties required for connector applications

Speaker: Yuta Sonoda, Dowa Metaltech Co., Ltd

Low Insertion force Reflow tin-plated copper alloy, "PIC plating"

Speaker: Kiyotaka Nakaya, Mitsubishi Materials Corporation

Tuesday 5 March

Session 4: Flatness improvement

New technologies for stretch bend levelling lines for thin materials of copper, stainless steel and special alloys

Speaker: Volker Lüdecke, Burghardt & Schmidt

Challenges in the precision foil world and how to push the boundaries of manufacturing

Speaker: Thomas Booz, Schlenk Metallfolien GmbH & Co. KG

Shape measurement and flatness control on thin and ultra-thin strips

Speaker: Elke Roller, Vollmer

Refreshment break

Session 5: Slitting and Logistics

Beyond one's own nose: Minimising cold deformation during the slitting process of aluminum

Speaker: Leander Zielenbach, Danieli Fröhling

Thin strip coiling systems, recoiling, slitting and how issues arise and can be countered

Speaker: Thomas Timmer, Achenbach

New slitting technologies and strip brake systems comparison between different systems and latest new features

Speaker: Volker Lüdecke, Burghardt & Schmidt

Lunch

Operator independent analysis of circular knives for cracks and wearing

Speaker: Patrick Telders, IMESS

Robot autonomous forklifts in warehouse automation
Speaker: Jeremy Seah, BALYO

Automation, Logistics Optimization and Safety for Material Handling and Storage
Areas
Speaker: Ed LaBruna, Janus Automation

Refreshment break

Session 6: Measurement, inspection & testing

Assessment of heat treated strips with eddy currents
Speaker: Rainer Sailer, Institut Dr. Forester

Multi-Measurement-System for slit copper strip
Speaker: Dr. Stefan Theobald, Wieland

Data Driven Quality Assurance Solution for Rolling Mills
Speaker: Helga Evers, QuinLogic

(Paper title to be confirmed)
Speaker: Hendrik Busch, Mansfelder Kupfer und Messing GmbH

Chair's closing remarks followed by refreshments

4 December 2018