

# Extrusion Workshop Program

Monday 26 May 2014 (8.30am – 5.00pm)

Session Topic	Content	Presenter
Introduction	Welcome to the workshop including the objective, introduction of the speakers.	Barbara Rinderer
Process basics	Introduction to the extrusion process, pressures, forces and safety, billet upset, metal flow and temperature, extrusion quality, dimensional control and recovery.	Chris Jowett
Billet and extrusion metallurgy	Covers the subject of billet composition effects and homogenisation, including recent developments in 6XXX alloys. Extrusion process metallurgy focuses on the metallurgical processes involved in preheating, extrusion, quenching and ageing of 6XXX alloys	Xinquan Zhang
<i>Morning Tea</i>		
Press equipment	<i>Press</i> - Introduces modern press line developments from billet loading through die preparation to press design.	Markus Dobler
	<i>Press handling systems</i> - Historic developments and solutions for handling extrusions out of the die through cutting to packing.	Ivan Grasis & Markus Dobler
	<i>Press tooling and thermal management</i> - Deals with the important aspect of thermal management including die heating and smart containers.	Paul Robbins
<i>Lunch</i>		
Die manufacture and handling	<i>Die Design and Manufacture</i> - Covering the manufacturing process from the original customers profile drawing, through die design, manufacture, die materials and heat treatment.	David Mrdjenovic
	<i>Die maintenance and performance</i> - Managing dies in the plant and die performance measurement.	Chris Jowett
Defects	Covers the main problems in producing high quality extrusions.	Chris Jowett
<i>Afternoon Tea</i>		
Extrusion performance	<i>Extrusion Process Optimisation</i> - Identifies the best practices for achieving maximum productivity.	Bill Dixon
	<i>Extrusion costs</i> - Procedure to optimize the key drivers for extrusion - conversion costs.	Markus Dobler
Conclusion	Questions and wrap-up.	Barbara Rinderer

