

# International Workshop

Every two years, licensees of XT's ISASMELT™ technology gather to conference latest developments associated with the installation and operation of technology. This year, participants travelled to north Queensland from many parts of Australia, as well as Belgium, China, Germany, India, Kazakhstan, Peru, USA and Zambia.

An important aspect of the conference was site visits and this year Glencore's Mount Isa Copper Smelter and Townsville Copper Refinery provided highlight tours as part of the conference program. The main workshop sessions were held on Magnetic Island; an excellent location for relaxed, open discussion and we took the opportunity to promote our wonderful climate and lifestyle.

Mount Isa is the birthplace of ISASMELT™; developed in conjunction with the CSIRO, and delivered improved smelting practices and efficiencies back in the eighties. The Townsville Refinery is where the Isa Process™ was developed in the mid seventies and is often referred to as the biggest single step forward in copper refining of the 20<sup>th</sup> century. Those of us who work with the technologies every day can easily forget the significance and impact these developments have had on the world industry. Both technologies have been successfully commercialised and sold around the world, underpinning the XT business for over ten years.

As the workshop group was predominantly a pyrometallurgical group, many have minimal exposure to refining operations so took advantage of the Refinery tour to inspect the latest and greatest when it comes to copper refining. Though the last plant upgrade was over 15 years ago, it still attains benchmark performance when compared to other world refineries. The material handling layout including cathode stripping machines and Kunz cranes can achieve some of the fastest harvesting cycles in the world.

The site tour also took in the XT cathode manufacturing facility including fabrication, sheet preparation (v-groove, laser etching and cutting machinery), copper plating area and also the robot stripping machines in the Research and Development area.

Hopefully delegates not only enjoyed a few days in one of the best locations on earth, but also gained valuable insights to take back to their respective plants and operations.

*John Doolan*

XT

## Improved traceability



Easy to see - the new display screen

**2**D Bar Code laser marking and scanning of XT cathode plates has now been in operation for several years, giving improved traceability of cathode plates during both the fabrication process and the plate lifecycle in the customers' plants.

The current world plate market is demanding an increase in use of Duplex cathode plates instead of the traditional plates which are 316L stainless steel.

With this comes the challenge of improving the readability of the 2D Bar Code marking on the Duplex steel. Existing Datalogic scanners were at times having difficulty reading the bar codes on the Duplex plates as their surface finish is slightly different.

Noel Kimlin undertook an investigation with scanner supplier POSMarket to identify a reader that would be better suited to the Duplex steel finish, providing faster and more reliable scanning.

Testing identified a Honeywell reader that would do the job for both Duplex and 316 cathode plates.

Replacement scanners were purchased, with both the scanning system software and hardware being modified to suit the new scanners.

It was also identified that the addition of a large screen in the packing shed, to display the scanned information, would greatly assist with packaging efficiencies. This would save time for the packing personnel as the scanned plate ID can be clearly seen from any of the six packing tables without walking to the computer screen to verify information during the packing process.

Further enhancements were also made to the bar code laser etching system by Planning and Projects Officer, Blair Warry. Blair's persistence with testing different laser etching intensities and shadows resulted in a much improved, more easily readable bar code on the cathode plates.

Positive feedback on the 2D Bar Code system upgrades has been received from packaging shop supervisors.

Leading Hands Gavin Griffey and Ed Rowe and Shift Supervisor John Thompson all commented that the system upgrades have reduced the amount of rework required due to scanning difficulties previously experienced, hence improving throughput in the shop.

Thanks to all involved with the upgrades - a job well done.



Delegates to the 2014 conference