

<b>Meeting</b>	<a href="#">2014 TMS Annual Meeting &amp; Exhibition</a>
<b>Symposium</b>	<b>Aluminum Reduction Technology</b>
<b>Presentation Title</b>	On-line Monitoring of Anode Currents; Experience at Trimet
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<b>On-Site Speaker (Planned)</b>	Andreas Luetzerath

**Abstract:**

Since late 2011, individual anode currents of one Hall-Hérault pot at Trimet, Hamburg, have been monitored using a system that measures the currents by sensing the magnetic fields produced by the anode currents. The system reports all anode currents every second, as well as the pot voltage. Data are transmitted wirelessly from the pot to a receiving computer near the pot for processing and onward transmission to the Trimet network as well as to WIT in California. Interactive real-time plots of individual anode currents are available to engineers and others at both locations. The paper summarizes the difficulties overcome in the initial stages of the installation and displays representative plots of currents before and during anode effects, after anode changes, current interruptions etc. Some thoughts are provided on the value of making individual anode current measurements.