Accepted Manuscript

A review of developments in the electrodeposition of copper-tin (bronze) alloys

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 PII:
 S0257-8972(16)30557-6

 DOI:
 doi: 10.1016/j.surfcoat.2016.06.065

 Reference:
 SCT 21308

To appear in: Surface & Coatings Technology

Received date:9 October 2015Revised date:10 June 2016Accepted date:23 June 2016

SURFACE & COATINGS *TECHNOL*OGY

Please cite this article as: F.C. Walsh, C.T.J. Low, A review of developments in the electrodeposition of copper–tin (bronze) alloys, *Surface & Coatings Technology* (2016), doi: 10.1016/j.surfcoat.2016.06.065

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ACCEPTED MANUSCRIPT

A Revised Critical Review

10 June 2016

A review of developments in the electrodeposition of tin-copper alloys

Highlights

- Aqueous electrolytes for Cu-Sn alloy deposition are concisely reviewed.
- The importance of versatile methanesulfonic acid electrolytes is stressed.
- The effect of bath composition and operating conditions on deposit quality are illustrated.
- Deliberately non-uniform current distribution achieved in an RCE Hull cell.
- R & D trends include ionic liquid baths, non-ionic additives and combinatorial deposition.
- Sn-Cu alloy deposition has provided components for modern lithium batteries.



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