

# MILL OPERATORS CONFERENCE 2021 | CONTENTS

---

## Comminution

Coarse vertical stirred mill applications <i>G R Ballantyne, B Foggiatto, P Staples and G Lane</i>	2
Automated mill relining – current progress and future <i>D Brander, J Bohorquez, S Gwynn-Jones and M Turner</i>	10
Coarse particle retention testing on a ball mill at Lundin’s Eagle Mine Humboldt concentrator <i>R E McIvor, K M Bartholomew, O Arafat, S Daavettala and E Savola</i>	29
Continuous improvement at Edikan (with MillROC support) <i>O Oblokulov, S Green, D Van Der Spuy and M Becker</i>	38
Installation, commissioning, operation and performance review of TowerMill at OceanaGold Haile Gold Mine, South Carolina <i>S Palaniandy, D Carr, J Johns and N Williams</i>	55
The application of ultra-fine grinding for Sunrise Dam Gold Mine <i>A Paz, C Ypelaan, T Ryan and M McInnes</i>	72
The endemic issue of ball mill overload in SABC circuits <i>M S Powell, M Yahyaei, A N Mainza and L M Tavares</i>	89
Investigating the size segregation of stockpile at MMG’s Las Bambas and its impact on performance of SAG mills <i>M Yahyaei, Z Ye, M Hilden, E A Ruiz and Z Gavelan</i>	112

## Flotation

Commissioning of the coarse ore flotation circuit at Cadia Valley Operations – challenges and successes <i>E Jaques, L Vollert, B Akerstrom and B A Seaman</i>	124
Piloting study of the reflux flotation classifier (RFC) at a Queensland copper mine <i>H Law, L Christodoulou, B Dabrowski and A de Hesse</i>	139
Nui Phao Mine – a study on the effect of flotation mechanism wear on metallurgical performance <i>S Morgan, B Weekes, A Jakowetz, S Arnold, S Taylor, S Keokhounsy, J Lakanen and J Tiitinen</i>	152
Pressurised flotation for froth-free concentration <i>G Rowe, A Luke, C de Leon and G Dobby</i>	167
Analysis of the Mount Isa Copper concentrate preflotation circuit using advanced diagnostic techniques <i>K C Runge, S Brito e Abreu, C Evans and R O’Donnell</i>	178
Overcoming rougher residence time limitations in the rougher flotation bank at Red Chris Mine <i>D R Seaman, K Li, G Lamson, B A Seaman and M H Adams</i>	193

Improving Capricorn Copper concentrator process performance and the role of process mineralogy and surface chemistry <i>M Tayebi-Khorami, M Muller, M Zanin and T Do</i>	208
Improving plant performance at the Endeavor Mine using Pionera F-250 <i>C Vanegas, M Sithole and R A Lauten</i>	218
Advances in flotation froth pumping <i>P Woodall, D Smith and J Pease</i>	229
<b>Plant operations</b>	
Debottlenecking of the Ridgeway Concentrator at Newcrest's Cadia Operation <i>R Edmunds, M Wilkens, B Akerstrom and C Haines</i>	242
Proving best practice gravity gold circuit design <i>G Heard and L D'Uva</i>	258
Tales of tails – values from liabilities? <i>P D Munro, K E Barns and D W Bennett</i>	271
Fosterville Gold Mine – adapting to new challenges <i>A Nash, R Symes, D Buchanan, J Van Niekerk and C Van Buuren</i>	279
Newmont Boddington concentrate grade improvement project <i>P Petrucci, S Hart, C Williams and J Stewart</i>	292
Gruyere Gold Project Western Australia, part 1 – from design to commissioning <i>R Radford, I Lovatt, B Putland and M Becker</i>	302
Development and application of an innovative approach to the beneficiation of serpentine ores for the Bozymchak Concentrator <i>R Ventura and K Mangulov</i>	323
Recent improvements in ore sorting at the Renison Tin Concentrator – target 1 Mt/a <i>B Wraith, J Resta and J Welmans</i>	339
Operational improvements at FCF Minerals Runruno process plant <i>X Zheng, A Crawford and D Bowden</i>	352
<b>Process automation</b>	
Online gold analysis at Evolution Mining Mt Carlton <i>A Cervellin, J Robinson, A Sia, E Craig and L Killer</i>	378
Application of the pulp chemistry monitor at Prominent Hill <i>D Holden, C Greet, A L Randriamanjatoa and M Myllynen</i>	387
Metallurgical testing – the pain continues <i>A J H Newell, P D Munro and K Fiedler</i>	397
<b>Process modelling and improvement</b>	
Multi-component Mine-to-Mill optimisation applied to iron and gold ores <i>B Bonfils, W Valery, A Jankovic, K Duffy, E Tabosa and P Holtham</i>	445

Back to basics – a practical approach to troubleshooting plant grade/recovery issues in the Mt Isa Copper Concentrator <i>C Evans and R O'Donnell</i>	456
Predicting mill feed specific energy from Bond ball mill Work index tests at Olympic Dam <i>Y Li, V Liebezeit, K Ehrig, M Smith, B Pewkliang and E Macmillan</i>	468
Recovery opportunity models driving multi-disciplinary improvement <i>L Napier and M Livingstone</i>	480
Application of process data to identify process improvement opportunities – case study: Antofagasta Mineral S.A.'s Los Pelambres <i>M Yahyaei, D Silva, N Manzanares Morales, I Yutronic Nunez, N Aguila and J Ojeda</i>	490
Author index	499