

CSRP'08 conference

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Towards a Virtual Comminution Machine



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Focusing Questions



- Can we take the Processing Device

and the Ore Type

“inside” the computer ?????

Objectives



- Detailed optimisation of existing devices
- Accelerated development of New Ones
- Improved process understanding

Outcomes to Date



- Verification of detailed particle motion
- A good start on slurry motion in mill charge
- New ways to think about Machine Operation
- New ways to think about Ore Characterisation
- Quantitative ways to extract from simulated data

Lots of Movies!!!

Movies



- 1.8 X 0.6m Pilot SAG mill – Hardinge Mill
- SAG Mill Slurry Hold Up Std Flow Half Flow Twice Flow
- Stirred Mills Tower Mill SAM Mill
- The Loveday Mill 1.2m x 0.3m [Mill](#)
- Industrial Banana Screen Velocities By Sizes

Conclusion



We can now take a great deal of the
process into

a Virtual Comminution Machine

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