

Reprocessing tungsten tailings with Derrick® screens

- Increased recovery
- Consistent size distribution
- Trouble-free startup

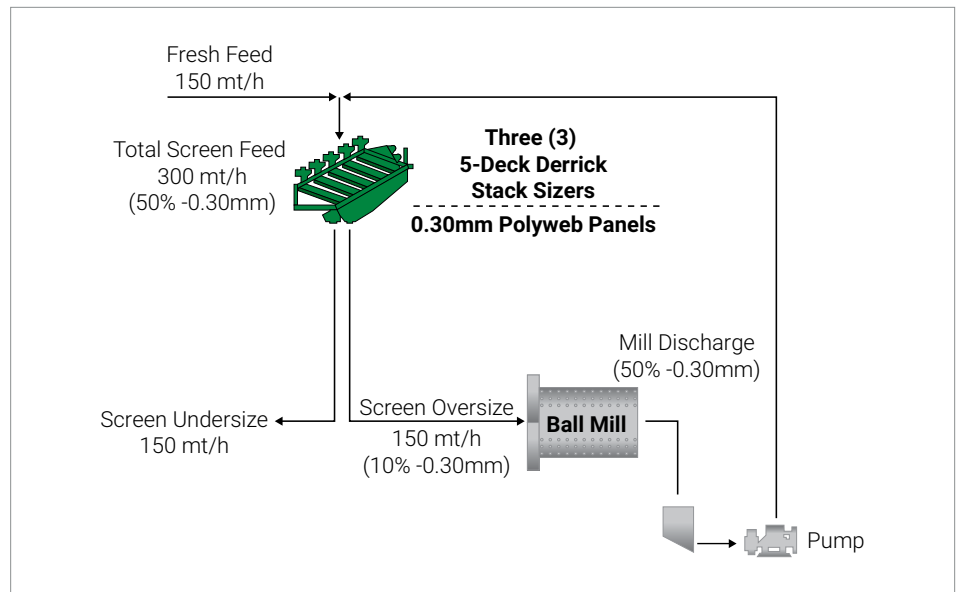
Background

A tungsten producer in Latin America was reprocessing old tailings using hydrocyclones to close the grinding circuit. The high specific gravity of shellite ore resulted in excessive variations in product flowing to downstream concentration circuits. When Derrick® learned of the process, information describing the benefits of screens for this application was forwarded to the producer.

Solution

Three Derrick 5-deck Stack Sizer® machines were installed to close the grinding circuit in a reverse configuration. Oversize material is discharged onto a conveyor belt that feeds the ball mill. Fresh feed received from an upstream process contains approximately 50% plus 0.30mm particles.

The Stack Sizers are fitted with 0.30mm opening Polyweb® urethane screen panels. The 150 mt/h product of the screen classification process flows to the downstream concentration circuits. Due to the high specific gravity of tungsten, good recovery of this material would be difficult to achieve using any method other than fine screening.



Conclusion

Startup of the Stack Sizers went smoothly, and the screens have provided consistent feed downstream without variations resulting from the high specific gravity of shellite.

For more information, please contact your local Derrick sales representative.

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