



Session: Processing
Wednesday, September 24
8 – 10a.m.
Room N257, Las Vegas Convention Center, Upper Concourse

Title: Design, Start-up and Operating Practices of the Minera San Cristobal SAG-Ball Grinding Circuit and Concentrator

Presenter: Anthony Filidore, FLSmidth Minerals and Dennis Bailey, Apex Silver

Abstract:

The San Cristobal Project is a grassroots mine located in southwestern Bolivia. The ore body contains silver, zinc, and lead with proven reserves of 450 million ounces, 8 billion pounds, and 3 billion pounds, respectively. Expansion potential is considered excellent for the ore body is open both at depth and laterally.

The design, procurement and construction of the mine was started in early 2005. Full production was achieved three years later in early 2008. At the peak, the site had nearly 5,000 construction personnel supporting the project. The project investment was over USD \$740 million which to date is the largest direct foreign investment in Bolivia mining history.

The conventional flowsheet consists of crushing, grinding, floatation recovery, and thickening. The crushing and grinding circuit consists of a gyratory crusher, SAG mill and two ball mills. This paper will highlight the design, start-up and commissioning of crushing and grinding circuit.