



PROBLEM SOLVED™ PAPER

SOLUTION: Belt Cleaners & Maintenance Services

INDUSTRY: Mining

LOCATION: Freeport Indonesia (PTFI)



Martin Engineering's cleaners must stand up under high capacity and large lumps and high tonnages in overflow applications at PTFI.

PROBLEM

Located in a remote, high-altitude Indonesia, Freeport Indonesia (PTFI) is a high volume operation producing gold and copper. To handle the vast quantities of ore, the mine uses large, fast, high capacity conveyors. Belts are typically 1800 to 2100 mm (72 or 84 inches) in width, and operate at 4 m/sec (~800 fpm). To simplify supplier arrangements, PTFI sought one belt cleaner supplier who could provide both installation and service.

SOLUTION

Martin Engineering specialists from the USA and Brazil spent a week at the Grasberg site, working with personnel from Indonesia partner/distributor P.T. Suprabakti Mandiri (Supra) to prepare a detailed site survey. Their report reviewed every belt cleaner in the operation, and discussed the benefit of outsourcing the cleaner maintenance. The Martin Engineering/Supra partnership was awarded a contract for cleaner supply and maintenance. Supra has now systemized the operations conveyors and made a number of improvements. Supra has a team of service technicians permanently based at the mill site. PTFI now leaves all the belt cleaners service to the Martin Engineering/Supra crew permanently based at the mill site. This crew is charged with all the belt cleaner service, including planning, adjustment and blade change-out.



Belt Cleaner technicians from P.T. Suprabakti Mandiri (Supra) install a Martin Engineering secondary cleaner on a conveyor at PTFI.

RESULTS

With the systemization of cleaners and the outsourcing of cleaner maintenance, PTFI has noted reduced levels of carryback. This provides the benefits of improved component life and reduced cleanup labor. Working together, Martin Engineering, Supra and PTFI anticipate continued improvement in the performance and life of belt cleaners and other conveyor components. The result is reduced fugitive material and improved conveying for the Grasberg operation.