



IMPALA PLATINUM HOLDINGS Ltd

Slag Granulation Cooling Tower

CLIENT

Impala Platinum Holdings Ltd

SITE

Impala Platinum Mine
Rustenburg, South Africa

SCOPE

Concrete Waterproofing, Rejuvenation
and Crack Repair

PRODUCTS / SYSTEMS USED

Krystol Crack Repair System, Krystol Plug,
Krystol T1, Krystol T2, Krystol Bari-Cote



Background

The Impala Platinum slag granulation cooling tower in Rustenburg had several flaws that were causing cracks and severe water leakage. Because of the nature of this process, the reservoir could not be emptied for this repair process as not only would it stagnate their smelting process but it would incur enormous labour and operational costs. Therefore, repairs would have to be to the negative side.

Impala had numerous contractors come and do a test panel on the negative side of the structure to see if their solution would work for this extremely large 6m (20 ft) deep reservoir structure.

Kryton was the only successful product on these test panels, as such, Sanika Waterproofing were awarded the contract to repair and waterproof this structure using Kryton's Crack Repair System.



Solution

Sanika had to remove the unsuccessful membranes and other products from the structure to prepare it for the crack repair and waterproofing process. After preparing the surface Sanika had to act quickly with Krystol Plug as the water penetrating through the cracks was at a temp of over 80 C° (176 F°). After the Krystol Plug successfully stopped the flow of water Sanika employed the rest of the Krystol Crack Repair System followed by a coat of Krystol T1 & T2 to completely waterproof the reservoir.

Impala was pleased with the work and had this to say; "Sanika performed the work in an exemplary fashion, with due respect to all safety, environmental and quality aspects. The work was executed within budget and on time with a very high standard of quality."

Subsequent inspections were conducted by an independent consulting engineer appointed by Impala. The engineers determined that the Kryton solution is long term and of superior quality.

Successfully completed project.

