

Multisite grade control

Westgold installs Cube's GCX system across their operations.

Westgold Resources Limited is a mid-tier group exploring and producing gold across four processing centres in Western Australia, currently producing at an annualised run-rate of approximately 250,000 ounces of gold.

"Geologists at all levels learn how to use the system really easily, it's not a black box.

Anyone can understand the inputs and the system processes quickly. This creates the opportunity to concentrate on the real job of understanding the geology rather than grappling with the computer."

Sarah BowmanGroup Manager – Resource
Estimation

Challenge:

The challenge for Westgold was to provide a standard operating procedure for grade control, across a number of sites — both open cut and underground. The company required consistent processes and procedures, whilst maintaining the flexibility to manage any site-specific requirements.

The company wished to streamline processes so that the geology team at each site could focus on being geologists rather than becoming computer experts – that is, they could spend minimal time in the office and more time understanding the geology in the mine. It was also important for the complete process to be auditable and for senior staff to be able to review and adjust items such as estimation parameters as required.



Solution:

After reviewing a number of solutions available on the market, Westgold engaged Cube Consulting to customise and install the GCX product into the Western Australian operations. GCX sits within the familiar Surpac environment and enables the user to follow a step-by-step menu throughout the grade control process.

The system has been installed across the all the operations in both the open cut and underground mines, including; Higginsville, Cue, Meekatharra and Fortnum. As the GCX System is based on a template model, additional sites can be added to the system quickly and efficiently, by Westgold personnel.

If one of the mines suggests an improvement, then this change can be applied across the existing installations. An example of this was a dilution function for digging and blasting in the open pit environment. This function has now been rolled out to all operations for the benefit of the mine geology teams. This creates a continuous improvement environment in grade control which was beneficial to the company. There are plans to incorporate other estimation routines into the Westgold template in the near future.

As a result of the template set-up, when geologists move from site to site, they are more productive immediately, even when moving from open cut to underground.

The GCX system is fully auditable so Senior Geologists can be confident that an estimation run was completed using appropriate parameters. Any changes that are made with parameters are tracked and there are no code changes required, with the parameters kept in easy-to-read external worksheets.



Benefits:

GCX is customisable for new sites but maintains the same framework even when switching from open cut to underground. All geologists across the group are working in a single, familiar environment.

The system is easy to use and processes quickly and efficiently.

Cube is able to adapt the system without fuss to meet the changing needs of Westgold.

"The team at Cube are approachable, friendly and hard working. They are also good communicators and very transparent. If we need changes, they will let us know how long it will take and then they deliver."

Sarah Bowman

Group Manager – Resource Estimation