



## Alumina Refinery Uses Emerald KVM over IP to Control Its New Automation System

- **Industry:** Industrial and Manufacturing
- **Client:** Alumina Refinery
- **Region:** Brazil
- **Solution:** KVM over IP
- **Products:** Emerald® KVM over IP

### THE CHALLENGE

One of the largest alumina refineries in Brazil needed to update its automation system with new servers. When planning this upgrade, the IT staff at the refinery realized that the new servers they wanted to install had a DVI video interface and their existing KVM Extender solution had a VGA video interface, making them incompatible. This video incompatibility was a major issue because control room operators were supposed to use the KVM extenders to access the new servers located in an equipment room 50 meters away.

To ensure operators could access all the servers they need to get their jobs done from their control room workstations, the refinery needed an advanced and reliable KVM solution that supported Full HD DVI video and signal extension beyond 50 meters. The customer also wanted the solution from a trusted vendor since its control room is critical to all of its operations. The customer reached out to Black Box for help because we installed its current KVM extension solution. On top of that, the customer knew we were a reputable brand with exceptional technical support that helps before, during, and after installation.

### THE SOLUTION

Black Box recommended an Emerald SE KVM extension solution because the extenders support Full HD DVI video and can extend signals up to 100 meters. Additionally, Emerald's reliable performance and flexibility would give the customer exceptional KVM functionality so operators could get their jobs done effectively from the control room.

Emerald Extenders were also chosen because the point-to-point extension can be upgraded to an advanced matrix switching solution by adding an IP switch and the [Boxilla® KVM Manager](#).

### RESULTS

The refinery and Black Box agreed on a control room extension solution based on the Emerald SE KVM system. This point-to-point Emerald system allows operators to access the new servers in the equipment room from their workstations in the control room, streamlining workflows and enhancing operations.

In addition, the Full HD DVI video gives operators a clear view of the different refinery processes they must carefully monitor. If the customer needs to expand its operation in the future, it plans to upgrade to an Emerald matrix switching solution with Boxilla.