



FREQUENTLY ASKED QUESTIONS

- Q. What is the resolution of the belt images on the monitor?**
A. For a typical 1.5m wide belt travelling at 4.0m/sec the resolution (in both axes) is about 0.75mm/pixel
- Q. There are 10 conveyors in our mine. How many cameras, lights, imaging servers, and surface workstations should be used to provide double-sided inspection for all of them?**
A. 20 Cameras, 20 Lights, 10 Imaging servers, 1 Workstation
- Q. Is the system specific for a particular type of mine?**
A. No it is not. The only prerequisite is the presence of the communication infrastructure. Every imaging server requires a connection to the surface workstation via at least 100Mb link
- Q. What happens if the light and/or camera optics get dirty?**
A. If the amount of dirt is significant the quality of images can deteriorate. The customer is responsible for providing a cleaning regime. Options range from regular manual cleaning to air curtain protection
- Q. Does the system produce any printed inspection report?**
A. No it does not, as reports normally have to be tailored to customer needs. However, a reporting feature can be implemented if requested
- Q. How long does it take to bring up a view of an event image or any particular belt location?**
A. Once the image has been taken, after one full revolution of the belt, the images can be viewed instantly
- Q. Are there any limitations on the belt length, width, or speed?**
A. There are no practical limitations
- Q. Does the system support colour images?**
A. No it doesn't
- Q. Can I browse through the belt image from the start to the end?**
A. Yes, you can, but it's not particularly practical. Say, if you spend 1 second to scrutinize a 1-meter long belt fragment (which is roughly what fits on the screen), you would need almost 3 hours to view a 10-kilometre belt. This is the benefit of the automatic inspection function
- Q. Is this system stationary or portable? Where and how is it mounted on conveyors?**
A. It is a fixed system. The camera can be installed anywhere along the conveyor structure though there must be a 2m distance between the camera and the belt. In addition, the presence of communication infrastructure (e.g. LAN) is required.
- Q. Do environmental conditions underground affect the inspection results?**
A. Water on the belt can result in an increased number of false positives, but it does not represent a major problem as the final analysis is made by the operator.
- Q. What kind of failures (size, intensity, area, etc.) could be detected?**
A. The detection algorithm is quite sophisticated. It picks up any significant abnormalities on the belt surface.
- Q. Do you have to position the camera in the flat area or between idlers?**
A. Either. The system can look at flat or curved surfaces. The most convenient place is the pulley surface, right after the scrapers as there is normally enough room there to install the system hardware.