

## WiseImage Pro Streamlines Polish Mining



### The Customer

The company BOT Lignite Mine that is headquartered in Rogowcu, Poland has one of the biggest brown coal mines in the country. The firm was established as a state mining enterprise at Bełchatów in 1975. In 1999 the BOT Lignite Mine went public. Currently it has about 9,000 employees.



### The Problem

Before the introduction of electronic archiving the existing engineering documents were paper based only, thus occupying large spaces. After the introduction of electronic archiving the documents are scan based and handled using computer and CAD-oriented processing.

Maintenance projects should be done so that the continuous extraction of coal in the mine is not disturbed. The mine operation must not be disrupted even if there is an equipment breakdown.

For example, if an excavator stops working this equipment needs to be repaired as quickly as possible as each hour of dead (down) time in the mine causes huge financial losses. Technical documentation is essential to handle breakdowns and accidents. The engineers in the design department are responsible for providing in a very short time the current technical documentation necessary for the repair effort on the equipment. As the majority of documents are on paper and some of the older documents are in bad condition (dirty, warped, or with holes), the documents must first be repaired or enhanced. Drawing modifications generally used to be done by photocopying the parts to be changed, making changes, and then pasting the changed fragments back into the document before sending the change order to the workshop. This copy-and-paste approach, however, is too slow thus creating long down times. This led the customer to look for a way to computerize the existing documentation to increase work order changes. After a suitable large-format scanner was found capable of transforming paper documents into electronic form, the customer began looking for a quick way to modify existing documentation. The tool that met the expectations of the design department in BOT Lignite Mine is Consistent Software's WiseImage Pro.

### The Consistent Software Solution

The program has already shown itself to be useful for the necessary corrections to improve the readability of documentation. Such corrections often include enhancements to remove unwanted patches (dirt), smoothing of lines, adjustments of contrast and deskewing of drawings. After quality correction, the planners using WiseImage Pro can edit the documents. The technology typically used is intelligent raster line editing, insertion of dimensions, moving objects in a drawing, and creation of new objects. Editing carried out at



the raster level shortens the time necessary to edit documents considerably by avoiding the time-consuming recreation of drawings. Also indispensable in the client's use of WiseImage Pro are the vector functions that are especially useful on very old drawings that require substantial changes. So after the document cleanup and editing the worker has a correct document and can carry out the needed work in the workshop or in the field.

### **Conclusion**

After the introduction of WiseImage Pro the time to make design documentation changes has been greatly reduced. Before the use of WiseImage Pro an average of 1.5 days were required for these changes. With WiseImage Pro the time has been reduced to half an hour. *One day of down time in the operations pays for many copies of WiseImage Pro! ROI is instantaneous (less than one day) on the first breakdown in the mining.* In addition to eliminating the old time-consuming process, the expensive and restrictive reliance on photocopying and the insertion of many copied fragments into drawings has ended. This means that the use of WiseImage Pro resulted in saving employees' time and the company paper. This is the strongest confirmation of a turnaround increase using document management and electronic paper editing. Further, additional use for WiseImage Pro is now planned in the design department.

For this purposes further copies of WiseImage Pro have been purchased for the energy management department of the firm. They have now a total of 11 WiseImage Pro licenses.



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