

HOW CORONADO IMPROVED EFFICIENCY AND COMPLIANCE BY DIGITISING WITH REDEYE

Industry

Mining

"The main advantage we see from RedEye is having a repository of drawings. We use a lot of contractors - a lot of consultant engineers. It's so easy to be able to say to them 'Here's access to our drawing system. Here's where you can find the information about our equipment that we're asking you to do a project on', without having to worry about which folder in the network the information is on. That's been a big advantage for us."

- Jordan Byles, Electrical Engineer

81%
DRAWINGS DIGITIZED

100%
DRAWINGS UP-TO-DATE

32KNEW SEARCH METADATA



THE COMPANY

The Curragh coal mine is located north of Blackwater in Central Queensland, Australia. With coal reserves amounting to 88 million tonnes of coking coal, it's one of the largest coal reserves in Asia and the world. In 2017, Coronado Coal Group purchased Curragh Coal Mine from Wesfarmers Resources.

Curragh produces a variety of high quality, low-ash metallurgical coal products which it exports globally to leading steelmakers. Thermal coal is also produced, and primarily sold domestically under a long-term contract to Stanwell, a Queensland government owned entity and the operator of the Stanwell Power Station.

One of the key challenges Coronado faced was a lack of visibility of the engineering drawings of its critical assets. Key stakeholders lacked confidence in the accuracy of the drawings due to their inaccuracies, which created safety risks, potential compliance issues and reduced productivity.

THE CHALLENGE

In 2014, Coronado's then General Manager noted that it was his statutory responsibility to all personnel onsite to ensure engineering drawings were controlled, marked up and updated.

At the time, the organization's engineering drawings were stored on staff hard drives, system drives and in other locations. Access to key drawings and documents from outside the central office was minimal, presenting issues for on-site staff.

Duplicate drawings were problematic for any stakeholders who worked on or around key assets. There was an overall lack of confidence in the accuracy of the engineering drawings because no one could be sure if they were using the most up-to-date version.

Drafting costs were high as a result of documents either needing to be recreated from scratch or reworked, and investments in audits were not capitalized on, because they were not readily available when needed.

The miner sought a solution that would centralize its engineering drawings into a single platform and facilitate new business processes which ensured everyone had access to the most up-to-date information.

THE SOLUTION

Coronado chose to work with Accruent, and remains one of the longest standing customers of the RedEye product.

The initial implementation project digitized and centralized Coronado's drawings into RedEye, creating a single source of truth which all key stakeholders could access. Around 10% of the drawings in that process were identified as being out of date.

Since the initial implementation, and as business and requirements have evolved, Coronado and Accruent have done ongoing work on Curragh's asset related drawings and data to ensure they're as available, usable and valuable as possible.



"We're all saving time in each step of our drawing review process. The workflows in RedEye help us to be more efficient."

- Jordan Byles, Electrical Engineer

THE BENEFITS

One of the immediate benefits RedEye delivered was the ease and speed of finding engineering drawings. Search time reduced from hours to just a couple of searches, improving the efficiency of both Coronado's internal teams and contractors.

On-site safety at the Curragh mine was also improved, as a result of engineering and maintenance crews having access to the latest version of drawings. Staff in the central office could view the same versions of drawings and documents as crews out in substations and be confident they were all seeing the same information.

Critically, by removing siloed information and implementing workflows within RedEye which ensured engineering drawings were controlled, marked up and updated, Coronado was able to maintain compliance with the Coal Mining Safety and Health Act 1999 and other statutory obligations.

Ongoing projects to make key data even more accessible

One early post-implementation initiative saw Coronado partner with Accruent and an engineering consultancy firm, on a multi-year project to update and revise every single electrical drawing onsite. This covered over twenty substations and Motor Control Centres (MCC). This project was only possible due to RedEye's cloud-based functionality, QR codes, and workflows.

During the project, some 32,000 new searchable metadata fields were added to Coronado's drawings. Accruent's specialists extracted key data from each drawing and applied it to the corresponding digital record. The more detailed the metadata on a drawing, the easier and faster it is for users to find.

Accruent's data migration processes also allow multiple versions of the same drawings and documents to be folded into one artifact. For each of Coronado's drawing numbers, between three and five drawings were folded in. This now makes it possible for users to see the latest version of a file, as well as its revision history. It also provides Coronado with an auditable log of changes, and far better visibility of the history of their assets.

80% of Coronado's physical drawings were able to be linked to their corresponding digital files, which has since reduced re-drafting expenses, as well as the time spent going back and forth between drafting services to have documents updated. Coronado now has just over 73,000 artifacts in RedEye.



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- Jordan Byles, Electrical Engineer

Using RedEye's API to provide deeper insights

Another project initiated by one of Coronado's electrical engineers, Jordan Byles, involved using RedEye's Application Programming Interface (API) to extract detailed information about the status of red line markups, reviews and approvals that were flowing through the system.

While RedEye provides monthly insights about activity within the solution, Jordan wanted more detailed metrics to further understand what was going on, operationally. He was able to use the API to extract relevant data and import it into business intelligence tool, Power BI, to provide valuable insights to his department.

Coronado and Accruent continue to work together to explore the possibilities of extracting even more granular insights from the solution, and refining business workflows to ensure that management of key asset drawings and data can help everyone to make better informed decisions.

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CONTACT FOR A DEMO



Accruent, LLC

www.accruent.com

