

CBM – Portable Continuous X-Ray

Maximising the return on your assets

BUSINESS CHALLENGE

Obtaining the maximum value for every maintenance dollar you spend has always been the greatest challenge for companies needing to maintain physical assets.

The primary purpose of the Portable Continuous X-ray system (cbmPCX) is to detect any anomalies within a conveyor belt by producing a highly detailed and holistic view of the internals in any conveyor belt. With the portability of the system and the flexibility to setup the X-ray apparatus on any conveyor belt on any site means there is no limitations to the number of conveyors being scanned on a site and no permanent fixture requiring maintenance.

SOLUTION

With shrinking maintenance windows and limited downtime access, CBM has developed a system to minimize interruption while scanning all forms of conveyor belting. X-ray imaging the internal structure of a conveyor belt gives the operators the ability to quantify cord damage, perform quality assurance inspections of the internal make up after splices have been installed and view a complete revolution of a belts internal structure.

When the system is operating, it locates areas of cord breakage, partially damaged, corroded cords and integrity of splices. This information is available almost instantly with minimal downtime, enabling full production to continue with limited interruption.

CBM's trained technicians analyse and generate comprehensive reports providing the images of the defects captured so clients can see exactly what we are seeing and can make quick and accurate decisions based on the data.

Setup of the system can be achieved in a short amount of time, allowing operations to return to normal while parameters are set for optimal performance. A flat section of belt and sufficient space to place the cbmPCX equipment is all that is required.

WHY CHOOSE CBM

Recognition

Founded in 1980, CBM is a worldwide leader in Conveyor Belt Monitoring. CBM has a long tradition of R&D and bringing to market beneficial technologies.

Knowledge & Expertise

Technical knowledge and constant training of our staff and distributors, ability to provide timely targeted information, are strengths appreciated by our clients.

Independence

CBM is completely independent of the conveyor belt manufacturers and our systems are designed to work on all manufactured conveyor belts, of any speed and all material types.

This ensures safety and security for the companies that we service.

RELATED SERVICES

CBM - Steel Cord Scanning

CBM - Static X-Ray

CBM - Beltspy Vision Monitoring

CBM - Reporting

CBM – Remote Monitoring

CBM – Conveyor System Inspection

CBM – Cover Thickness Testing

CASE STUDY

A client with a CBM permanently installed X-Ray system required their belt to have internal examinations to determine if the irregular wear on their conveyor belt had been a cause of cord displacement.

Performing the X-Ray scans on a regular basis ensured the integrity of the internal structure was sufficient to continue operations, decreasing the concern of catastrophic failure from excessive wear, particularly within the splices.

The life of the belt was extended with continual monitoring, assisting in achieving an extended end of life for that particular belt.

After installation of new belting, X-ray imaging of the entire length of belt was performed to gather a base line for future examinations and was also used for quality assurance for the splicing.

The images revealed that during the splicing process a number of steel cords had returned to a natural position, overlapping the adjacent steel cords. If these overlapped steel cords in the splices were left unnoticed, premature wear and cord exposure within the splices would have been imminent.

Further analysis of the complete belt image captured also revealed the cord plane to be misaligned. This can assist the client with determining premature wear as well as causes of mis tracking conveyor belt.

OUR APPROACH

Clear, concise, easy to read and above all, rapid indications regarding conveyor belt safety and durability.

Provision of the most comprehensive condition monitoring of conveyor belts and systems in the world today.

Non Contact / High Quality / Portability / Holistic Approach / Operating In All Conditions

FAQ

Do I need to have all my Belts Scanned?

Not at all, we only implement in a way that will benefit your companies' requirements

What are the key benefits?

- Complete imaging of internal structure in a conveyor belt
- Effective maintenance & budgetary planning

Who owns the Data?

You do – we keep a back up of that data and it forms part of the database for our trained technicians to analyse and make comparative recommendations. You receive regular reports and recommendations at a frequency that best suits your site operations.

Do I have to shut down the belt for the scan?

A short shutdown is required when installing and removing the equipment. The X-ray imaging occurs while the belt is operating and available for production.

