

MINING *People*



**From Past to Present
Westmoreland's Jewett Mine:
A Second Purpose**



Martin Engineering Highlights Safe Conveyor Equipment Design

Conveyors are among the most dynamic and potentially dangerous equipment in bulk handling. The operational basics of belt conveyor systems regarding the hardware installed and the performance required from the components are too often a mystery to many employees. This knowledge gap also creates a safety gap. Since personnel are the single most important resource of any industrial operation, to meet workplace safety standards, the consensus among safety professionals is to design the hazard out of the component or system, which historically yields more cost-effective and durable results.

Designs should be forward-thinking. This means exceeding compliance standards and enhancing operators' ability to incorporate future upgrades cost-effectively by taking a modular approach. This method alleviates several workplace hazards, minimizes cleanup and maintenance, reduces unscheduled downtime and extends the life of the belt and the system. Before the drafting phase, designers should:

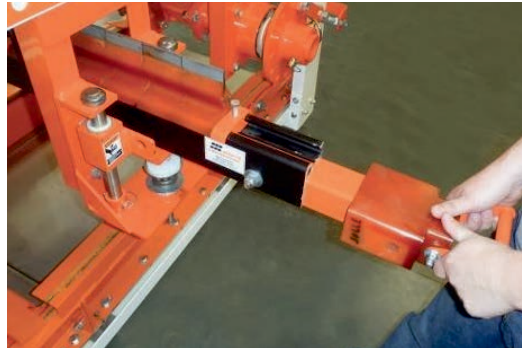
- 1) establish the goals of reducing injuries and exposure to hazards (dust, spillage, etc.);
- 2) increase conveyor uptime and productivity, and;
- 3) seek more effective approaches to ongoing operating and maintenance challenges.



*All photos copyright Martin Engineering 2023
Martin® Guarding is designed to protect workers from reach-in injuries in unauthorized areas.*

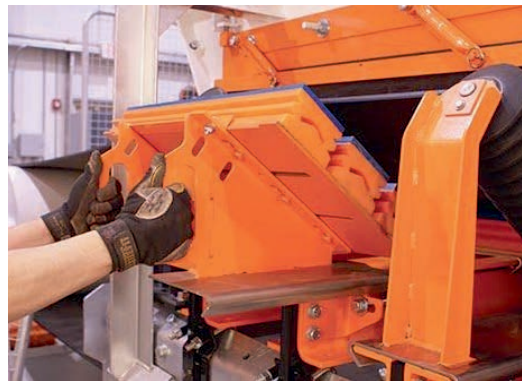
Combining Safety & Productivity

To meet the demands for greater safety and improved production, some manufacturers have introduced equipment designs that are not only engineered for safer operation and servicing but also reduced maintenance time. An example is the Martin® QC1™ Cleaner HD/XHD STS (Safe-to-Service) primary cleaner and the Martin SQC2S™ STS secondary cleaner, designed so the blade cartridge can be pulled away from the belt for safe access and replacement by a single worker.



This Martin SQC2S STS secondary cleaner allows for safe external maintenance by a single worker.

The same slide-out technology has been applied to impact cradle designs. Systems like the Martin Slider Cradle are engineered so operators can work on the equipment safely, without breaking the plane of motion. External servicing reduces confined space entry and eliminates reach-in maintenance while facilitating faster replacement. The result is greater safety and efficiency, with less downtime.



The track-mounted Martin® Slider Cradle can be serviced quickly and safely, with no reach-in maintenance.

An example of a safer belt cleaner is the CleanScrape®, which received the Australian Bulk Handling Award in the «Innovative Technology» category for its design and potential benefits. The revolutionary patented design reduces the need for bulky urethane blades altogether. It delivers extended service life, low belt wear, and significantly reduced maintenance, which improves safety and lowers the cost of ownership.

Unlike conventional belt cleaners that are mounted at an angle to the belt, the CleanScrape is installed diagonally across the discharge pulley, forming a three-dimensional curve beneath the discharge area that conforms to the pulley's shape. The novel approach has been so effective that in many operations, previously crucial secondary belt cleaners have become unnecessary, saving further on belt cleaning costs and service time.



The CleanScrape® forms a 3-D curve beneath the discharge that conforms to the pulley's shape.

Low-Bid Process and Life Cycle Cost

Although the policy is generally not explicitly stated by companies, the “Low-Bid Process” is usually an implied rule that is baked into a company’s culture. It encourages bidders to follow a belt conveyor design methodology that gets the maximum load on the conveyor belt with the minimum compliance to regulations using the lowest price materials, components and manufacturing processes available.

When companies buy on price, the benefits are often short-lived, and costs increase over time, eventually resulting in losses. In contrast, when purchases are made based on the lowest long-term cost (life-cycle cost), benefits usually continue to accrue and costs are lower, resulting in a net savings over time.

Engineering safer conveyors is a long-term strategy. Although design absorbs less than 10 percent of the total budget of a project, Engineering / Procurement / Construction Management (EPCM) services can be as much as 15 percent of the installed cost of a major project, additional upfront engineering and applying a life cycle-cost methodology to the selection and purchase of conveyor components proves beneficial.

Safety-minded design at the planning stage reduces injuries by engineering hazards out of the system. The system will likely meet or exceed the demands of modern production and safety regulations, with a longer operational life, fewer stoppages and a lower cost of operation.

Visit www.martin-eng.com, or call (800) 544-2947 / (309) 852-2384.

PRODUCT LITERATURE

Metallurgical Coal Global Market Report 2023 -The global metallurgical coal market is expected to grow from \$14.15 billion in 2022 to \$14.70 billion in 2023 at a compound annual growth rate (CAGR) of 3.9%. Major players in the metallurgical coal market are Coal India Ltd., Anglo American Plc, Arch Coal Inc., Bharat Coking Coal Ltd., BHP Group plc, China Coal Energy Co. Ltd., China Shenhua Energy Co. Ltd. Read the full report: https://www.reportlinker.com/p06479947/?utm_source=GNW

U.S. Energy Atlas data identify and provide information on surface and underground coal mines in the United States in 2021. The attribute data for this point dataset come from the U.S. Energy Information Administration, Form EIA-7A, Coal Production and Preparation Report, and the U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, Quarterly Mine Employment and Coal Production Report. It includes operating surface and underground coal mines in the United States. Additional coal mine data can be found on EIA Coal Data Browser.

The Global Market for Mining Automation is undergoing significant transformations due to various factors such as novel innovations, the emergence of new players, pricing fluctuations, and supply chain shortages caused by market disruptions from the COVID-19 pandemic and the Russia-Ukraine War. This report provides a thorough analysis of the global Mining Automation market, taking into account crucial factors and assessing both the current state and future prospects. The report examines the essential drivers influencing the market, focusing on the demand outlook, supply potential, and margins in different countries and regions. It also discusses the potential consequences of a more stringent regulatory framework that affects all stakeholders in the value chain. (EnergyPortal.eu)

The Global Coking Coal and Thermal Coal Market is anticipated to rise at a considerable rate during the forecast period, between 2023 and 2030. The market in North America is expected to grow considerably during the forecast period. The report focuses on the Coking Coal and Thermal Coal market size, segment size (mainly covering product type, application, and geography), competitor landscape, recent status, and development trends. Furthermore, the report provides detailed cost analysis, supply chain.

The Global Coal Mining Market study with 132+ market data tables, pie charts & figures is now released by HTF MI. The research assessment of the Market is designed to analyze futuristic trends, growth factors, industry opinions, and industry-validated market facts to forecast till 2029. Coal Mining Market is likely to experience a tremendous growth in near future. Download sample report PDF of *Global Coal Mining Market* @ <https://www.htfmarketintelligence.com/sample-report/global-coal-mining-market>.

Haver & Boecker Niagara announces two new educational guides. The first guide, titled “Finding the Sweet Spot, Your Guide to Optimal Screening,” helps customers better understand the relationship between opening, open area and wear life and how to optimize their vibrating screens for maximum throughput and product quality. The second guide, “Boost Productivity with Double Eccentric Technology,” offers customers four methods to maximize screening action, reduce vibration into their structures, improve stratification and prevent equipment damage. Visit www.haverprocheck.com.



Mined Anthracite Coal Market Outlook 2023: Unveiling growth prospects and industry trends. A 2023 insightful analysis of the mined anthracite coal market reveals a myriad of opportunities and challenges that are poised to shape the industry’s trajectory. The mined anthracite coal market is projected to witness substantial growth in regions like Asia-Pacific, where rapid industrialization and urbanization are propelling the need for reliable energy resources. Browse Mined Anthracite Coal Market Analysis with Table of Content - <https://univdatos.com/report/mined-anthracite-coal-market/>