

# FORGING THE FUTURE OF MINING

## NORTH AMERICA'S STRONGEST CONVEYOR BELT POWERS WARRIOR MET'S BLUE CREEK MINE



Sempertrans was selected to provide a groundbreaking conveyor belt solution for **Warrior Met's Blue Creek Mining Project** in Alabama, USA. This state-of-the-art longwall mine is expected to be among the lowest cost producers in the world, with a highly efficient facility and an anticipated annual production capacity of approximately 6.0 million short tons of premium hard coking coal. The project involved the provision of the strongest conveyor belt in North America, and significantly, the strongest conveyor belt ever produced by Sempertrans to date, addressing critical high-tension requirements within this high-volume slope belt application.

### WHO IS WARRIOR MET COAL?

Warrior is a U.S.-based, environmentally and socially minded supplier to the global steel industry. It is dedicated entirely to mining non-thermal metallurgical (met) steelmaking coal used as a critical component of steel production by metal manufacturers in Europe, South America and Asia. Warrior is a large-scale, low-cost producer and

exporter of premium quality met coal, also known as hard-coking coal (HCC), operating highly efficient longwall operations in its underground mines based in Alabama. The HCC that Warrior produces from the Blue Creek coal seam contains very low sulfur and has strong coking properties. The premium nature of Warrior's HCC makes it ideally suited as a base feed coal for steel makers.

Client	Warrior Met, Blue Creek
Location	Alabama, USA
Transported Material	Met Coal
Installed Belt	Sempercord™ ST 7500
Conveyor belt width	72" wide
Specification	MSHA.FR+
Estimated Capital Cost (full project)	~\$1 billion
Belt Installation Date	July 2024
Production Target	~6.0M short tons/year

### THE CHALLENGE

Warrior Met's Blue Creek longwall mine aimed to become one of North America's most efficient coking coal operations.

But to achieve this vision, they needed a conveyor belt capable of:

- Enduring extreme slope tension and throughput
- Operating under long-term, high-capacity loads
- Reducing downtime, carryback, and spillage
- Meeting strict MSHA fire-resistance standards



## THIS PROJECT PUSHED THE LIMITS OF CONVEYOR BELT ENGINEERING

TO DELIVER THE STRONGEST CON-  
VEYOR BELT IN NORTH AMERICA

This project pushed the limits of conveyor belt engineering — and Sempertrans delivered. From custom splice design to the strongest belt we've ever produced, our team worked hand-in-hand with Warrior Met to set a new benchmark for performance, safety, and reliability in North American mining.

## UNMATCHED STRENGTH

**ST7500 BELT EXCEEDED LOAD  
AND TENSION REQUIREMENTS**

## OPERATIONAL EFFICIENCY

**SUPPORTS WARRIOR MET'S COST-EFFICIENCY  
AND OUTPUT TARGETS**

### THE SEMPERTRANS SOLUTION

Sempertrans responded with a groundbreaking solution

- **Custom ST Belting:** Delivered a Sempercord™ ST7500 belt.
- **Splice Innovation:** Deployed a 5 stage splice design tested and proved prior to installation.
- **Installation Expertise:** Provided certified splice supervision.

### SUMMARY RESULTS

THE IMPLEMENTATION OF THE SEMPERTRANS CONVEYOR BELT DELIVERED SUBSTANTIAL BENEFITS TO WARRIOR MET:

**Unprecedented Strength & Throughput:** The belt was built to handle increased tension and throughput, designed for both current and future operational demands of a high-capacity mine.

**Enhanced Operational Efficiency:** The high-quality design contributes to improvements in overall availability and throughput, supporting the Blue Creek project's goal of being a low-cost, state-of-the-art operation.

**Extended Service Life:** Expected benefits include lifetime improvements, leading to reduced maintenance and replacement costs.

**Optimized Performance:** Other anticipated improvements include less carryback, reduced spillage, minimized mistracking, less wear, and enhanced safety within the conveyor operations.

**Strong Partnership:** The project exemplified a high-quality design achieved through strong partnerships between the end-user, an engineering company, and Sempertrans, including collaboration with ICR for the sale and installation of the belt by Sempertrans qualified splicers.

"A mine with this capacity needed the toughest belt North America has ever seen. Sempertrans delivered — combining innovation, strength, and partnership to redefine performance standards in mining."



Va 11.2025. All specifications, numbers, calculations, test values, and data mentioned here — which are the basis for our customer consultation — are in accordance with the latest engineering standards. As the operating conditions have an influence on product application, it is the sole responsibility of the customer to check the application conditions of each individual case, and whether the specified quality criteria of our products are adequate for the intended purpose. Improper use, excessive loading, or exposure to impermissible media can impair the product's function. The pictures and graphics shown are only representative images. No liability is accepted for mistakes or printing errors, and data is subject to change at any time. Sustainability report can be found here <https://www.semperitgroup.com/company/sustainability>. Copying and distribution in any form whatsoever, in whole or in part, only with the express written consent of Semperit. Copyright © Semperit 2025. All rights reserved.