

MINING

CLIFTON
STEEL

WEAR & IMPACT STEEL

FABRICATION SPECIALISTS



PREMIUM WEAR STEEL

**PRODUCING DEPENDABLE MINING PRODUCTS
FOR MORE THAN 40 YEARS**



MINING



TOUGH. RELIABLE. INNOVATIVE.

At Clifton Steel, we stand behind our mining products, manufactured to meet and exceed the highest quality standards in the industry. For more than 40 years, we have produced dependable products, while working side-by-side with our customers. Clifton Steel provides innovative solutions to wear problems in a host of applications in both underground and surface mining. Material handling, shoveling, hauling, crushing, and sizing — you can depend on Clifton. Using a wide variety of wear products and leading-edge fabrication techniques, Clifton Steel delivers the best solutions to your wear challenges, with excellent results.

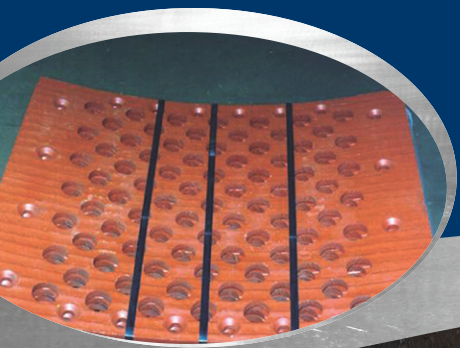
PREMIUM QUALITY. DEPENDABLE PERFORMANCE.

Clifton Steel covers the complete spectrum of abrasion, impact resistant plates and high strength steels necessary for staying competitive in today's mining markets. We help you reduce lost production time due to worn parts that hamper throughput during peak production season. Clifton Steel offers quality that lasts to reduce maintenance cycles — and keep your production flowing.



WE PROVIDE SOLUTIONS.

Focused on your bottom line, we work with you to reduce time and money spent maintaining and servicing different parts. By working with our in-house engineering team we can help you design standardized parts to improve wear, reduce your inventory and save you money. With over 40 years of experience in the mining industry, Clifton Steel understands your problems and is prepared to solve them.



APPLICATIONS

- Bin Liners
- Chute Liners
- Crusher Main Frame Liners
- Cutter Blades
- Dozier Blades
- Drag Bucket Liners
- Drag Line Pins in Linkage & Buckets
- Grizzly Bars
- Haul Truck Bed Liner Kits
- Hopper Liners
- Links
- Long Wall Miner Bed Liners
- Loader Bucket Liners
- Primary, Secondary & Tertiary Crusher Liners
- Ripper Bars
- Rotary Breaker Grates
- Shovels

MATERIALS

All of Clifton Steel's abrasion and impact plate products are fabricated to exact specifications for consistent, controlled quality. Our dependable product line delivers superior weldability, formability, and toughness in combination with superior flatness and a clean surface, making Clifton Steel quality and performance the industry benchmark.

TENSALLOY™ EXTRA

Clifton Steel's Tensalloy™ Extra (also referred to as HY 80 and HY 100) is a high alloy abrasion and impact resistant steel plate that offers corrosion resistance and heat resistance.

Tensalloy™ Extra contains high levels of chrome and nickel which allow it to resist corrosion. This chemistry also provides greater resistance to heat. When other AR plates become soft at 400 degrees Fahrenheit, Clifton Steel's Tensalloy™ Extra remains stable at atmospheric temperatures up to 1,000 degrees Fahrenheit.

TENSALLOY™ BLUE 500

Tensalloy™ Blue 500 is a premium wear and impact plate that provides the highest level of protection against wear and impact.
Hardness: 477- 550 BHN

TENSALLOY™ 450

Tensalloy™ 450 provides additional hardness and strength at a modest cost increase over standard Tensalloy™ 400.
Hardness: 420 – 477 BHN

TENSALLOY™ 400

Tensalloy™ 400 is the everyday plate for applications that call for a long-lasting wear and impact resistant material.
Hardness: 360 – 440 BHN

AR 250

AR 250 is a low-cost, abrasion-resistant steel plate that offers outstanding wear and impact resistance at an economical price.
Hardness: 200 – 280 BHN

CLIF-CLAD® CHROMIUM CARBIDE OVERLAY PLATE

Clif-Clad® is a bimetallic plate consisting of a mild steel base plate overlaid with a high chrome/high carbon composite. This composite contains 30% chrome and 5% carbon that form the chromium carbide particles that make the surface extremely hard and resistant to wear. The overlay layer has a metallurgical bond with the base plate and will not separate. Clif-Clad® is impact resistant, will not corrode and is resistant to high heat.
Hardness to 600 BHN

TENSAMANG™ 11-14% HADFIELD GRADE MANGANESE STEEL

Clifton Steel's 11-14% Hadfield Grade Tensamang™ manganese steel is a special work hardening grade designed to become increasingly harder with impact. Tensamang™ will work harden to 550 BHN, making it ideal for high impact applications.



FABRICATION SERVICES

WELDING

Our expansive capabilities encompass an entire range of manual and automated welding technologies, including TTG and MIG for manganese and other steel alloys. At Clifton Steel, pre-heating, full-edge preparation and post-weld stress relieving are standard processes—not expensive options.

DRILLING

Clifton Steel drills and countersinks holes from 1/4 inch to 5 inches in diameter ... even through 15 inch thick plate. Using leading-edge technology, we deliver fast, efficient, and exact drilling finishes, even in hard-to-machine, wear-resistant materials.

MILLING

Put Clifton Steel milling capacity to the test. We manage it all: Mill slots, thread holes, bevel, and chamfer—even in tough, wear-resistant materials.

FORMING

At Clifton Steel, precision work is our specialty: Our experienced team forms our full line of abrasion and impact-resistant materials to meet exact customer specifications.

SAWING

Clifton Steel employs rugged band and hack saw capacity with cutting capacity up to 24 inches in diameter. Rotary carbide saw capability handles all manganese rounds up to 4 inches in diameter.

FLAME CUTTING

Our team at Clifton Steel flame-cuts plate to any desired length up to 15 inches in thickness and 120 inches in width. When necessary, we apply pre-heating and controlled post-cooling processes to assure clean cuts without stress cracking at the edges. When working with heavy plate, pre-heating and post-heating processing are standard procedure to ensure product integrity.

LASER AND WATER JET CUTTING

Clifton Steel offers high-tech laser and water jet cutting to meet the express needs of our customers. These processes deliver close tolerances with a clean-edge finish for optimum quality and performance.

COMMITTED TO QUALITY, PRECISION AND PERFORMANCE, CLIFTON STEEL OFFERS A FULL RANGE OF MATERIALS AND LEADING-EDGE FABRICATION PROCESSES TO PRODUCE LONG-LASTING, INNOVATIVE SOLUTIONS TO YOUR WEAR PROBLEMS.

CONTACT A CLIFTON STEEL REPRESENTATIVE TODAY!

1-800-745-3962

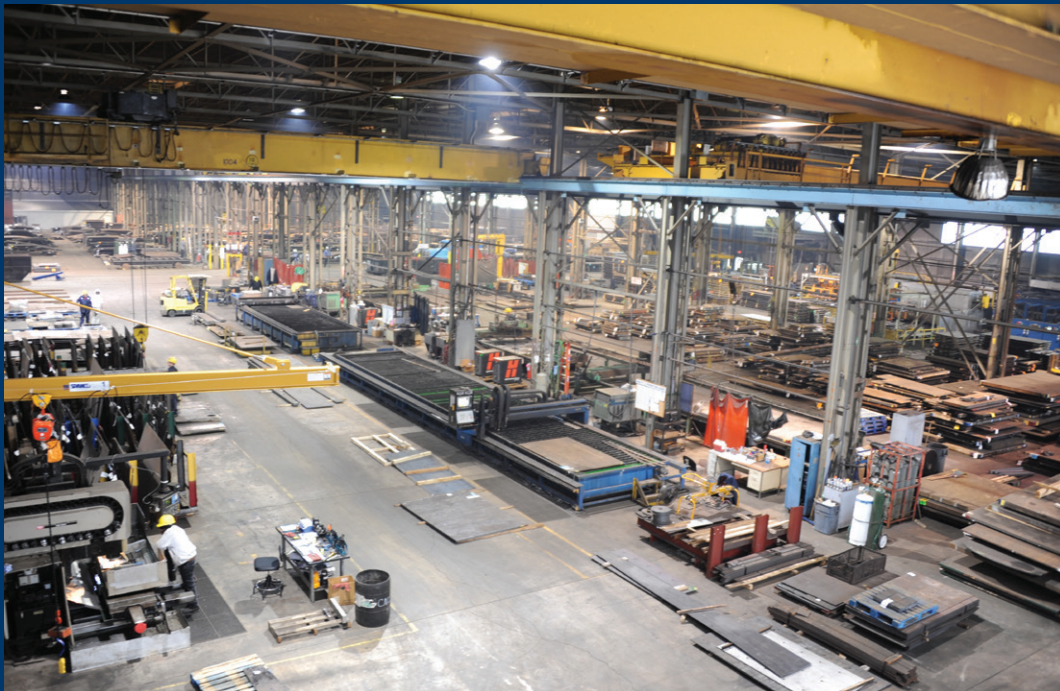
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Since 1971, Clifton Steel has operated as a full-service specialty steel distributor and manufacturer, specializing in abrasion-resistant, high-impact, high-strength steel fabrications. We serve our loyal customers in a host of industries, from aggregate and mining, to military and railroad, as well as a variety of other industrial applications. Clifton Steel delivers a level of seasoned experience, proven expertise and personal service that is unmatched.

PUT CLIFTON STEEL'S INNOVATION TO WORK FOR YOUR BUSINESS TODAY!



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