FOUNDRY

WEAR & IMPACT STEELS

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FABRICATION SPECIALISTS

PRODUCING DEPENDABLE FOUNDRY PRODUCTS
FOR MORE THAN 40 YEARS
At Clifton Steel, we stand behind our foundry 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 and impact problems in a host of applications within the foundry. We carry a full line of Hadfield manganese steel for shot blast applications. We have innovative processes for producing shot out decks. We can produce a variety of fixtures for holding parts during cleaning. 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 foundry 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 line flowing.

**WE PROVIDE SOLUTIONS.** Focused on your bottom line, we work with you to reduce time and money spent finding the best solution to your wear problems. By working with our in-house engineering team we can help you design parts to improve wear, reduce your maintenance, and save you money. With over 40 years of experience working with foundries, Clifton Steel understands your problems and is prepared to solve them.

Member of the American Foundry Society

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**APLICATIONS**

- Shot Blast Cabinet Liners
- Shot Blast Tables
- Shot Blast Trees
- Shot Blast Cages
- Shake Out Decks
- Muller Bottoms
- Manganese Steel Grates – Floor Bottoms
- Manganese Steel Woven Wire Screens
- Robotic Manipulator Arms
- Augers
- Blast Cabinet Rollers
- Walker Beams
- Manganese Tubes

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**FABRICATION SERVICES**

**WELDING**

Our expansive capabilities encompass an entire range of manual and automated welding technologies, including TIG 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. Whenever 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
info@cliftonsteel.com

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**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:** 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.
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!