



ST. LAWRENCE

Alloys for Industry Since 1955

abrasion & impact resistant solutions

about us St. Lawrence Steel is a provider of wear resistant solutions serving heavy industry since 1955. We are a leader in supplying premium abrasion resistant materials, hard facing, impact resistant steels, ceramic materials and fabrications. Our materials and products have been instrumental in reducing downtime within mission-critical processes in industrial markets. The St. Lawrence North American Fabrication Facility has the advanced fabrication equipment, products, people, and expertise to provide technological solutions for the most challenging wear problems

industries served:

- aggregate
- agriculture
- aluminum
- ash handling
- asphalt
- bulk loading & handling
- cement/concrete
- chemical
- coal
- construction
- crushing
- forestry
- glass
- iron & steel
- maritime port facilities
- materials handling
- mining
- power generation
- pulp & paper
- recycling
- steel mills
- tunneling
- utilities
- waste incineration

fabrication services:

- bending
- blanchard grinding
- blanking
- casting
- cnc machining
- drilling & countersinking
- flame cutting
- forging/upsetting
- grinding
- hard facing – chrome carbide / tungsten
- heat treating
- laser cutting
- machining
- oxy fuel cutting
- pipe lining
- plasma cutting
- plate rolling/forming
- polishing
- screw/auger fabrication
- straightening/flattening
- surface grinding
- thermal processing
- turn, ground & polished
- waterjet cutting
- welding

custom designed and oem replacement parts:

- agitator & mixer paddles
- arbors
- ash pipe
- back-up plates
- baffle plates
- blade liners
- blower wheels
- breaker plates
- breaker screens
- bolts
- bucket liners & lips
- bulldozer blade liners
- chain conveyor wear plates
- chain guides
- chain raceways
- cheek plates
- chipper hoods
- chute liners
- cladding for mixing tubs
- clam shell bucket liners
- classifier screens
- coal chutes/bins
- concrete mixer liners
- connecting rods
- conveyor belt scrapers
- conveyor buckets
- crusher hammers
- crusher liners
- debarking hammers
- deck plates
- deflector plates
- dipper sticks
- distributor sleeves
- dragline bucket liners
- drag flights
- dredge pump lines
- dump truck bed liners
- exhaustor blades
- eye bars
- fan blades & housings
- feed screws
- flop gates
- flotation plates
- flue liners
- froth cell liners
- funnels
- furnace liners
- gear shafts
- grader blades
- grizzly bars
- guillotine blocks
- hoppers & liners
- launder plates
- liners
- log-washer paddles
- mandrels
- mill impact plates
- mixer paddles & liners
- mobile equipment liners
- muller bottoms
- nonstick liners
- oscillator liners
- ore car liners
- ore pocket liners
- pins
- pressure plates
- pulp paddles
- pulverizer parts
- pump channel linings
- rail car liners
- reclaim buckets
- rope guides, pulley linings
- scrap baler liners
- scraper blades
- screen decks & plates
- screw conveyor flights
- screws
- scrubber parts
- shafts
- shakeout liners
- shaker screens
- skip car liners
- skirt boards
- shot-blast liners
- sluice plates
- sorting plates/screens
- stirrer blades
- strip plates & blades
- suction box covers & liners
- transfer car liners
- vibrator parts
- washer linings & bottoms
- wear bars, guides, pads
- wear plates
- wearing strips
- wiper and wiper plates
- **and many others**

abrasion resistant materials:

PLATE

Nickel Alloy Armor Plate – AR-MAX®

Hardness Range: 444 – 532 BHN, nominal

Forms: Plate, Custom forms available

Std Sizes (W x L): 48x96, 72x240, 72x288, 96x240, 96x288

Thickness: 1/4, 3/8, 1/2, 5/8, 3/4, 1, 1 1/4, 1 1/2, 2, 2 1/2, 3

AR Grade Alloy – MAN-CRO®

Hardness Range: 400, 450, 500 BHN, nominal

Forms: Plate, Bars, Multi-Grip, Custom forms available

Std Sizes: Plates – Thicknesses of 1/4 to 3", widths 48" to 96" lengths to 288"

Bars – Thicknesses of 1/4 to 2", Widths of 1" to 12", lengths to 288"

Chromium Carbide Overlay – Ultra-Met

Hardness Range: 550 – 600 BHN, nominal

Forms: Plate, Custom forms available

Std Sizes (W x L): 48" x 120", 96" x 120" on request

Thickness: Single overlay – 3/8", 1/2", 3/4" 1" Double overlay – 3/4" 1"

CASTINGS

Manganese Steel – SLS® 14%

Hardness Range: work hardens to 550 – 600 BHN, nominal

Forms: Plate, Bars, Castings, and Custom

Std Sizes: Plates – Thicknesses of 1/4 to 3", widths 48" to 96" and lengths to 288" Bars are available in rounds, squares, and flats.

Consult your local St. Lawrence Sales Rep for standard sizes

SHAFTING

Chrome-Nickel-Moly Alloy Steel – Microsteel®

Hardness Range: 269 – 341 BHN, nominal

Forms: Turned Ground & Polished Bars, and Custom bars

Std Sizes: Diameters 7/16" to 6" in 1/16" increments

Lengths 20 – 24

Chrome-Nickel-Moly Alloy Steel – Flexite®

Hardness Range: 269 – 341 BHN, nominal

Forms: Hot-Rolled Quenched & Tempered Round Bars, Square Bars, Tubing, Flats, and Plates

Std Sizes: Consult your local St. Lawrence Sales Rep for standard sizes

PIPE

Induction Hardened Wearpipe – SLS® 600

Hardness Range: 600 BHN minimum at the ID, 250 BHN nominal at the OD

Forms: Straight or formed pipe

Std Sizes: 2 1/2, 3, 4, 5, 6, 8, 10, 12, 14, 16, 18, 20, 22

Consult your local St. Lawrence Sales Rep for wall thickness

Length: 20'

Chromium Carbide Overlay Pipe – Ultra-Met Pipe

Hardness Range: > 600 BHN

Forms: straight, bends, spool sections, mitered elbows and fabricated fittings

Std Sizes: Straights 10' – 40' NPS Custom bends 8' – 40' NPS

Cast Lined Pipe – SLS® Cast Lined Pipe

Hardness Range: 300 – 700 BHN

Forms: Straight and elbows

Std Diameters: 3', 4', 5', 6', 8'

Length: 18'

UHMW

Ultra High Molecular Weight Polyethylene (UHMW-PE) – ARPLEX®

Grades: V – White – produced from 100% virgin resin

R – Green – produced from recycled resin

VX-AR – Grey – cross-linked UV stabilized

Wear Resistance 10 according to DIN Standard 52108

Forms: Sheets, and Custom cut shapes

Std Sizes: 48" x 96", 48" x 120"

Thickness: 1/32" to 4"

CERAMIC

Engineered Ceramic Material – Ceramite®

Wear Resistance: 0.2 according to DIN Standard 52108

Compressive Strength: > 26000psi

Forms: Trowellable Powder or Precast

Std Sizes: 55 lb. Bag or custom cast shapes

Max Service Temp: 2195 F



ST. LAWRENCE

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