



VALAST® 450

ABRASION RESISTANT STEEL

A STEEL YOU CAN RELY ON

Valast® 450 is engineered for durability, consistency, and clean fabrication. With a 450 HBW hardness rating and guaranteed impact performance, it delivers exceptional wear resistance.

KEY ATTRIBUTES:

- 450 HBW hardness rating for long-lasting abrasion resistance
- Guaranteed impact toughness ≥ 20 ft-lbs at -40°F
- Widths up to 81" — the widest strip in the market
- Custom lengths available for greater efficiency

APPLICATION BENEFITS:

- Up to 2.5 times more abrasion resistance than Grade 50 structural steel
- Lighter scale jacket for a clean, high-gloss finish
- Guarantees impact toughness of ≥ 20 ft-lbs at -40°F

PROCESS AND SURFACE QUALITY:

- Consistent dimensional tolerances and flatness
- Brushed surface enhances finish appearance and coating adhesion
- Pickled and oiled options for improved fabrication processes
- Excellent weldability with $\text{CET} \leq 0.33$ (CEV 0.45), suitable for all welding methods

MECHANICAL PROPERTIES

$0.118" \leq \text{thickness} \leq 0.315"$	Hardness (HBW)	Yield Strength* (ksi)	Tensile Strength* (ksi)	Elongation ASTM (2") %	Bend Radius**
Guaranteed	420-480	-	-	-	4.5t
Typical Value	450	181	214	10	-

* Mechanical properties are tested in longitudinal direction.

** Minimal radius at bending over 90° - bend line parallel to the rolling direction. A tighter bending radius might be possible for your product application. Please contact us to discuss.

SIZES

- Widths from 50.00" to 81.00"
- Customized lengths
- Thicknesses from 0.079" to 0.472"

APPLICATIONS

- Tippers and dump trailers
- Agriculture and forestry equipment
- Mining and construction machinery



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VALAST® 450 ABRASION RESISTANT. LASTING QUALITY.



HIGH WEAR RESISTANCE

Valast is harder and longer-lasting than structural steel – delivering ~2.5× the abrasion resistance of standard structural steel.



IMPACT TOUGHNESS

Guaranteed impact toughness $\geq$ 20ft. lbs at -40° F (27J at -40° C), making sure the product performs in even the coldest environments.



SURFACE QUALITY

Smoother surface finish reduces prep time, requires less paint/coating, and improves final appearance.



WELDABILITY

Valast is available in extra-wide strip dimensions (81 inch) and customized lengths to optimize material usage and nesting.



FORMABILITY

Consistent bending performance—4t bend guarantee at 90° for ≤ 6 mm thickness.



COST VALUE

Valast is available in extra-wide strip dimensions (81 inch) and customized lengths to optimize material usage and nesting.

WHY STEEL WAREHOUSE?

Steel Warehouse is more than a steel solutions provider; we're a partner to support your fabricating needs. Family owned and operated for over 75 years, Steel Warehouse is an industry-leading steel processing service center offering steel coil, sheet, plate and more. But quality steel is only the start. Doing business the right way is about the relationship. Rely on our expert team of metallurgists for design engineering and technical support, along with our inventory management with JIT delivery.