

CMC

Performance Steel

TruWEAR



TruWEAR, abrasion resistant steel

Manufacturers are looking for steel that provides abrasion-resistant toughness and extended life for their equipment. TruWEAR from CMC Impact Metals provides superior durability, toughness and strength will improve a product's service life in the most demanding environments, increase payload capacity, decrease weight and withstand anything thrown its way.

TruWEAR offers:

Hardness

TruWEAR steel endures the most demanding environments over the entire service life of the product. Our advanced heat treating, quenching and tempering processes produce a superior hardness combined with high strength that results in a lightweight, strong and wear-resistant steel to withstand harsh conditions.

Toughness

TruWEAR's design provides for a combination of wear resistance and durability that sets it apart from other types of steel when it comes to toughness. A key aspect of its durability and toughness is its ability to endure heavy impact without permanent deformation or cracking when stressed or impacted beyond its yield point.

Formability and Weldability

The refined chemical composition, along with the heat-treating, quench and tempering processes used to create TruWEAR, creates an abrasion-resistant steel with the ductility that is necessary for formability and fabrication in the manufacturing process. Manufacturers and fabricators can use conventional, manual or automated welding processes when working with TruWEAR products due to the steel's advanced chemical composition. See product specifications for more detail.





Melted and manufactured in the USA, our abrasion-resistant steel delivers the hardness and toughness needed to meet the most challenging environments.

Our abrasion-resistant steel plate and flat bar are reliable solutions for industries requiring tough performance steel. TruWEAR meets the most stringent requirements and specifications for chemical and mechanical properties.

Our TruWEAR steel products have multiple uses, but primarily lend their toughness and hardness in applications for construction, mining, forestry and manufacturing industries, extending the service life of hard working equipment like:

TruWEAR Applications

Mining transportation vehicles

Garbage trucks

Equipment buckets

Dump truck bodies

Heavy construction

Rail cars

Drag conveyors

Targets

Bulldozers

SUPPORT YOU CAN COUNT ON

CMC Impact Metals is committed to ensuring that you have the support you need at every step in the process. As a TruWEAR customer, you'll have a dedicated sales team, backed by the expertise of our technical staff, working with you to provide solutions for any project application.

As an industry leader, we are confident your business will benefit from your alliance with CMC Impact Metals - receiving the highest levels of quality with TruWEAR steel, and relying on our industry expertise and personalized customer service that you expect from a trusted partner.



TruWEAR Hot Rolled Flat Bar Products

TruWEAR abrasion resistant flat bar is available in AR400.

	Hardness (nominal HBW)	Thicknesses (inches)	Widths (inches)	Lengths (feet)	Tensile Strength	Carbon Equivalency	Hardness Range	Charpy Impacts @ -40°F (-40°C)
TruWEAR AR400 Flat Bar	400	0.250" - 1"	2" - 10"	20'	190 ksi (1310 MPa)	0.61 - 0.64	360 - 440	25 ft-lbs (34J)

TruWEAR Hot Rolled Plate Products

FLATNESS

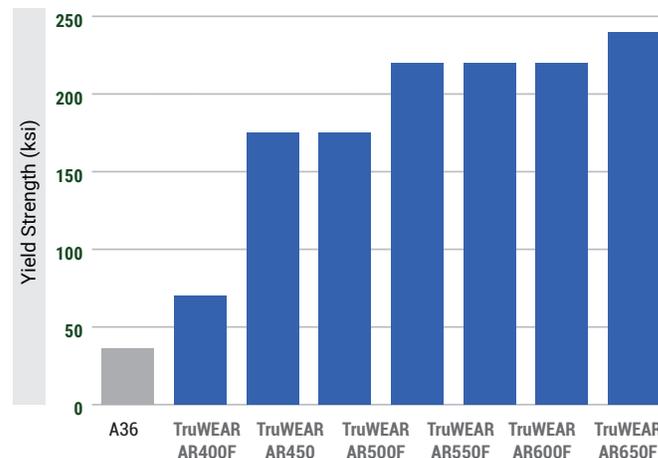
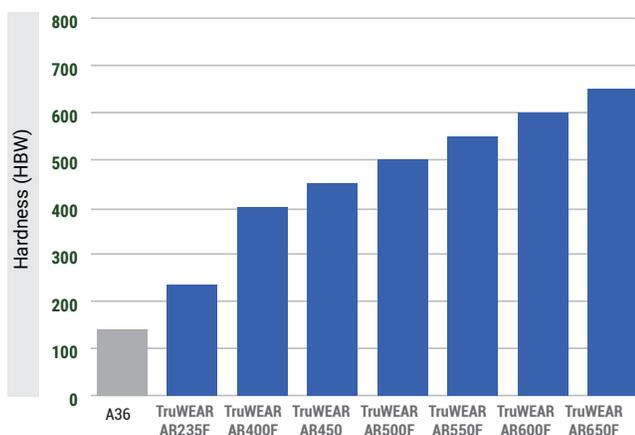
CMC Impact Metals offers a flatness guarantee that ensures TruWEAR plate excels in downstream fabrication processes. Our heat treating, quenching and tempering process reduces and relieves the stresses induced during manufacturing, ensuring the parts remain flat when cut into smaller pieces. CMC is proud to offer our cutting-edge TruFLAT technology for most plate products .300" and thinner, with a flatness of ¼ ASTM A6 standards and significantly exceeding typical standards for flatness.

SURFACE QUALITY

TruWEAR plate products have a superior surface quality that produces a smooth finish ready for exposed or painted applications.

	Hardness (nominal HBW)	Thicknesses (inches)	Widths (inches)	Tensile Strength	CEV (typical)	Hardness Range	Charpy Impacts (transverse typical) @ -40°F (-40°C)
TruWEAR AR235F Plate	235	Up to 0.500"	Up to 60"	100 ksi (689 MPa)	0.58	235	--
TruWEAR AR400F Plate	400	Up to 0.500"	Up to 60"	190 ksi (1310 MPa)	0.58	370 - 430	25 ft-lbs (34 J)
TruWEAR AR450F Plate	450	Up to 0.500"	Up to 60"	215 ksi (1482 MPa)	0.58	425 - 475	25 ft-lbs (34 J)
TruWEAR AR500F Plate	500	Up to 0.500"	Up to 60"	235 ksi (1620 MPa)	0.61	470 - 535	22 ft-lbs (29.8 J)
TruWEAR AR550 Plate	550	Up to 0.500"	Up to 60"	265 ksi (1827 MPa)	0.70	525 - 570	18 ft-lbs (24.4 J)
TruWEAR AR600 Plate	600	Up to 0.500"	Up to 60"	290 ksi (1999 MPa)	0.84	570 - 650	10 ft-lbs (13.5 J)
TruWEAR AR650 Plate	650	Up to 0.500"	Up to 60"	314 ksi (2165 MPa)	1.00	625 - 700	10 ft-lbs (13.5 J)

Call your CMC Impact Metals representative for additional details and to inquire about any other product offerings not included here. All charts show typical values unless otherwise noted.



it's what's **inside** that counts

We're CMC. You'll find our products strengthening and reinforcing the infrastructure nearly everywhere on the planet – in sports stadiums and public buildings as well as highways, bridges, railways and other structures. To serve this global market, CMC maintains facilities across the United States, Europe and Asia. These sites include everything from local recycling centers, steel mini-mills and micro-mills to large-scale fabrication centers, heat-treating facilities as well as other operations.