

# EB-450<sup>®</sup>



## BENEFITS

- \* Higher wear resistance, when compared to conventional steels, due to its uniform hardness.
- \* Easy to weld with normal low hydrogen simple techniques.
- \* May be flame cut with oxyacetylene, plasma or similar methods.
- \* Cold formable with heavy presses or rolls.
- \* The high hardness and toughness, in combination with its low co-efficient of friction, reduces maintenance costs.
- \* May be easily cut, welded, machined and cold formed, as required.

# Astralloy EB-450®

EB-450 is a liquid, quenched and tempered, through-hardened, high impact alloy steel with excellent abrasion-resistant properties. Its balanced boron, modified nickel-chrome moly chemistry is ideal for achieving an optimum hardness to toughness ratio. EB-450 boasts a longer wear life due to its through-hardness which is more uniform than what is found in conventional carbon/manganese steels. This quenched-hardened material is competitively priced for optimum cost/wear ratios. This steel's resistance to atmospheric corrosion further reduces surface pitting. EB-450 is field proven in extremely abrasive bulk handling installations.

Brand	Tri-Braze™	Ford Wearalloy Nickel Chrome	Astralloy EB-450®
<b>Characteristics</b>	Through-hardened	Heat treated, quenched and tempered	Liquid quenched and tempered, through-hardened
<b>Hardness (BHN)</b>	418 – 512	444 – 495	418 – 495
<b>C</b>	.18 – .24	.18 – .26	.27
<b>Mn</b>	.75 – 1.00	.50 – .92	1.00
<b>P</b>	.025	.015	.025
<b>S</b>	.003	.003	.005
<b>Si</b>	.20 – .40	.60	.20
<b>Ni</b>	.50 – .85	.85	.70
<b>Cr</b>	1.60 – 1.80	1.40 – 1.85	1.75
<b>Mo</b>	.20 – .30	.20 – .30	.30
<b>Tensile Strength (psi)</b>	215K – 267K	180K – 230K	225K – 235K
<b>Yield Strength (psi)</b>	192K – 240K	216K – 240K	180K – 190K
<b>Charpy Test @RT (ft-lbs)</b>	NA	23	18-20
<b>Charpy Test @-40 (ft-lbs)</b>	NA	14	12 – 20

DISCLAIMER: This comparison document has been compiled from publicly available manufacturer data. Astralloy Steel Products makes no representation regarding the accuracy or completeness of this data and assumes no liability. Astralloy Steel Products is not associated with Tri-Braze™ or Ford Steel Company.

Toll-free: 1.866.587.6970 | Sales: 724.230.5100  
[sales@astralloy.com](mailto:sales@astralloy.com)

