

# TUFFBRAZE 500

## CONTENTS

<i>Applications</i>	2
<i>Sizes</i>	2

### Special points of interest:

- Tuffbraz 500 is the ultimate in abrasion-resistant plate because it maintains a rich chemistry with a 515 BHN hardness.
- Tuffbraz 500 is a special, high alloy grade of 500 Brinell steel – it is not generic.
- Tuffbraz 500 is available in a variety of sizes.
- Tuffbraz is also available in a lower hardness range (444 BHN typical).

## TUFFBRAZE 500 – HIGH STRENGTH ABRASION RESISTANT ALLOY

Tuffbraz 500 is the ultimate in high hardness abrasion resistant plate. It is engineered for cut-and-weld applications where severe, low-stress (smaller particle) abrasion is the main cause of failure.

- ▶ A special grade of 500 Brinell, not generic
- ▶ Quench and tempered to improve machinability and reduce brittleness
- ▶ Superior abrasion resistance
- ▶ Special nickel added chemistry providing deep hardening, not surface only



- ▶ High toughness for resistance to fracture, the most common wear problem, through:

- Clean Steel Technology
- Calcium treatment,

promoting inclusion shape control

- Silicon killing, fine grain practice and vacuum degassing

## TYPICAL MECHANICAL PROPERTIES

<b>Tensile</b>	270,000 psi
<b>Yield</b>	240,000 psi
<b>%of elongation</b>	14%
<b>Reduction in area</b>	35%
<b>BHN hardness</b>	515 BHN

## TYPICAL TUFFBRAZE 500 APPLICATIONS

- Bucket Heel Plates
- Bucket Lips
- Chipper Components
- Chutes
- Cones
- Conveyor Components
- Crushing Mill Liner Plates
- Cyclone Components
- Drag Line Bucket Liners
- Fan Blades
- Fan Housing Components
- Farm Machinery & Components
- Flat Back Elbows
- Grizzly Bars
- Hoppers
- Impact Plates
- Impellers
- Pug Mill Paddles
- Railroad Maintenance Equipment
- Screen Plates
- Screw Conveyor Flights
- Shot and Sand Blast Equipment
- T-Injectors
- Target Plates
- Transitions
- Truck Body liners
- Wheelabrator Parts

## TUFFBRAZE 500 STOCKING SIZES

*“Tuffbraze 500 is available from stock in 4,6 and 8 ft widths and 4, 8, 12 and 24 ft lengths. We can cut to size upon inquiry.”*

thick	4x4	4x8	4x12	4x24	6x8	6x12	6x24	8x12	8x24
3/16					sizes N/A				
1/4									
3/8									
1/2									
5/8									
3/4									
7/8									
1									
1-1/4					sizes N/A				
1-1/2									
2									

\*LARGER SIZES  
AVAILABLE UPON  
INQUIRY