Amera-Braze 520 is a heat treated, abrasion resistant alloy steel plate and strip. With a combination of excellent toughness and high hardness, a reduction of dead weight can be achieved by using Amera-Braze 520 in half the thickness of the original chute, liner, or wear area.

**Features And Advantages**
- Ultra-high wear resistance
- Heat treated, quenched, and tempered to a high Brinell hardness
- Good weldability
- Depth hardened
- Fine grain structure
- High tensile strength
- Corrosion resistance six times greater than mild steel
- Reduces dead weight

**Typical Mechanical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength psi</td>
<td>245,000</td>
</tr>
<tr>
<td>Yield point psi</td>
<td>230,000</td>
</tr>
<tr>
<td>Elongation in 2”</td>
<td>9%</td>
</tr>
<tr>
<td>Reduction of area</td>
<td>40%</td>
</tr>
<tr>
<td>Brinell hardness</td>
<td>480–520</td>
</tr>
</tbody>
</table>

**Welding**

Use low hydrogen high tensile electrodes: AWS specification E100XX, E110XX, or E120XX electrodes.
- Preheat to 300°–500°F on plates over 1/2” in thickness.

*Consult Ameralloy plant for welding and fabrication information. Special forming and fabrication procedures required.*
**Applications**

- Backup plates
- Baffle plates
- Bucket lips
- Car plates
- Chain links
- Chain slide runners
- Chutes:
  - Coal
  - Coke
  - Glass
  - Grain
  - Gravel
  - Limestone
  - Ore
  - Refuse
  - Rock
- Sand
- Slag
- Slat
- Classifier screens
- Coke bins
- Conveyor buckets
- Clam shell bucket lips
- Concrete pipe liners
- Deck plates
- Doors
- Dredge pump liners
- Drag line buckets
- Dipper sticks
- Dump truck beds
- Eye bars
- Fan blades & housings
- Flotation plates
- Flume liners
- Furnace liners
- Hoppers
- Launder plates
- Loaders
- Log-washer paddles
- Muller bottoms
- Mixers
- Oscillator Liners
- Ore car bodies & liners
- Ore pocket liners
- Pressure plates
- Scrap baler liners
- Shakeout liners
- Skip cars and liners
- Sluice plates
- Transfer carliners
- Truck box liners
- Vibrators
- Wear bars
- Wear plates
- Wearing strips
- Wheelabrator end plates

**Available Sizes**

**Amera-Braze 520 Plates**
- Thickness: 1/4” 3/8” 1/2” 5/8” 3/4” 1” 1-1/4” 1-1/2” 1-3/4” 2” 2-1/2” 3”
- Thicknesses over 3’ upon request
- Widths: 48” 60” 72” 84” 96” or burned to your specifications
- Lengths: 96” 120” 144” 240” 288” or burned to your specifications

**Amera-Braze 520 Wear Strips**
- Thickness: 1/4” 3/8” 1/2” 5/8” 3/4” 1” 1-1/4” 1-1/2” 1-3/4” 2”
- Thicknesses over 2’ burned to your specifications
- Widths: Burned to your specifications
- Lengths: Maximum of 24’