



# WINCO-TUF 50

## Ultra Hi Strength Alloy Wear Plate

***WINCO-TUF 50 Quenched and Tempered, High Alloy Steel Is Intended Specifically for Applications Requiring a High Degree of Abrasion and Wear Resistance.***

Used by industries such as mining, forestry, quarrying, and construction. **WINCO-TUF 50** is the cost-effective choice for parts subjected to extremely high levels of wear.

### Physical Properties

Tensile Strength .....	<b>210,000 PSI</b>
Yield Strength .....	<b>180,000 PSI</b>
Elongation in 2" .....	<b>12%</b>
Hardness .....	<b>48-53 Rockwell "C"</b>
Brinell Hardness .....	<b>455-525 BHN</b>

### Typical Analysis

Carbon .....	<b>.31</b>
Chromium .....	<b>1.00</b>
Manganese .....	<b>1.50</b>
Nickel .....	<b>.70</b>
Silicon .....	<b>.55</b>
Boron .....	<b>.003</b>
Molybdenum .....	<b>.35</b>
Phosphorus .....	<b>.025</b>
Sulphur .....	<b>.015</b>

### Welding Instructions

**WINCO-TUF 50** has superior welding characteristics. No specific electrodes are needed — standard low-hydrogen, high-tensile rod is recommended for maximum strength. E100XX, E110XX or E120XX or E130XX is preferred.