Mangalloy steel is an 11-14% manganese steel that performs best in extreme impact applications. Under shock and impact it nearly triples its initial surface hardness, retains its interior toughness, and acquires a high polish. These features, combined with Mangalloy’s high tensile strength, make it an ideal material for heavy impact and abrasive service. Mangalloy steel is also non-magnetic.

**CHEMICAL ANALYSIS:**
- Carbon: 1.13%
- Manganese: 13.00%
- Sulphur: 0.003%
- Phosphorus: 0.017%
- Silicon: 0.38%

**PHYSICAL PROPERTIES:**
- Tensile: 145,000 psi
- Yield: 55,000 psi
- BHN (Before work hardening): 200
- BHN (After work hardening): 550

**STOCK SIZES:**
- Widths: 48”, 60”, 72”, 96”
- Lengths: 120”, 144”, 240”

**COLOR CODE:**
- Green

**APPLICATIONS**
- Shot Blast Equipment Liners
- Abrasive, Non-Magnetic Applications
- RR Bolster Plates
- Magnetic Drum Liners
- Crusher Liners
- Crusher Hammers
- Stock Tubes
- Crusher Breaker Plates

**CUTTING:**
Recommend using plasma or laser, but can be flame cut with oxygen acetylene.

**FORMING:**
Cold blending and cold roll forming can be performed.

**MACHINING:**
Due to Mangalloy’s work hardening feature, special tooling such as carbide tipped or high speed cobalt tools are required.

**WELDING:**
Preheating is not advised. When welding Mangalloy to manganese use manganese welding rod, such as McKay Hardalloy 118. When welding Mangalloy to a dissimilar metal use 308, 309 or 310 stainless steel coated electrodes.