

# TECHALLOY 430LCb

I. **DESCRIPTION:** Techalloy 430LCb is stabilized ferritic steel, which offers superior mechanical properties to 430 grade. In addition its fatigue resistance is also higher, the fact that lead to its spontaneous popularity in automotive industry. This product is also used for overlay cladding as well as in thermal spray applications. Preheating of the joint to a minimum of 300°F is recommended. Welding must be done with very low heat input.

**Note:** Mechanical properties reflect the heat-treated specimen at 1400°F to 1450°F for two hours

II. **APPROVALS:** Manufactured under Quality System approved by ASME, ISO 9001.

<b><u>CHEMICAL COMPOSITION (%)</u></b>		<b><u>MECHANICAL PROPERTIES</u></b>	
Carbon	.01	<b>Tensile Strength</b>	
Manganese	0.51	74,000 PSI	510 MPA
Silicon	0.40	<b>Yield Strength</b>	
Chromium	18.20	60,000 PSI	40 MPA
Columbium	0.32	<b>Elongation</b>	
Sulfur	0.008	25%	
Phosphorus	0.020		

### III. **WELDING PARAMETERS**

(a) **MIG WELDING:** Direct current; electrode + Ve  
Shielding Gas 97% Argon + 3% Ar + 1% CO<sub>2</sub>  
Gas Flow 30/40 CFH  
Voltage 28/33  
Amperage 160/170 for 0.035"  
170/190 for 0.045"  
190/210 for 0.062"  
Speed of Welding 35 to 45 IPM

(b) **T.I.G. WELDING:** Direct current; electrode – Ve  
Shielding Gas 100% Argon  
Gas Flow 30 to 40 CFH  
Speed of Welding must be between 15 – 20 IPM

### IV. **STANDARD PACKAGES:**

**Mig Wire-30# Spools; TIG Wire-10# Tubes; SAW-60# Coils**