

## **COLD FINISHED CARBON STEELS - 12L14**

**AISI/SAE 12L14**

**UNS G 12144**

### **TYPICAL ANALYSIS**

<b>C.</b>	<b>Mn.</b>	<b>P.</b>	<b>S.</b>
.15 MAX.	.85/1.15	.04/.09	.26/.35

C 12L14 IS ESSENTIALLY RESULPHURIZED AND REPHOSPHORIZED SCREW MACHINE STOCK TO WHICH LEAD HAS BEEN ADDED.

### **TYPICAL APPLICATIONS**

USED TO MAXIMUM ADVANTAGE FOR PARTS WHERE CONSIDERABLE MACHINING IS REQUIRED SUCH AS BUSHINGS, INSERTS, COUPLINGS, AND HYDRAULIC HOSE FITTINGS. WITH GOOD DUCTILITY, THESE GRADES ARE SUITABLE FOR PARTS INVOLVING BENDING, CRIMPING, OR RIVETING.

### **MECHANICAL PROPERTIES**

THE FOLLOWING ARE AVERAGE VALUES FOR 1" ROUND AND MAY BE CONSIDERED AS REPRESENTATIVE:

<b>TENSILE STRENGTH, PSI</b>	<b>87,500</b>
<b>YIELD POINT, PSI.</b>	<b>75,000</b>
<b>ELONGATION, % IN 2"</b>	<b>15</b>
<b>REDUCTION IN AREA, %</b>	<b>50</b>
<b>BRINELL HARDNESS</b>	<b>163/179</b>

### **MACHINABILITY**

12L14 HAS A MACHINABILITY RATING OF 198% OF AISI B-1112.  
AVERAGE SURFACE CUTTING SPEED IS 325 FEET PER MINUTE.

### **WELDABILITY**

DUE TO HIGH SULPHUR CONTENT, THESE GRADES ARE NOT CONSIDERED AS WELDABLE

### **HARDENING**

ALTHOUGH THESE GRADES WILL RESPOND TO CONVENTIONAL TREATMENTS, THEY ARE NOT CONSIDERED CASE-HARDENING STEELS. BETTER RESULTS CAN BE OBTAINED FROM 1117