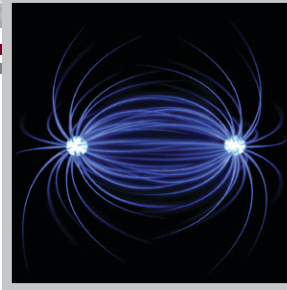


# SHIELDING ALLOY 80 (HyMu 80)

CHEMICAL COMPOSITION %	
Chemical Element	HyMu 80
Nickel	80
Molybdenum	5
Iron	Balance
MECHANICAL PROPERTIES	
Property	HyMu 80
Density	.316 lb/in
Specific Gravity	8.7 g/cm
Curie Temperature	830°F (410°C)
Melting Point	2650°F (1454°C)
NOMINAL MECHANICAL PROPERTIES (ANNEALED)	
80 max 44,000 psi yield 100,000 psi tensile 40%< elongation in 2"	
THERMAL CONDUCTIVITY	
134 Btu-inch/ft hour degree F 0.32 W/cm degree C	
MEAN COEFFICIENT OF THERMAL EXPANSION	
7.2 in/in/degree F x 10-6 between 70° & 400°F 13 cm/cm/degree C x 10-6 between 30° & 204°C	
ELECTRICAL RESISTIVITY	
349 ohm circ mil/foot 0.55 ohm mm2/m	
MAGNETIC PROPERTIES	
"Shielding Alloy 80" has a minimum DC permeability of 80,000 at a flux density of 40 gauss when heat treated by the recommended procedure and tested in accordance with ASTM 596.	



"Shielding Alloy 80" (ie, Hymu 80, MuMetal2, Ultravac 80) is a magnetic shielding alloy. It's comprised of 80% Nickel, 4-5% Molybdenum and the balance is Iron.

Its main characteristic is high permeability with minimal hysteresis loss, which is useful for shielding against static and low frequency magnetic fields that can interfere with electronic components.

"Shielding Alloy 80" has a minimum DC permeability of 80,000 at a flux density of 40 gauss when properly heat treated. It can be used in its current state of Annealed, however, because forming can reintroduce temper, it is recommended to heat treat parts to achieve optimal shielding capability.

**NEA** ISO 9001:2015  
Specialty Metal Service Center  
Dedicated to Customer Service & Quality

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Toll Free: 877-632-9378  
Email: Sales@nealloyswest.com

# SHIELDING ALLOY 80 (HyMu 80)

**(HyMu 80)**

**Mil N 14411C; Comp 1, ASTM A 753; Alloy 4**

*Available from Stock*

## **SHEET**

.004" x 12" x Sheet/Coil

.006" x 12" x Sheet/Coil

.010" x 12"/24" x Sheet/Coil

.014" x 12"/24" x Sheet/Coil

.020" x 24" x 120"

.025" x 24" x 120"

.030" x 24" x 120"

.040" x 24" x 120"

.050" x 24" x 120"

.062" x 24" x 120"

## **ROUND BAR**

.130" Dia. x 120"/144"

.250" Dia. x 120"/144"

.380" Dia. x 120"/144"

.511" Dia. x 120"/144"

.760" Dia. x 120"/144"

1.000" Dia. x 120"/144"

1.535" Dia. x 120"/144"

1.890" Dia. x 120"/144"

Special Diameter Sizes Upon Request

Alloy 49 (Comp 3) Also Available From Stock

All coils slit to your width • Can shear sheet to your exact size

***Other sizes available on request***

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