

SUPERPERM 80 LAMINATIONS

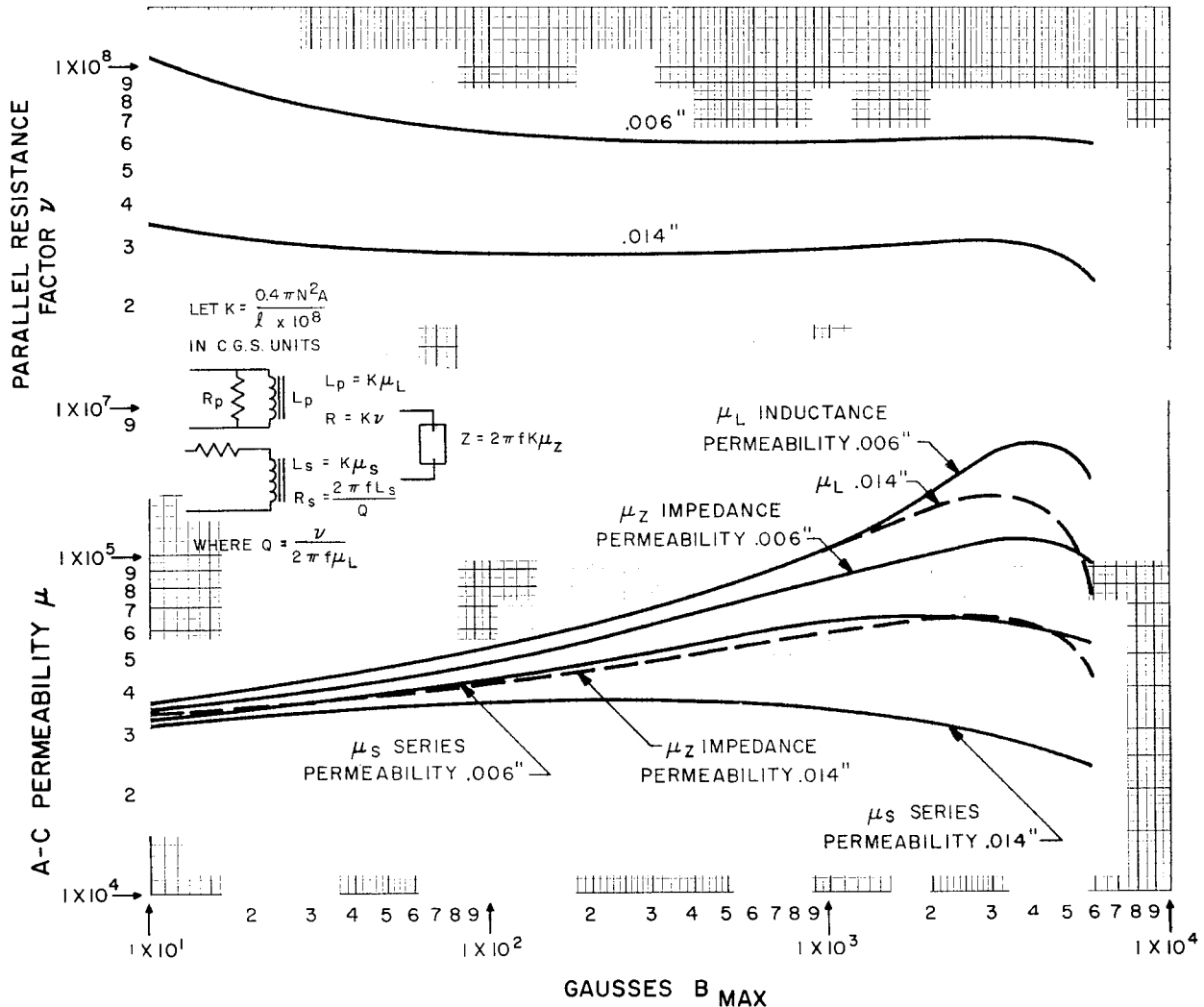
SUPERPERM 80 LAMINATIONS are produced from selected quality of 80% nickel alloy to give consistent high permeability performance. The exacting care taken in all steps of manufacture results in magnetic qualities previously considered unobtainable.

The magnetic component design engineer requires information on both the magnetic qualities of the core material and the magnetic performance of particular lamination shapes in a

magnetic core assembly. Material performance is reliably observed from data on Stamped Rings and 1DU Laminations. Permeability and core loss data of 1DU Laminations are found on this page. Incremental permeability curves are shown on page 2.

Performance of other laminated core assemblies which include the effect of joints is found on page 3.

Permeability and core loss of typical material used in the manufacture of Superperm 80 laminations. 1DU laminations at 60 Hz.



INCREMENTAL PERMEABILITY

These incremental permeability curves were measured by impedance methods. The value of d-c excitation is calculated in terms of C.G.S. units:

$$H_0 = \frac{0.4\pi N I_{dc}}{l} \text{ Oersteds}$$

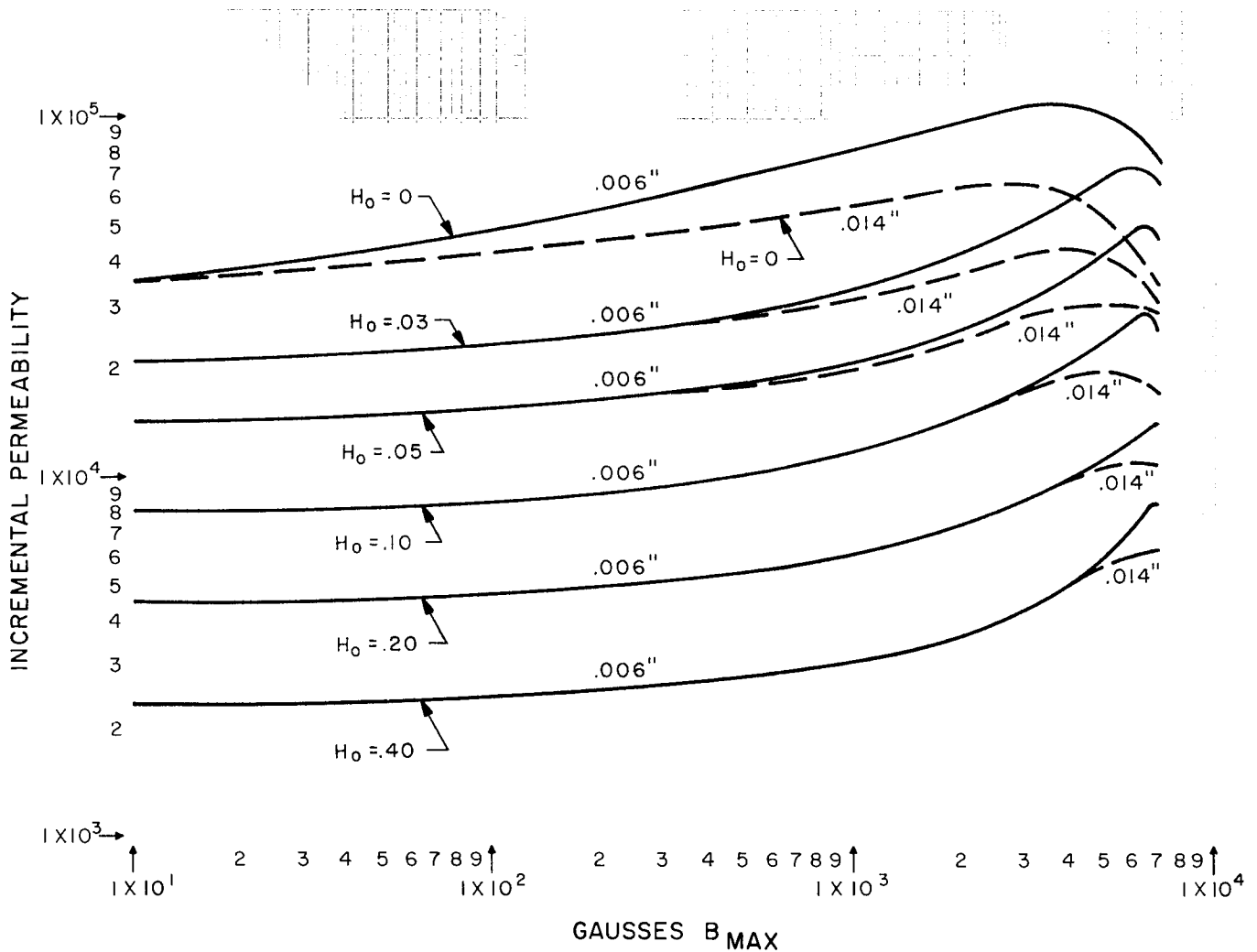
N = Number of turns

I_{dc} = Current in amperes

l = Magnetic path length in centimeters.

Whereas differences are shown in the values of μ_z for .006 inch and .014 inch thick material for $H_0 = 0$, these differences tend to disappear when H_0 is effective in reducing the permeability.

Incremental permeability of typical material used in the manufacture of Superperm 80 laminations. 1DU laminations at 60 Hz.



MAGNETIC METALS CORP.

LAMINATION PERMEABILITY

Impedance permeability at 60 Hz. of typical lamination shapes. Curves are drawn through rejection levels at test inductions.

