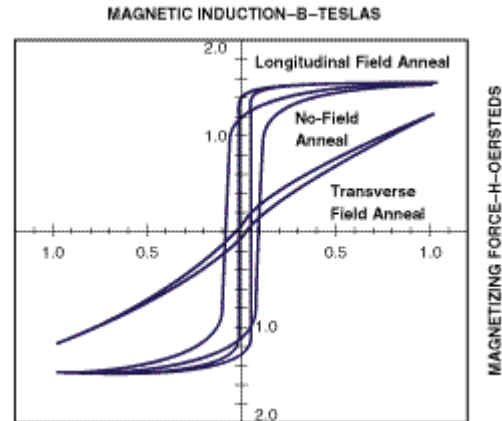


**Applications**

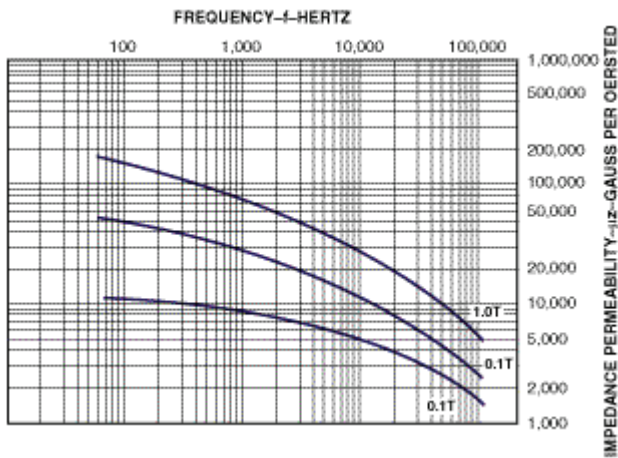
- Distribution and power transformers
- Motors
- High frequency inductors
- Current transformers
- Devices requiring high permeability and low loss at low frequencies

**Benefits**

- Extremely low core loss – less than 0.29 w/kg at 60 Hz, 1.35 Tesla, or 40% of the core loss of grade M3 electrical steel (core loss at 50 Hz is approximately 80% of 60 Hz values). This is for finished cores.
- High permeability



**Typical Impedance Permeability Curves,  
Longitudinal Field Anneal**



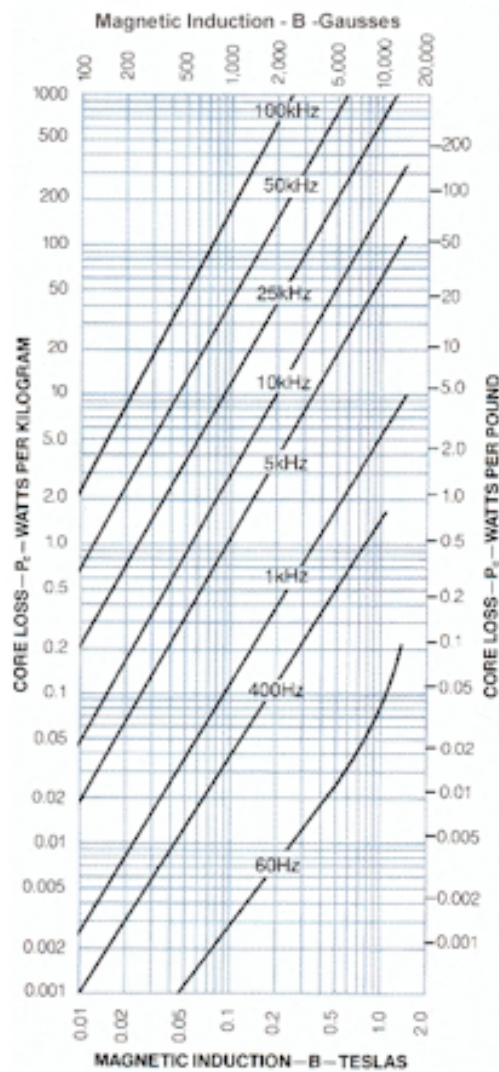
**Physical Properties**

Density (g/cm <sup>3</sup> ) As Cast . . . . .	7.18
Vicker's Hardness (50g load) . . . . .	900
Tensile Strength (GPa) . . . . .	1-2
Elastic Modulus (GPa) . . . . .	100-110
Lamination Factor (%) . . . . .	>82
Thermal Expansion (ppm/°C) . . . . .	7.6
Crystallization Temperature (°C) . . . . .	508
Continuous Service Temp. (°C) . . . . .	150

**Magnetic Properties**

Saturation Induction (T) As Cast . . . . .	1.56
Maximum D.C. Permeability (μ):	
Annealed . . . . .	600,000
As Cast . . . . .	45,000
Saturation Magnetostriction (ppm) . . . . .	.27
Electrical Resistivity (μΩ.cm) . . . . .	.130
Curie Temperature (°C) . . . . .	399

**Typical Core Loss Curves, Longitudinal Field Anneal  
METGLAS Alloy 2605SA1**



**Contact Information:**

---

**AMERICAS**

Metglas<sup>®</sup>, Inc.

440 Allied Drive  
Conway, SC 29526

**Tel:** (800) 581-7654

**Tel:** (843) 349-7363

**Fax:** (843) 349-6815

**ASIA**

Hitachi Metals Hong Kong

Units 2212-14, 22/F.  
Miramar Tower, 132 Nathan Road,  
Tsimshatsui, Kowloon  
Hong Kong

**Tel:** 852-27244183

**Fax:** 852-27227660

**EUROPE**

Hitachi Metals Europe

Immermannstrasse 14-16  
D- 40210 Düsseldorf  
Germany

**Tel:** 49(0)211-16009-23

**Fax:** 49(0)211-16009-30