

**Non-Oriented Electrical Steel Fully Processed (FP) ASTM A677**

Former AISI Type	ASTM Type	Core Loss by Thickness Watts/lb 15 Kilogausses 60HZ		Typical Electrical Resistivity Microhm-CM	Some Characteristics	Typical Applications
		Thick	Max w/lb			
M-15	36F145 47F160	.0140 .0185	1.45 1.60	45-55 45-55	Lowest core loss of conventional grades. Excellent permeability at low inductions.	Small power transformers & rotating machines of high efficiency.
M-19	36F155 47F165 64F200	.0140 .0185 .0250	1.55 1.65 2.00	45-55 45-55 45-55	Low core loss, good permeability at low and intermediate inductions.	High-reactance cores, generators, stators of high-efficiency rotating equipment.
M-22	36F165 47F180 64F210	.0140 .0185 .0250	1.65 1.80 2.10	45-55 45-55 45-55	Low core loss, good permeability at low and intermediate inductions.	High-reactance cores, generators, stators of high-efficiency rotating equipment.
M-27	36F175 47F190 64F225	.0140 .0185 .0250	1.75 1.90 2.25	45-55 45-55 45-55	Low core loss, good permeability at low and intermediate inductions.	High-reactance cores, generators, stators of high-efficiency rotating equipment and relays.
M-36	36F185 47F200 64F235	.0140 .0185 .0250	1.85 2.00 2.35	40-50 40-50 40-50	Good core loss, good permeability at all inductions and low exciting current, good stamping properties.	Small generators, high-efficiency, continuous duty rotating A-C and D-C machines and transformers.
M-43	36F195 47F210 64F250	.0140 .0185 .0250	1.95 2.10 2.50	35-45 35-45 35-45	Good core loss, good permeability at all inductions and low exciting current, good stamping properties.	Small generators, high-efficiency, continuous duty rotating A-C and D-C machines and transformers.
M-45	36F205 47F240 64F275	.0140 .0185 .0250	2.05 2.40 2.75	35-45 35-45 20-30	Good stamping properties. Good permeability at high flux densities.	Small motors, generators, ballasts, and relays.
M-47	47F280 64F320	.0185 .0250	2.80 3.20	20-30 20-25	Good stamping properties. Good permeability at high flux densities.	Small motors, generators, ballasts, and relays.