SPECIFICATION OF COLD ROLLED GRAIN ORIENTED ELECTRICAL STEEL

Product	Thickness mm	Grades	Theoretical Density (kg/Dm^3)	Max. Core Loss (Kg/W) 50HZ 1.7T	Min. Magnetic Flux Density B800	Lamination Factor %
Hi-B	0.27	27QG100	0.765	1.00	1.89	95.0
		27QG110		1.10	1.89	
		27QG120		1.20	1.89	
Normal		27Q120		1.20	1.80	
		27Q130		1.30	1.79	
		27Q140		1.40	1.78	
Hi-B	0.30	30QG100		1.00	1.89	95.5
		30QG105		1.05	1.89	
		30QG110		1.10	1.89	
		30QG120		1.20	1.89	
Normal		30Q120		1.20	1.80	
		30Q130		1.30	1.80	
		30Q140		1.40	1.79	
Normal	0.35	35Q135		1.35	1.80	96.0
		35Q145		1.45	1.80	
		35Q155		1.55	1.78	

Size

Coil	Thickness		0.27mm, 0.30mm, 0.35mm
	Width	Standard Width	910mm, 950mm, 970mm
		Available Width	800mm – 990mm
	ID		510mm
	Weight		2-5MT

Tolerance

Width mm	Thickness mm	Thickness Tolerance mm	Traverse Thickness Tolerance mm	Width Tolerance mm
>750	0.27	±0.03	≤0.03	0 ~ +0.50
	0.30			
	0.35			

Typical Value of Electrical and Magnetic Property

Grade	Theoretical Density Kg/Dm^3	Interlayer Resistance $\Omega.cm^2/pc$	Typical Core Loss 9W/kg)				Magnetic Flux Density T		
			50HZ		60HZ				
			1.5T	1.7T	1.5T	1.7T	800A/m	1000A/m	2500A/m
27QG100	7.65	48	0.74	0.98	0.98	1.29	1.92	1.93	1.97
27QG110			0.78	1.05	1.04	1.39	1.91	1.92	1.96
27QG120			0.81	1.10	1.06	1.50	1.90	1.92	1.96
27Q120			0.82	1.13	1.09	1.52	1.86	1.87	1.94
27Q130			0.85	1.23	1.12	1.60	1.84	1.86	1.93
30QG105			0.76	1.03	1.02	1.35	1.92	1.93	1.97
30QG110			0.78	1.05	1.04	1.39	1.91	1.93	1.96
30QG120			0.81	1.10	1.06	1.50	1.90	1.92	1.95
30Q120			0.82	1.13	1.10	1.51	1.85	1.87	1.94
30Q130			0.85	1.23	1.12	1.60	1.84	1.86	1.93
30Q140			0.91	1.34	1.20	1.75	1.82	1.84	1.91
35Q145			0.95	1.37	1.26	1.80	1.84	1.86	1.93

Typical Value of Mechanical Properties and Lamination Factor

Product	Thickness mm	Tensile Strength Mpa		Elongation δ %		Hardness Hv5	Bending Number		Lamination Factor %
		L	C	L	C		L	C	
Hi-B	0.27	350	395	9	31	178	23	18	97.0
	0.30	345	392	10	32	179	22	18	97.5
Normal	0.27	351	392	9	31	179	26	15	97.0
	0.30	343	393	10	31	179	25	18	97.5
	0.35	355	395	11	32	178	26	18	98.2

Remark: L=Samples parallel to rolling direction
C=Samples perpendicular to rolling direction

Coating Characteristics

Coating Type	T2
Composition	Inorganic
Coating thickness μm	2 ~ 4
Interlayer Resistance $\Omega.cm^2/pc$	≥30
Adhesion	B-F Level
Punching Performance	Good
Rust Resistance	Good
Heat Resistance	Able to resist 800ºC annealing in non-oxidizing atmosphere
Corrosion Resistance	With a high corrosion resistance to insulating paint, oil refrigerating media.