

电磁性能标准值
Standard Magnetic Properties

牌号 Grade	公称厚度 Nominal thickness	理论密度 Theoretical density	最大铁损 Max. Core loss	最小磁感 Min. Induction	最少 弯曲次数 Min, Number of bends	最小 叠装系数 Min, Lamination factor
			P _{1.5/50}	50Hz B ₅₀₀₀		
	mm	kg/dm ³	W/kg	T		%
35WW230	0,35	7,60	2,10	1,62	3	96,0
35WW250		7,60	2,30	1,62	3	
35WW270		7,60	2,50	1,62	3	
35WW300		7,65	2,70	1,62	6	
35WW360		7,65	3,30	1,63	6	
35WW440		7,70	4,00	1,65	6	
50WW250	0,50	7,60	2,30	1,62	3	97,0
50WW270		7,60	2,50	1,62	3	
50WW290		7,60	2,70	1,62	3	
50WW310		7,60	2,90	1,62	3	
50WW350		7,65	3,10	1,62	6	
50WW400		7,65	3,50	1,64	6	
50WW470		7,70	3,30	1,70	10	
50WW600		7,75	4,20	1,67	12	
50WW800		7,80	5,80	1,70	15	97,5
50WW1300		7,85	7,50	1,74	15	
50WH470	0,50	7,70	3,00	1,71	8	97,0
50WH600		7,75	3,50	1,72	10	97,0

电磁性能典型值
Typical Magnetic Properties

牌号 Grade	公称厚度 Nominal thickness mm	理论密度 Theoretical density kg/dm ³	铁损 Core loss W/kg				磁感 Induction T	
			50Hz		60Hz		2500A/m	5000A/m
			1,0T	1,5T	1,0T	1,5T		
35WW230	0,35	7.60	0.85	2.06	1.08	2.61	1.57	1.67
35WW250		7.60	0.92	2.20	1.16	2.74	1.58	1.67
35WW270		7.60	1.00	2.33	1.25	2.92	1.58	1.67
35WW300		7.65	1.00	2.45	1.26	3.07	1.60	1.68
35WW360		7.65	1.16	2.69	1.44	3.35	1.60	1.69
35WW440		7.70	1.20	2.82	1.51	3.53	1.64	1.72
50WW250	0,50	7.60	0.94	2.26	1.24	3.01	1.59	1.67
50WW270		7.60	1.01	2.45	1.27	3.06	1.59	1.67
50WW290		7.60	1.07	2.49	1.36	3.20	1.59	1.67
50WW310		7.60	1.16	2.68	1.47	3.44	1.59	1.69
50WW350		7.65	1.18	2.70	1.51	3.45	1.61	1.69
50WW400		7.65	1.23	2.83	1.56	3.62	1.61	1.68
50WW470		7.70	1.35	3.15	1.74	4.06	1.65	1.72
50WW600		7.75	1.71	3.79	2.16	4.82	1.64	1.72
50WW800		7.80	2.10	4.67	2.41	5.49	1.66	1.74
50WW1300		7.85	2.44	5.32	3.09	6.85	1.68	1.76
50WH470	0,50	7.70	1.27	2.86	1.61	3.63	1.65	1.73
50WH600		7.75	1.42	3.21	1.79	4.06	1.66	1.73

产品规格

Specifications

产品尺寸 Dimensions of Products

可供产品厚度 Available thickness	可供产品宽度 Available width range	内径 Inside diameter
mm	mm	mm
0.15、0.20	950-1000	508 ± 10
0.30、0.35、0.50、0.70、0.75、0.80、0.85	1000-1250	508 ± 10

尺寸及板形公差 Dimensional and Shape Tolerances

公称厚度 Nominal thickness	公称厚度允许偏差 Nominal thickness tolerance	横向厚度差 Traverse thickness tolerance	宽度允许偏差 Width tolerance	不平度 Flatness	2m 内镰刀弯 Camber within 2m
mm	mm	mm	mm	%	mm
0.15	± 0.012	≤0.010	0~+1.5	≤1.5	≤1.0
0.20	± 0.012	≤0.010			
0.30	± 0.015	≤0.012			
0.35	± 0.015	≤0.012			
0.50	± 0.020	≤0.015			
0.70	± 0.030	≤0.025			
0.75	± 0.030	≤0.025			
0.80	± 0.040	≤0.030			
0.85	± 0.040	≤0.030			

注：a. 横向厚度差是指钢板中心与距边部15mm的厚度差。
b. 对于有特殊要求的用户，武钢可以标准+α供货。

Note: a. Traverse thickness deviation refers to the thickness difference between the sheet center and 15mm from the edge.
b. Please consult us if you have special requirements.

力学性能典型值
Typical Mechanical Properties

牌号 Grade	屈服强度 R _e Yield strength N/mm ²		抗拉强度 R _m Tensile strength N/mm ²		伸长率 Elongation %		硬度 HV5 Hardness	叠装系数 Lamination factor %
	L	C	L	C	L	C		
35WW230	415	435	520	540	16	18	195	98.0
35WW250	415	435	520	540	16	18	195	98,0
35WW270	415	435	520	540	16	18	195	98,0
35WW300	395	410	510	530	25	26	185	98.0
35WW360	380	400	490	505	27	29	170	98.0
35WW440	270	280	415	435	30	32	140	98,0
50WW250	420	440	520	540	16	18	195	98.5
50WW270	420	440	520	540	16	17	195	98.5
50WW290	420	440	520	540	16	18	195	98,5
50WW310	390	410	510	530	25	27	185	98,5
50WW350	390	410	510	530	25	27	185	98,5
50WW400	380	400	490	510	27	30	170	98,5
50WW470	265	275	420	440	30	32	140	98,5
50WW600	280	295	410	425	40	42	130	98.5
50WW800	255	265	380	390	45	46	105	98.5
50WW1300	230	240	350	360	50	50	100	98,5
20WTG1500	400	415	510	525	22	21	175	97.0
30WGP1600	420	430	520	530	16	18	190	98.0
30WGP1700	395	405	520	530	16	18	190	98,0
50WH470	300	315	440	452	33	34	150	98,5
50WH600	250	265	420	435	38	39	135	98.5

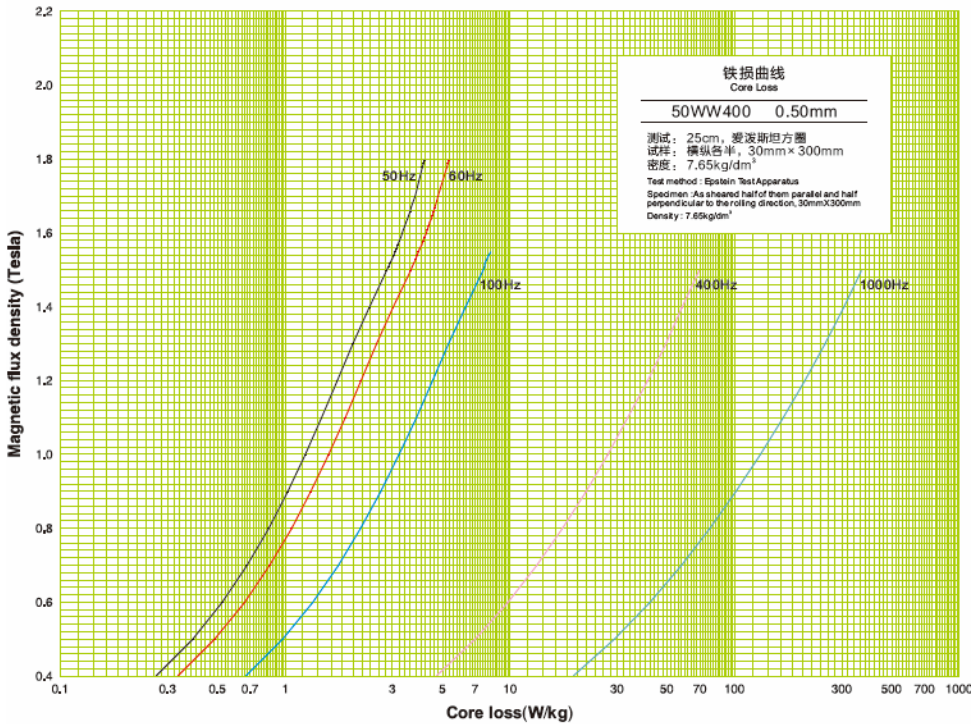
注： a. 检测依据GB/T228、GB/T4340.1、GB/T2522。
b. 以上为典型值，仅作参考不作保证。
c. L—平行于轧制方向，C—垂直于轧制方向。

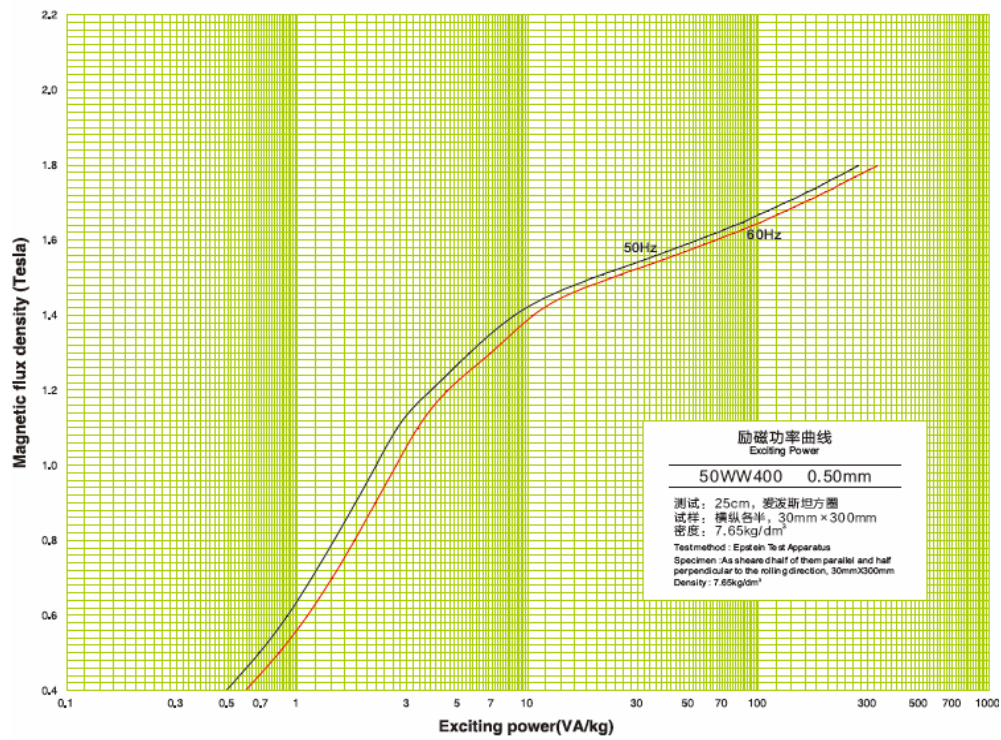
Note: a. Testing standards are GB/T228、GB/T 4340.1、GB/T2522.
b. Above properties are typical values for reference only and not as a guarantee.
c. L—Parallel to the rolling direction. C—Vertical to the rolling direction.

50WW400

B(T)	50Hz	60Hz	100Hz	400Hz	1000Hz	B(T)	50Hz	60Hz
	P(W/kg)	P(W/kg)	P(W/kg)	P(W/kg)	P(W/kg)		P(W/kg)	P(W/kg)
0.40	0.265	0.332	0.667	4.704	19.081	1.60	3.310	4.251
0.50	0.387	0.485	0.973	7.009	29.119	1.61	3.351	4.294
0.60	0.523	0.659	1.322	9.798	41.858	1.62	3.403	4.339
0.70	0.675	0.851	1.720	13.124	57.903	1.63	3.434	4.367
0.80	0.842	1.065	2.156	17.099	77.542	1.64	3.472	4.486
0.90	1.025	1.299	2.659	21.761	101.020	1.65	3.568	4.522
1.00	1.226	1.557	3.210	27.202	129.772	1.66	3.597	4.573
1.10	1.448	1.846	3.834	33.370	164.232	1.67	3.633	4.616
1.20	1.703	2.170	4.523	40.919	204.660	1.68	3.653	4.712
1.30	1.997	2.547	5.308	49.355	251.992	1.69	3.674	4.755
1.40	2.367	3.019	6.332	58.436	305.877	1.70	3.777	4.782
1.50	2.823	3.612	7.576	69.422	366.529	1.71	3.813	4.810
1.51	2.877	3.668	7.696			1.72	3.833	4.920
1.52	2.923	3.730	7.739			1.73	3.853	4.955
1.53	2.978	3.800	7.900			1.74	3.888	4.997
1.54	3.026	3.849	8.026			1.75	3.990	5.097
1.55	3.077	3.915	8.213			1.76	4.032	5.162
1.56	3.128	3.951				1.77	4.051	5.181
1.57	3.166	4.072				1.78	4.070	5.223
1.58	3.216	4.109				1.79	4.113	5.287
1.59	3.264	4.145				1.80	4.158	5.369

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
20	0.058	80	0.740	402	1.391	1508	1.533	7036	1.732
30	0.115	90	0.836	502	1.419	2011	1.563	8042	1.755
40	0.211	100	0.914	603	1.440	3017	1.610	9048	1.776
50	0.344	151	1.146	703	1.456	4020	1.648	10051	1.795
60	0.489	201	1.252	804	1.470	5026	1.680		
70	0.624	302	1.345	1004	1.492	6031	1.707		





50WW470

B(T)	50Hz	60Hz	100Hz	400Hz	1000Hz	B(T)	50Hz	60Hz
	P(W/kg)	P(W/kg)	P(W/kg)	P(W/kg)	P(W/kg)		P(W/kg)	P(W/kg)
0.40	0.274	0.348	0.728	5.456	22.206	1.60	3.731	4.824
0.50	0.403	0.513	1.067	8.183	34.168	1.61	3.792	4.893
0.60	0.552	0.703	1.458	11.513	49.320	1.62	3.851	4.963
0.70	0.719	0.920	1.909	15.556	68.577	1.63	3.919	5.033
0.80	0.907	1.163	2.419	20.392	92.573	1.64	3.965	5.126
0.90	1.115	1.433	2.994	26.122	121.512	1.65	4.035	5.195
1.00	1.345	1.736	3.649	32.848	157.092	1.66	4.081	5.264
1.10	1.603	2.071	4.392	40.691	199.991	1.67	4.150	5.358
1.20	1.892	2.447	5.212	49.853	249.627	1.68	4.198	5.426
1.30	2.231	2.880	6.129	60.518	308.768	1.69	4.266	5.496
1.40	2.641	3.430	7.271	72.049	376.396	1.70	4.360	5.612
1.50	3.149	4.059	8.601	85.269	452.016	1.71	4.383	5.659
1.51	3.205	4.133	8.638			1.72	4.452	5.728
1.52	3.244	4.203	8.827			1.73	4.498	5.798
1.53	3.318	4.279	9.066			1.74	4.568	5.868
1.54	3.377	4.356	9.152			1.75	4.638	5.960
1.55	3.429	4.425	9.452			1.76	4.670	6.030
1.56	3.485	4.502				1.77	4.730	6.123
1.57	3.538	4.578				1.78	4.800	6.192
1.58	3.606	4.648				1.79	4.845	6.255
1.59	3.668	4.731				1.80	4.939	6.330

Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax	Hmax	Bmax
[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]	[A/m]	[T]
20	0.083	80	0.892	402	1.412	1508	1.567	7036	1.765
30	0.214	90	0.960	502	1.442	2011	1.600	8041	1.787
40	0.396	100	1.015	603	1.466	3017	1.647	9047	1.807
50	0.564	151	1.188	703	1.484	4020	1.684	10052	1.826
60	0.699	201	1.275	803	1.499	5025	1.716		
70	0.807	302	1.365	1005	1.524	6030	1.742		

