



铜陵精迅特种漆包线有限责任公司

**TONGLING JINGXUN
SPECIAL ENAMELLED WIRE CO.,LTD.**

Aluminum Flat Wire

铝扁线

产品1说明 Flat Wire Introduction-Example 1



产品型号—180 ~ 200级漆包铝扁线（平绕）

Product type - Polyester(imide) overcoated polyamideimide enamelled round aluminum twisted wire

线规范围：5mm² ~ 70mm²

Wire range: 5mm² ~ 70mm²

应用领域：

干式变压器、油浸变压器、电流互感器、电压互感器等。

产品特点：

优越的耐溶剂性、耐电压强度高，电阻不平衡率低。

Application areas: dry-type transformers, oil-immersed transformers, current transformers, voltage transformers.

Product features: superior solvent resistance, high voltage strength, low resistance unbalance rate.



产品2说明 Flat Wire Introduction-Example 2



产品型号—200~240级漆包铝扁线（立绕）

Product type - 180 ~ 200 grade enamelled aluminium flat wire (flat wound)

线规范围: $5\text{mm}^2 \sim 70\text{mm}^2$

Wire range: $5\text{mm}^2 \sim 70\text{mm}^2$

应用领域:

光伏逆变器、新能源、通信网络、高端工业、电抗器、电感线圈等

产品特点:

耐电压好、优越的机械强度（延伸率30%以上、抗拉强度100MPa以上）、

耐高温冲击（240℃）、漆膜附着力优异（2a 2b立绕弯曲漆膜不开裂）

Application areas: photovoltaic inverters, new energy, communication networks, high-end industry, reactors, inductors.

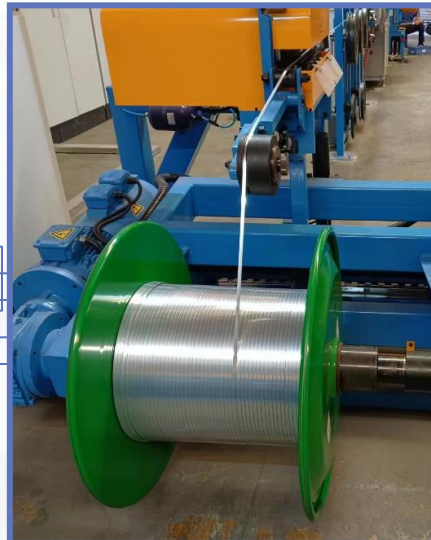
Product features: good voltage resistance, superior mechanical strength (elongation of more than 30%, tensile strength of more than 100MPa), high temperature impact resistance (240 °C), paint film with excellent adhesion (2a 2b bending of the paint film without cracking)



生产流程 Production process



Pay-off 放线 → Extrusion 挤压 → Take-up 收线 → Semi-finished products 成品



挤压是将原材料铝杆 (φ9.5mm)挤压成半成品裸铝扁线的过程，针对各种裸铝扁线规格，基于最后成品铝扁线的规格要求，我司均可以根据标准或者客户需求满足。

Extrusion is the process of extruding raw aluminium rods (φ9.5mm) into semi-finished bare aluminium flat wires. For various specifications of bare aluminium flat wires, based on the specifications of the final finished aluminium flat wires, we can satisfy them according to the standards or customers' demands.

生产流程 Production process

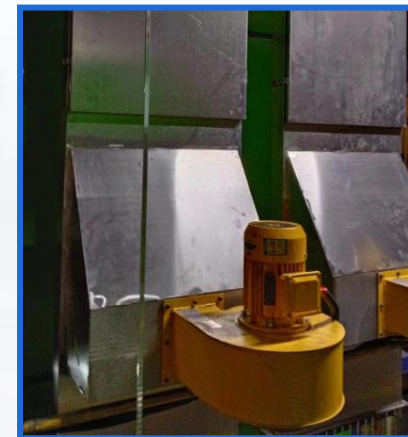
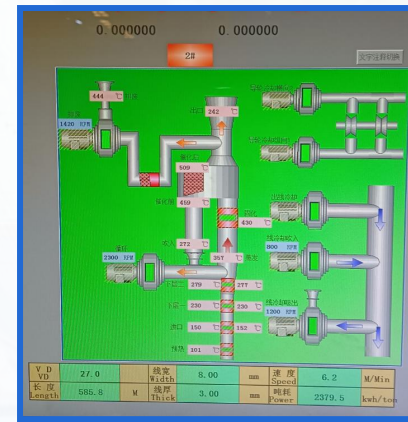
Pay-off 放线



Coating 涂漆



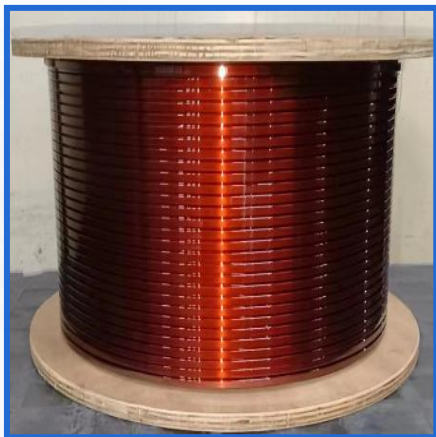
Backing 烘焙



Cooling 冷却

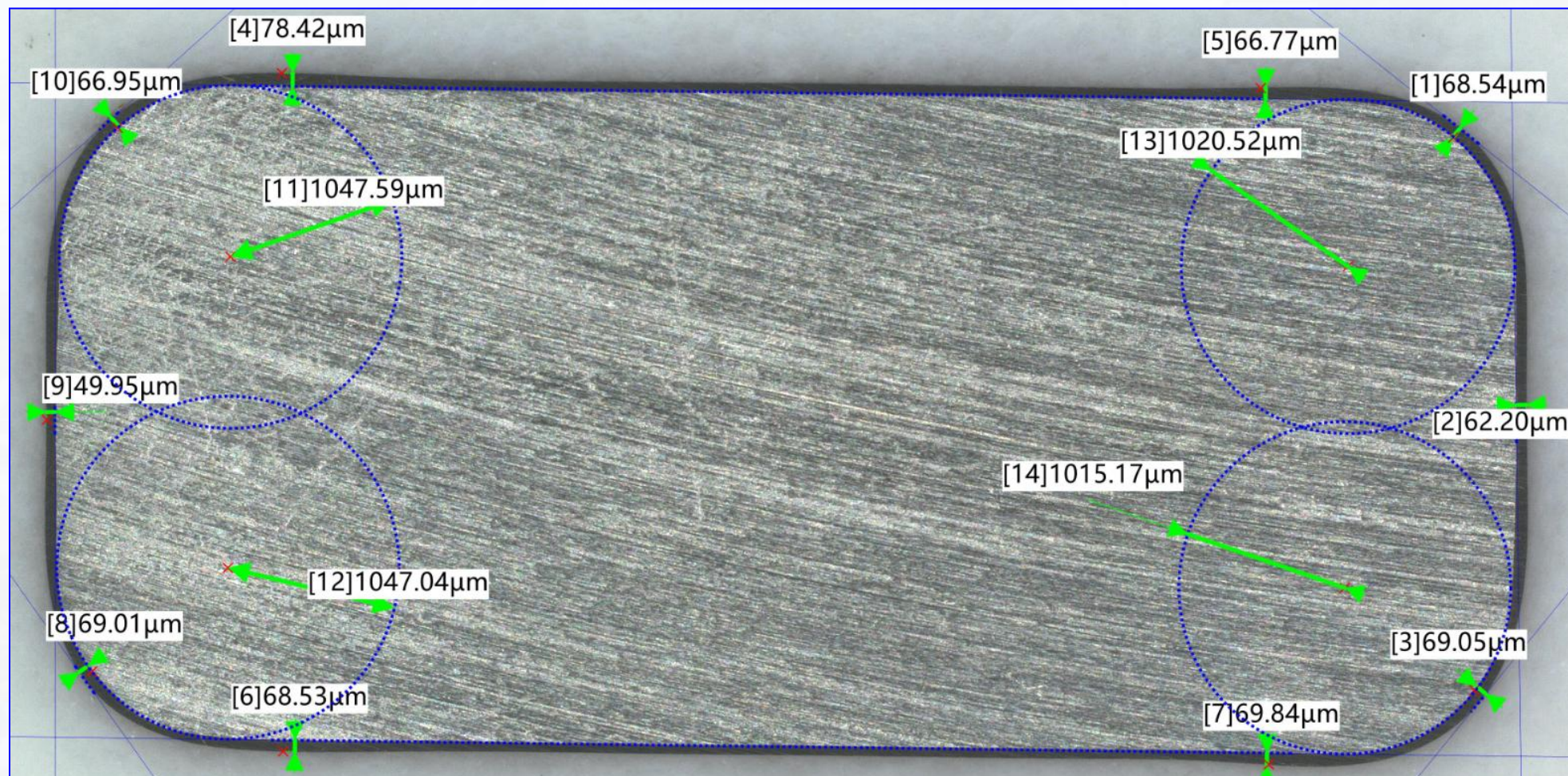


Take-up 收线



Finished Product 成品

铝扁线横截面图-Material composition structure



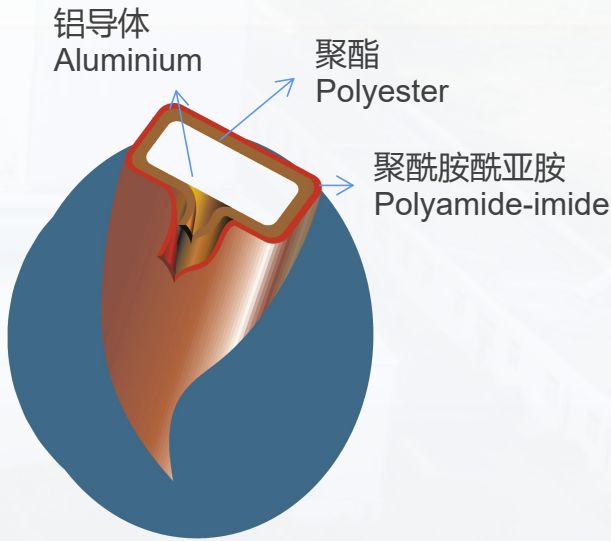
变压器用扁线技术参数 Technical Specification



外形尺寸 Overall dimensions	A side (narrow)	≤3.200 mm	3.167
	B side (width)	≤8.240 mm	8.165
导体尺寸 Conductor dimensions	A side (narrow)	2.970 ~ 3.030 mm	3.012
	B side (width)	7.930 ~ 8.070 mm	8.015
	导体圆角半径 (r角) Conductor corner radius (r corner)	0.750 ~ 1.250 mm	1.000
漆膜厚度 (双面) Film thickness (both sides)	窄边 (narrow) ≥0.120 mm ≤0.170 mm	155	
	宽边 (width) ≥0.120 mm ≤0.170 mm	150	
室温击穿电压 (Kv) Cut through voltage at room temperature	≥2.0KV	6.14/6.56/5.24/6.29/6.50	
盐水针孔 Saline pinhole	≤0个	0个	
20℃电阻 resistance value at 20℃	≤0.00122Ω/m	0.0011976Ω/m	
柔韧性 (圆棒弯曲) flexibillity	窄边: 4倍窄边弯曲, 漆膜不开裂 Narrow edge: 4x narrow edge bending, no cracking of paint film	OK	
	宽边: 4倍宽边弯曲, 漆膜不开裂 Wide edge: 4 times wide edge bending, no cracking of paint film		
附着性 (拉伸15%) adhesion	缩漆 Shortened paint film < b	OK	
伸长率 elongation	≥20%	33	
回弹角 Angle of rebound	≤ 5°	4.3	
热冲击 heat shock	220℃, 60min, 弯曲样式不开裂 bending without cracking	OK	

变压器扁线-Transformer

(Q(ZY/XY)LB-2/200)
3. 00*8.00mm



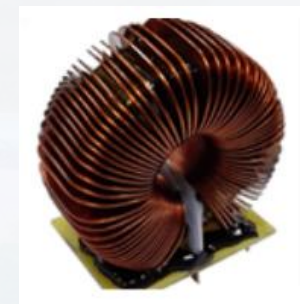
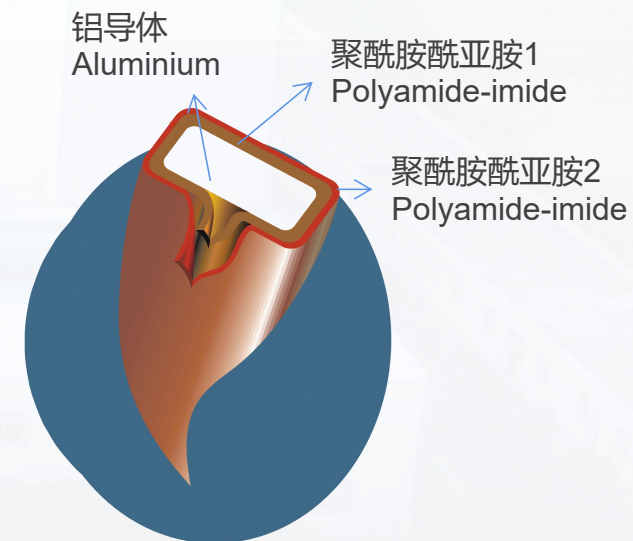
光伏用扁线技术参数 Technical Specification



外形尺寸 Overall dimensions	A side (narrow)	≤2.700mm	2.64
	B side (width)	≤14.270mm	14.147
导体尺寸 Conductor dimensions	A side (narrow)	2.470 ~ 2.530 mm	2.513
	B side (width)	13.900 ~ 14.100 mm	14.009
	导体圆角半径（r角） Conductor corner radius (r corner)	0.600 ~ 1.000 mm	0.822
漆膜厚度（双面） Film thickness (both sides)		窄边（narrow）≥0.080mm ≤0.170 mm	127
		宽边（width） ≥0.080 mm ≤0.170 mm	138
室温击穿电压（Kv） Cut through voltage at room temperature		≥2.0KV	4.9/5.4/5.7/5.11/5.8
盐水针孔 Saline pinhole		≤0个	0个
20℃电阻 resistance value at 20℃		≤0.00083Ω/m	0.000816Ω/m
柔韧性（圆棒弯曲） flexibillity		窄边：2倍窄边弯曲，漆膜不开裂 Narrow edge: 2x narrow edge bending, no cracking of paint film	OK
		宽边：2倍宽边弯曲，漆膜不开裂 Wide edge: 2 times wide edge bending, no cracking of paint film	OK
附着性（拉伸15%） adhesion		缩漆 Shortened paint film < b	OK
伸长率 elongation		≥20%	40
回弹角 Angle of rebound		≤ 5°	4.3
热冲击 heat shock		240℃， 60min,弯曲样式不开裂 bending without cracking	OK

光伏扁线-Photovoltaic

(Q(ZY/XY)LB-2/200)
2. 50*14.00mm



感谢您的观看！
Thanks for your attention!