



Precise Rectangular Wire

FURUKAWA ELECTRIC

1. Features

High Quality

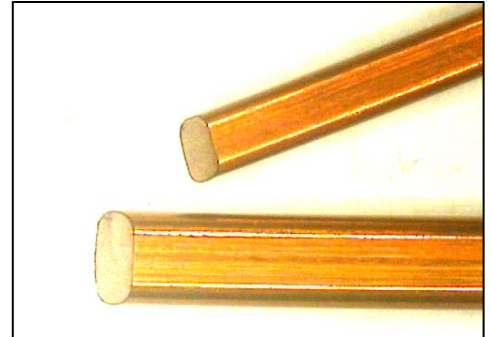
- Continuous tandem manufacturing process
- Same on-line quality monitoring system same as round wire
- Wire forming by precise Dies: smooth conductor surface
- Film coating by precise enameling Dies: Uniform film thickness & excellent concentricity
- Excellent softness for coil winding

Low Price

- by continuous tandem manufacturing process

High performance and variation

- Wide selection for the film construction (Dual/Triple coat is also available.)
- The same enamel with conventional round wire is also available.



2. Product Range(Width-Thickness)

1) Equivalent size range for the round wires: 1.0 ~ 2.8 mm diameter on round wire

2) Range for Width / Thickness: 1:1.2~1:2.0

3) Thickness: 0.7 mm<

r	幅 厚	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	
0.35	0.7																												
0.4	0.8																												
0.4	0.9																												
0.4	1.0																												
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0.6	2.0																												
0.6	2.1																												
0.6	2.2																												
0.6	2.3																												
0.6	2.4																												

Width

Thickness

※Please contact us for the availability of the wire out of range

3. Application & Usage

- Automobile Parts (Motors etc.)
- Conventional Motors and Transformers

Please Contact to:

FEMCO MAGNET WIRE
 1900 Earlywood Drive, Franklin, IN 46131, USA
 Tel: 317-738-3549 Fax: 317-738-7750
 E-mail shiigi@femcomagnetwire.com

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1. General Characteristics

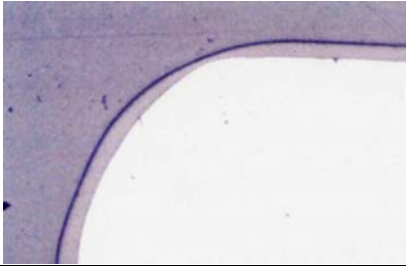
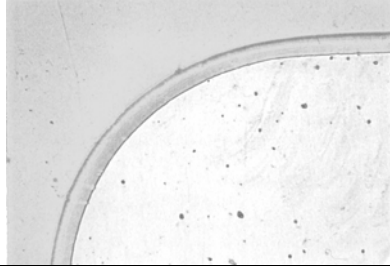


Each characteristic is quite similar to the round wire for equivalent conductor size

		AIW 1.5×2.4 r=0.6	AIW φ2.0	Method
Type of Enamel		AIW	AIW	-
Overall Dimension (mm)	t	1.578	2.078	JISC3003 5.
	w	2.479	—	
Conductor Dimension(mm)	t	1.498	1.998	
	w	2.399	—	
Film Thickness(mm)	t	0.040	0.040	
	w	0.040	—	
Cross section (mm ²)		3.28	3.13	-
Resistance(Ω/km)		5.240	5.495	JISC3003 19.
B.D.V.(kV)		7	7	JISC3003 11.(3)
Flexibility		d=1.5 Good	1d Good	JISC3003 8.
Heat Shock(220□×1h)		d=1.5 Good	1d Good	JISC3003 13.
Cut-thru. Temp.(□)		435	430	JISC3003 12.(2)(3)
Pin-hole(/5m)		0	0	JISC3003 6.
0.2% Yield strength(MPa)		105	105	-
Resistance to solvent		8 H	8 H	JISC3003 14.

2. Features

• Conductor forming and enamel coating by precisely designed Drawing Dies and Enameling Dies

Comparison between conventional method and our newly developed method(1.5mm×2.4mm)

		Conventional process	Newly Developed process
Conductor	Conductor	Lack of smoothness at the corner	Very smooth at the corner
	Film	Concentricity at the corner is very poor	Excellent concentricity around the conductor
			
Abrasion resistance		40 times	100 times
Flexibility			
		d=1.5 Edge width bend Crack	d=1.5 Edge width bend No crack

