ERİKOĞLU
emaye bakır tel sanayi a.ş.

Quality in enamelled copper wire

Erikoğlu Enamelled Copper Wire Production Co.Inc. is one of the leading enamelled copper wire producer in TURKEY.

Our company is using the "in-line" system which is the top advanced level in enamelled copper wire production technology.

We can produce enamelled copper wire acc. To national and international standards such as IEC and NEMA.

The aim of our company is to produce high quality enamelled copper wire. Quality control team strictly applies quality control tests at every step of production.

Erikoğlu Enamelled Copper Wire Production Co. Inc. is always the disposal of its clients to provide technical assistance and share its vas experience with them.

We are in every point of your life

		ERSOL-155	ERSOL155 N	ERSOL 180	ERTHERM SOL	ERTHERM 200	ERTHERM 200 N	ERAMIDE 220	ERACETAL 120
THERMAL CLASS		F (155ºC)	F (155°C)	H (180ºC)	H (180°C)	H (200ºC)	HC (200ºC)	HC(220°C)	(120°C)
INTERNATIONAL REFERENCE STANDARDS	IEC	IEC 60317-20	IEC 60317-21	IEC 60317-51	IEC 60317-23	IEC 60317-8	IEC 60317-22	IEC 60317-13	IEC 60317 -12
	NEMA	MW 79C	MW 80C	MW 82C	MW 77C	MW 30C: - MW 74C	MW 76C	MW 35C- MW 73C	MW 15C
TYPE OF INSULATION	BASE COAT	MODIFIED POLYURETHANE	MODIFIED POLYURETHANE	MODIFIED POLYURETHANE	POLYESTERAMIDE	THEIC MOD. POLYESTERIMIDE	THEIC MOD. POLYESTERIMIDE	THEIC POLYESTERIMIDE	POLYVINYL ACETAL
	TOP COAT	–	POLYAMIDE	–	–	–	POLYAMIDE	POLYAMIDE-IMIDE	–
STANDART PRODUCTION RANGE	Grade 1 and 2	0,05 - 0,80	0,05 - 0,80 mm	0,05 - 0,80 mm	0,05 - 0,80 mm	0,15 - 4,00 mm	0,15 - 4,00 mm	0,16 - 3,55 mm	0,20 - 2,50 mm
PROPERTIES		Very good solderability High frequence resistance High thermal resistance	Very good solderability High frequence resistance High thermal resistance Smooth surface and winding	Very good solderability Thermal stability Pinhole resistant High thermal resistance	Very good solderability Thermal stability Pinhole resistant High thermal resistance	Good mechanicall prop. High thermal resistance Resistance to transformer oil Suitable for high speed winding Very good resistance to refrigerants	Good mechanical prop. High thermal resistance Good chemical resistance Resistance to transformer oil Very good resistance to refrigerants Suitable for high speed winding	High thermal resistance High mechanical properties High chemical properties Suitable for high speed winding Very good resistance to refrigerants Good transformer oil resistance	High chemical resistance Oil proof Good mechanical prop. High flexibility High resistance to abrasion
APPLICATION		Communication apparatus Electronic devices&meters Transformers Micromotors & Transformers Relays & Selenoids	Communication apparatus Electronic devices&meters Transformers Micromotors & Transformers Relays & Selenoids	Communication apparatus Electronic devices&meters Transformers Micromotors & Transformers Automotive Components Selenoids	Communication apparatus Electronic devices&meters Transformers Micromotors & Transformers Automotive Components Selenoids	Motor&Small motor Manufacturers Transformer Manufacturers Alternators	Motor&Small motor Manufacturers Transformer Manufacturers Alternators	Oil filled transformers High power motors Electromagnetic coils High temperature transformers Refrigerator compressor Alternators	Oil filled transformers Distribution transformers General motors
SOLDERING TEMPERATURE		375 °C / 1-2 sec	375 °C / 1-2 sec	375 °C / 1-2 sec	470 °C / 2-3 sec	–	–	–	–
CUT THROUGH TEMPERATURE		>220ºC	>220ºC	> 250 °C	> 265 °C	>320ºC	> 320°C	> 320°C	> 280°C
HEAT SHOCK (IEC STANDARDS)		>175°C	>175°C	> 180 °C	> 200 °C	>220ºC	> 200°C	>220°C	> 155°C
TEMPERATURE INDEX		155ºC	155ºC	180ºC	180°C	200ºC	200ºC	220°C	120°C

Not contractual document. Above mentioned date are for information only.
We can produce wires in accordance with other requiments, upon request.

Measurement table (IEC 317-0-1)

Copper wire				Standard enamelled wires			
Nominal conductor diameter	Tolerance Conductor ±	Linear resistance Ω/m at 20 °C		Minimum increase mm		Maximum overall diameter mm	
mm	mm	min	max	Grade 1	Grade 2	Grade 1	Grade 2
0,045		9,705	11,79			0,055	0,061
0,050		7,922	9,489			0,060	0,066
0,056		6,316	7,565			0,067	0,074
0,063		5,045	5,922			0,076	0,083
0,071	0,003	3,941	4,747	0,007	0,012	0,084	0,091
0,080	0,003	3,133	3,703	0,007	0,014	0,094	0,101
0,090	0,003	2,495	2,900	0,008	0,015	0,105	0,113
0,100	0,003	2,034	2,333	0,008	0,016	0,117	0,125
0,112	0,003	1,632	1,848	0,009	0,017	0,130	0,139
0,125	0,003	1,317	1,475	0,010	0,019	0,144	0,154
0,140	0,003	1,055	1,170	0,011	0,021	0,160	0,171
0,160	0,003	0,8122	0,8906	0,012	0,023	0,182	0,194
0,180	0,003	0,6444	0,7007	0,013	0,025	0,204	0,217
0,200	0,003	0,5237	0,5657	0,014	0,027	0,226	0,239
0,224	0,003	0,4188	0,4495	0,015	0,029	0,252	0,266
0,250	0,004	0,3345	0,3628	0,017	0,032	0,281	0,297
0,280	0,004	0,2676	0,2882	0,018	0,033	0,312	0,329
0,315	0,004	0,2121	0,2270	0,019	0,035	0,349	0,367
0,355	0,004	0,1674	0,1782	0,020	0,038	0,392	0,411
0,400	0,005	0,1316	0,1407	0,021	0,040	0,439	0,459
0,450	0,005	0,1042	0,1109	0,022	0,042	0,491	0,513
0,500	0,005	0,08462	0,08959	0,024	0,045	0,544	0,566
0,560	0,006	0,06736	0,07153	0,025	0,047	0,606	0,630
0,630	0,006	0,05335	0,05638	0,027	0,050	0,679	0,704
0,710	0,007	0,05298	0,04442	0,028	0,053	0,762	0,789
0,800	0,008	0,03305	0,03500	0,030	0,056	0,855	0,884
0,900	0,009	0,02612	0,02765	0,032	0,060	0,959	0,989
1,000	0,010	0,02116	0,02240	0,034	0,063	1,062	1,094
1,120	0,011			0,034	0,065	1,184	1,217
1,250	0,013			0,035	0,067	1,316	1,349
1,400	0,014			0,036	0,069	1,468	1,502
1,600	0,016			0,038	0,071	1,670	1,706
1,800	0,018			0,039	0,073	1,872	1,909
2,000	0,020			0,040	0,075	2,074	2,112
2,240	0,022			0,041	0,077	2,316	2,355
2,500	0,025			0,042	0,079	2,578	2,618
2,800	0,028			0,043	0,081	2,880	2,922
3,150	0,032			0,045	0,084	3,233	3,276
3,550	0,036			0,046	0,086	3,635	3,679
4,000	0,040			0,047	0,089	4,088	4,133

1) On the table are not mentioned the intermediate diamers belonging to the R40 serie, these diameters are produced only on request.
2) For the tolerances are not fixed the relevant figures for the acceptance only the linear resistance value are required.
3) Values not fixed.