
The future of ENERGY
HIGH
FREQUENCY
LITZ WIRE
MAIN APPLICATIONS
High Frequency Transformers
Windings for Powertrain Systems
Transformers for UPS
DE ANGELI PRODOTTI
every wire, everywhere.
www.deangeliprodotti.com

DE ANGELI PRODOTTI
every wire, everywhere.

Working in High Frequency

High frequency applications are increasingly widespread in the world of power electronics, their use greatly reduces dimensions.

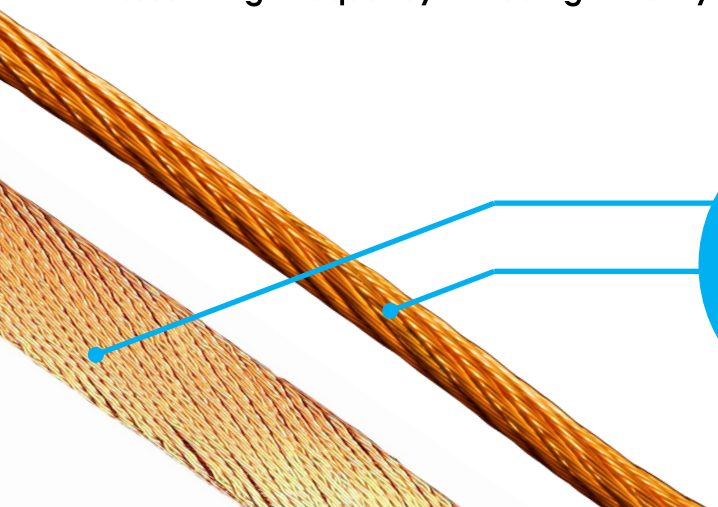
Litz cables (or **Litz wires**) fulfill this purpose perfectly. They consist of many strands of thin enamelled round wires, which are twisted and intertwined with each other.

The **intertwining of hundreds or thousands of elementary conductors** isolated from each other so this eliminates the skin effect and to work very well at frequencies up to 1 MHz.

Avoid the skin effect!

The concept behind the Litz cable is very simple: to constitute a stranded wire in which the fundamental units are enamelled wires with a diameter smaller than the skin effect.

In this way Litz wire will not suffer from this phenomenon and **the losses in high frequency will be significantly reduced**.



SHAPE

Round and Rectangular

Section up to 330 mm²

OUR SOLUTIONS

Individual wire

Material	Spec. Resistance (Ωmm²/m)	Density (Kg/m³)	Diameter (mm)
Copper	0.0171	8890	≥ 0.05
Aluminium	0.0278	2700	≥ 0.2

Insulation type for the individual wires

Name	Enamel type	Thermal class (°C)	Solderability
Solvest F	PU	155	yes
Solvest H	PU	180	yes
Thervest/Adhexal	PEI+PAI	200	-

Enamel build: Grade 1, Grade 2, Grade 3

External insulation type

Type	Thickness (µm)
Polyester	23
Nomex T410	50
Polyimide	25 - 38 - 50
Conductofol	90
Mica-Glass	100
And much more!	-

Silicone extrusion after taping is possible

All our products are developed according to customer specifications in compliance with **IEC** and **UL** standards

Range of frequency (kHz)		Nominal diameter of single wire (mm)	
From	Up to	From	Down to
0.06	1	0.400	0.254
1	10	0.254	0.200
10	20	0.200	0.127
20	50	0.127	0.102
50	100	0.102	0.079
100	200	0.079	0.063
200	350	0.063	0.050
350	850	0.050	0.040
850	1400	0.040	0.030
1400	3000	0.030	0.020