

About the advantages of foil coils

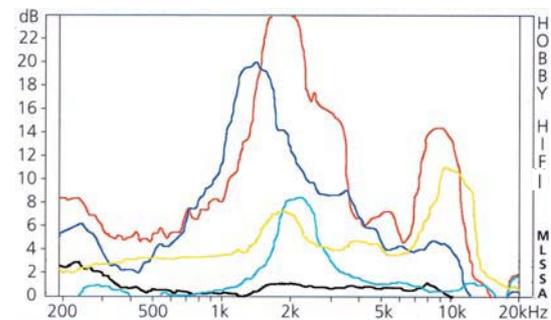
Winding upon winding, the **foil coil** is the most physically ideal coil type. This can be seen for example in the quality of the coil that remains constant for up to 100 kilohertz. Moreover, the undesired capacitive part of this coil is particularly low so that very high frequencies are also effectively blocked. In addition, the large surface area of the foil also improves the effective conductivity for alternating current (skin effect).

The high mechanical stability of the design is also remarkable: Due to the large contact surface between the individual windings and the tough-elastic isolation of the polypropylene foil, the vibrations of the individual windings are effectively eliminated. This benefit can be easily identified in the diagram shown below. Comparatively, foil coils clearly show the least vibration. For the music reproduction this means the lowest possible level of distortion and tonal distortion of the signal due to microphone effects.

With their excellent electrical and mechanical properties, the **foil coils** aid in the reproduction of music, making it clearly more dynamic and faithful to detail overall.



Vibrations of coils



Average coil (wire 1,0 mm)

Unimpregnated Mundorf coil (wire 1,4 mm)

Baked varnish coil (wire 1.4 mm)

Mundorf vacuum-impregnated coil (wire 2.0 mm)

Mundorf copper-foil coil (AWG 10)

Type	foil height	conductor cross-section [mm ²]	△ round wire-Ø [mm]	H [mm]	f [mm]	l [mm]
...fc16	17 mm	1,30	1,29	24±2	9±1	<10 mH : 100 >8,2 mH : 140
...fc14	28 mm	2,08	1,63	34±2	14±2	<1,5 mH : 100 >1,2 mH : 140
...fc12	44 mm	3,30	2,05	52±2	13±2	<1,2 mH : 100 <2,4 mH : 170 >2,4 mH : 190
...fc10	70 mm	5,26	2,58	77±2	18±2	<0,82 mH : 100 <2,70 mH : 170 >2,20 mH : 190

