High-End Capacitors, Inductors, and Resistors

Capacitors

Mundorf M–Cap Supreme Capacitor

Listening Impression:

The M–CAP SUPREME introduces affordable high-end sound to any quality speaker drivers. It delivers a very spatial sound with plenty of depth and gives good reproduction of the musical nuances. Detail and depth from the high treble right down into the low mid-range becomes more distinct. This is your first step into high-end crossovers. The Supreme is a clear and transparent sounding cap with a good sound stage, providing a good improvement in clarity, focus and dynamics. The degree of improvement is comparable to upgrading to high-end cabling. We were definitely very impressed when we first auditioned them.

Mundorf M–Cap Silver Oil Capacitor

Listening Impression:

Mundorf states: “...wonderfully spacious and detailed sound reproduction ...an even fuller and smoother tonal richness and diversity. This capacitor’s ability to bring out the finest nuances and the subtlest distinctions make the music sound more alive and “juicy”, yet without unnatural emphasis of any individual effects. ...Wonderfully spacious music reproduction... " . Yes, exactly what we felt when we first sampled the Supreme
Silver/Oil capacitors. The air, bloom and the high-end feel just became more apparent. The cap gives heighten attention to music detail and depth throughout from top to bottom. The music presentation is very smooth and liquid. The only drawback is the extremely long burn-in period and the rollercoaster performance while waiting. To overcome this teething problem, we offer a 100-hour, 200-hour or 300-hour burn-in service for a minimal charge.

Listening Impression:

The Silver/Gold in Oil is Mundorf’s current highest offering and they are among one of the best and most exotic capacitors available in the market. They are expensive but honestly, it is worth it. Compared to the Mundorf Silver/Gold, they have better layering and sound even more airy. The spatial soundstage window is opened wider and deeper. They are richer tonally and better layered than the Mundorf Silver/Gold. The Silver/Gold/Oil excels in refinement of highs and micro-details like the like the Mundorf Silver/Gold but takes it a few levels ahead in extension and creates more depth and width as if you have a larger area beyond the confinement of your room or car. Install it and you may never want to remove it.
Duelund VSF Aluminum Capacitor

Listening Impression:

Calm as a sleeping baby. The Duelund VSF capacitors give you that smile the minute you press the play button. The chocolate bar actually tastes better than it looks. One is tempted to close the eyes (although it is not a good idea while driving) and relax in sheer peacefulness as the music flows from the speakers to your ears and down to your heart and soul. The VSF Aluminum is Duelund’s most entry level offering but it still spells high-end at an affordable level. It has less flair and is leaner sounding than some of the other high-end capacitors but they sound very natural and has the tonal that most capacitors are dying to achieve. Compared to the VSF Copper, it sounds more forward and less layered. Nevertheless to say, if you own a really kick-ass high-end speaker driver, you ought to take a bite on these.

Duelund VSF Copper Capacitor

Listening Impression:

We were charmed by this capacitor. The VSF Copper comes across very natural, smooth, clear, open and keeps everything in place in an extremely calm and controlled manner. One may think that this is a boring capacitor like some analog sounding
capacitors in the market but we term it very natural for its ability to deliver dynamics whenever the type of music calls for it. The tonal balance and harmonics is a definite win–win and we love how it sounds with both instruments and human voices. It does not have the depth and wow factor like the Mundorf Silver/Gold/Oil but it makes up for it with its awesome tonality. We were extremely happy with how the imaging and separation of every individual instrument is portrayed with precision rather than cluster. And we just have to stress again, the VSF Copper is exceptionally natural sounding. This is a definite must have for any serious audiophile or music lover.

Duelund Cast Copper Capacitor

Listening Impression:

The Duelund CAST Capacitor is our no holds barred flagship capacitor. The construction builds on the foundation of our Virtual Stack Foil design but does so with the addition of a proprietary WPIO dielectricum which necessitates several days of impregnation under high pressure. We will spare you the technical details but as complicated it may seems, wait till you have heard how it sounds. The cast design helps music flow effortlessly with utmost presence and palpability. The background is pitch black, quiet and extremely calm. Music is delivered in a timely and high-end fashion. It is a seriously no games, just music and the best that money can buy when it comes to capacitors for passive crossovers. It is available as pure copper or pure silver.
Feast your eyes on the dual chassis 300 uF CAST caps. One cap weighs in at +25 kilograms and contains nigh on 1 kilometre of pure metal foil. Available in copper or silver as standard other configurations available on request.

Inductors
**Mundorf Air Coils / Inductors**

Mundorf is regarded as specialist in high-end components. All of our Mundorf coils are made of copper lacquer wire with a purity of > 99.995%. The coil body is made of glass fibre reinforced polyamide. The wire ends are tinned and labelled. Inductance is measured at 25 degrees Celsius; tolerance is +/- 3%. Air coils (i.e. coils without a ferro-magnetic core) are absolutely distortion-free, which on the face of it makes them ideal for all audio applications. The trouble is, their electrical resistance increases with their inductance. There are two solutions to this problem: One can either use very thick windings (this is why we use windings with wire up to 3mm in diameter) or coils with cores. Lower cost and smaller size are also common reasons for choosing cored coils but we choose to use only air coils.

**Mundorf Flat Copper Foil Inductors**

Mundorf manufactures an oxygen free copper foil coil (OFC copper) that exhibits consistent performance even beyond 100 kHz. The large surface reduces the skin effect (higher frequencies are carried on the copper surface). Additionally, the coil has a tough, yet elastic isolation made from polypropylene foil ensuring a high mechanical
stability and, therefore, suppressing vibrations efficiently and effectively. Available in 16, 14, 12 and 10 gauge.

**Duelund CAST Inductor**

The Duelund CAST Air Core Inductor is our uncompromising take on inductors. The construction builds on the foundation of our foil design but does WPIO dielectricum which necessitates several days of impregnation under high pressure. This creates a form with incredible damping properties giving a mechanical stability hitherto unheard of. This stability is then further augmented by a rigorous casting process, keeping the inductor perfectly stable. On top of this casting process, a ring of hard pressed paper strengthens the damping properties of the design helping music flow effortlessly. The Duelund CAST Inductor is simply without peers. Available as pure copper or pure silver.

**Resistors**

Thus far the resistor has been regarded as a necessary evil, something that was needed out of necessity but scorn for its negative impact on the fidelity of the signal. However, this is not true with the high-end resistors that we carry.

High power resistors are used in crossover networks to adjust the levels of individual speaker units, and they are also used in oscillator circuits and equalisers. Their basic job is to convert surplus or unwanted electrical power into heat. One of the most important specifications of a resistor is thus its power handling capacity, which is expressed in watts.
Resistors' residual inductance is also relevant for tweeter circuits. Ordinary ceramic resistors consist of an insulator body cast around a wire winding. At very high frequencies this winding can behave like a coil, blocking the corresponding frequencies. Because of this we recommend using at minimum Mundorf metal oxide resistors for tweeters. These components don't have any windings; instead, the resistance is made of a conductive metal oxide layer applied to a substrate. This design has virtually no inductance. If you are into serious high-end, you can consider the Mundorf M-Resist Supreme or Duelund Carbon/Silver Resistors.

**Mundorf Metal Oxide Resistors**

Metal oxide layer resistors have no residual inductance. This means that they should always be used for all applications calling for high transient rise times, such as mid-range speakers and tweeters. Mundorf metal oxide MR10 resistors have a continuous power rating of 10–watts but their peak capacities are much higher. Mundorf metal oxide MR3 resistors have a continuous power rating of 2.5–watts but their peak capacities are much higher. Size: L =17mm, D=6 mm, Wire 0.8 x 30 mm

**Duelund Carbon/Silver Resistor**

The world of resistors has changed with the introduction of the Duelund Coherent Audio Resistor. When designing this component the task was that the voicecoil of the speaker and the resistor was viewed as a whole rather than two separate entities. The result is a resistor which seemingly has no sound of its own and it allows the drivers to perform at their very best. Duelund believes in their "humble" opinion is that this
resistor is the best "bang for the buck" upgrade available. Simply replace the resistor in series with your tweeter for unparalleled transparency and dynamic ability.

Mundorf M–Resist Supreme Resistor

For usage in high end applications Mundorf offers Mundorf Resistor Supreme.
The dimensions of the resistor are 51 x 14 x 24 mmRated power: 20 Watt Tolerance: +/-2%

Source: http://www.co-bw.com/Audio_High_End_Capacitors.htm