

FURUTECH

PURE TRANSMISSION



Incorporating NCF

Project V1

Alpha OCC-DUCC / Silver-Plated α (Alpha) OCC Conductors
Featuring NCF & Carbon Fiber Particle Composite Materials

Furutech's Top-of-the-line High Performance Power Cord



All audiophiles search for the same qualities: Verisimilitude to the original event, a sense of engagement promoting suspension of disbelief, a visceral immersion in the audio video experience. They also know that everything in the signal path makes a difference, and that which we see, hear and experience is, in a very direct way the AC power itself.

In fact, the AC supply is directly in the signal path. As amplifiers transfer energy to speakers it draws down storage capacitors by exactly the same amount. The capacitors try to keep fully charged by drawing energy from rectifiers that turn the AC into DC from the transformer that draws power through the wall. Ultimately everything you see, hear and experience is the AC that must be identical to let's say an amplifier's output, and that AC travels through

the power cord! That's why they're as important as any cable in a system because they carry the same signal.

Furutech has received enthusiastic reports of significant improvements with every type of audio, video and display device.

Furutech's Nano Crystal² Formula, also known as NCF, has resulted in a number of truly innovative and effective products over the past few years. NCF features a special crystalline material that has two distinct properties—it generates negative ions that eliminate static, and it converts thermal energy into far infrared.

When combined with nano-sized ceramic particles and carbon powder, these crystals become the ultimate electrical and mechanical damping material. Created by Furutech, NCF is found exclusively in Furutech products and nowhere else.

Furutech's beautifully crafted Project V1 power cord is an engineering marvel and the culmination of over 30 years research and design into the pure transmission of AC power. The Project V1 power cord incorporates Furutech revolutionary NCF antistatic and antiresonance material and a 3 concentric layer combination of Silver coated Alpha-OCC conductors and Alpha-DUCC conductors, a refined balanced mix of two of the best conductors Furutech has found for high end performance sound reproduction. Along with the highest-grade materials, the double shielded, double insulated Project V1 also utilizes a special hybrid polyethylene insulation that incorporates a ceramic-carbon powder damping material for ultimate power transmission cable.

The Project V1 results are extremely fine resolution down and through the very low noise floor, improved sound staging and image palpability, a musical, attractive, midrange, tight and controlled bass, plus power and dynamics to spare.

The Project V1 power cord features special connectors, exclusive to this power cord: an IEC connector, male AC connector and Cable Damping rings that incorporate Furutech's special antistatic and antiresonance NCF material combined with special high-grade nylon insulation. The housings of these special connectors and Damping Rings are formed with 4-layer hybrid NCF carbon fiber finished with a special hardened clear damping coating.

Connector conductors are formed with nonmagnetic rhodium plated α (Alpha) pure copper secured in bodies insulated with Furutech's special antistatic and antiresonance NCF material - NCF allows for the transmission of pure uncolored power delivering improvements in the depth and focus of the sound stage, harmonics, and tonal balance. Low frequencies are cleaner, with a greater sense of definition made possible by a lowered noise floor.

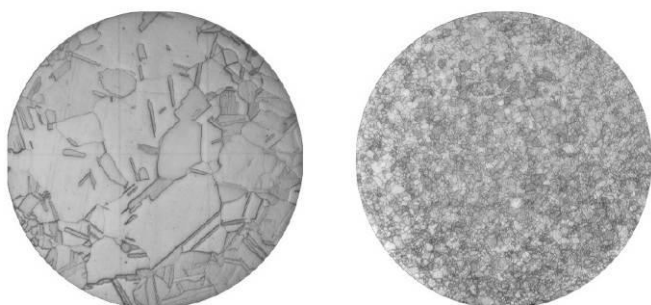
D.U.C.C. (Dia Ultra Crystallized Copper)

α (Alpha) OCC –DUCC is constructed using a combination of DUCC Ultra Crystallized High Purity Copper and Furutech’s world famous Pure Transmission α (Alpha)-OCC.

Furutech DUCC Ultra Crystallized High Purity Copper -- supplied and regulated with strict quality and supply control by Mitsubishi Materials Industries -- is one of the best conductors Furutech engineers have found for signal transmission.

Mitsubishi process this extremely pure oxygen-free copper with new technology that optimally aligns the crystals while reducing the number of crystal-grain boundaries resulting in a tremendously efficient conductor. Furutech combines DUCC with Furutech’s world famous Pure Transmission α -OCC and treats this optimized dual conductor configuration with Furutech’s Alpha Super Cryogenic and Demagnetizing process to take purity and conductivity a significant step further.

Mitsubishi Materials designed the new conductor to optimally align the copper crystal grain structure in addition to reducing crystal grain boundaries

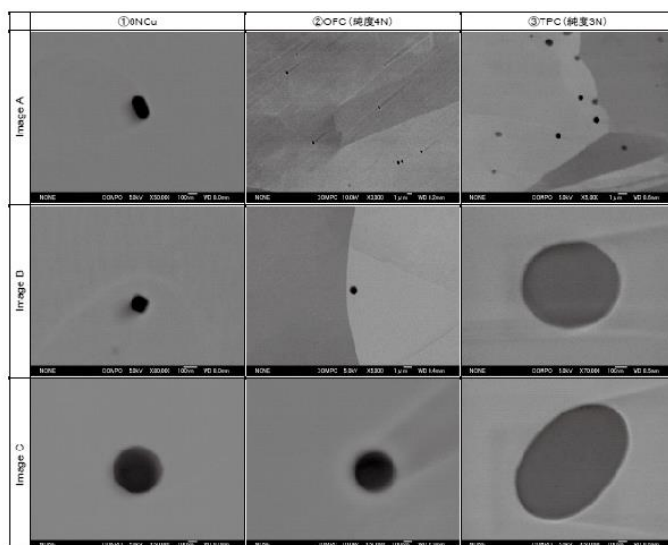


D.U.C.C.

一般的なOFC

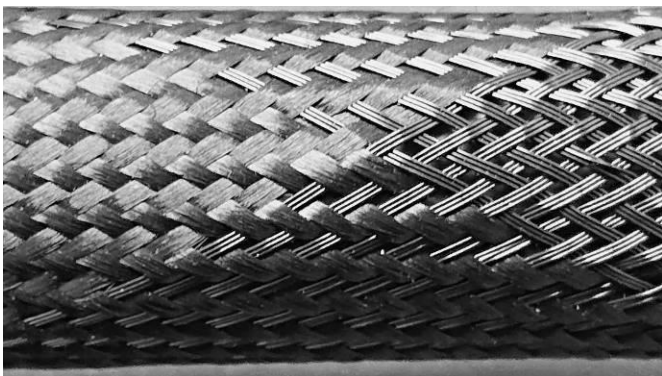
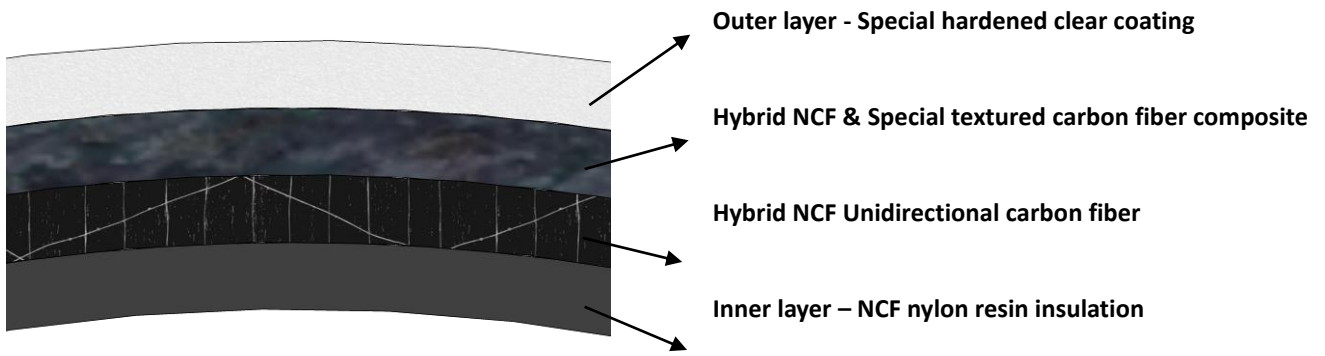
D.U.C.C. と一般的なOFCの金属組織の比較

Comparison of microstructures of D.U.C.C and typical oxygen free copper conductors



純銅中に観測された不純物のCOMPO像

Compo image of impurities observed in high purity coppers

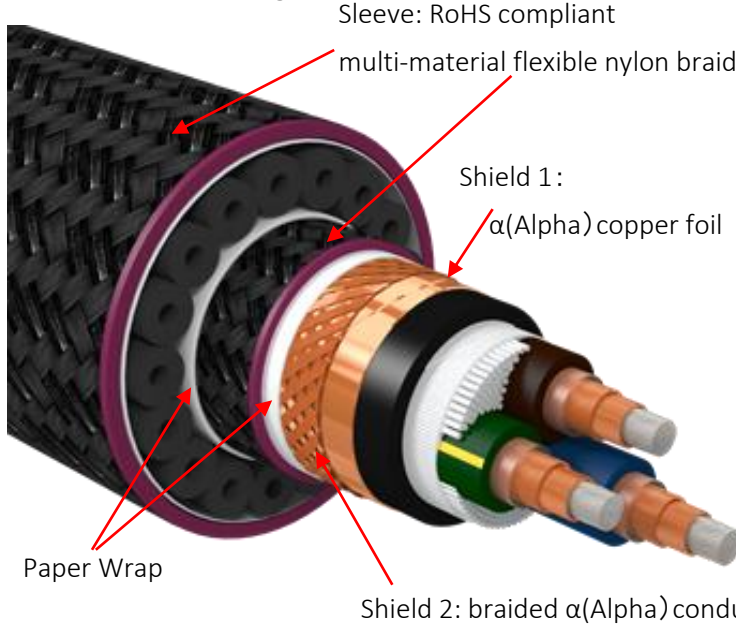


Specially designed Sleeve:

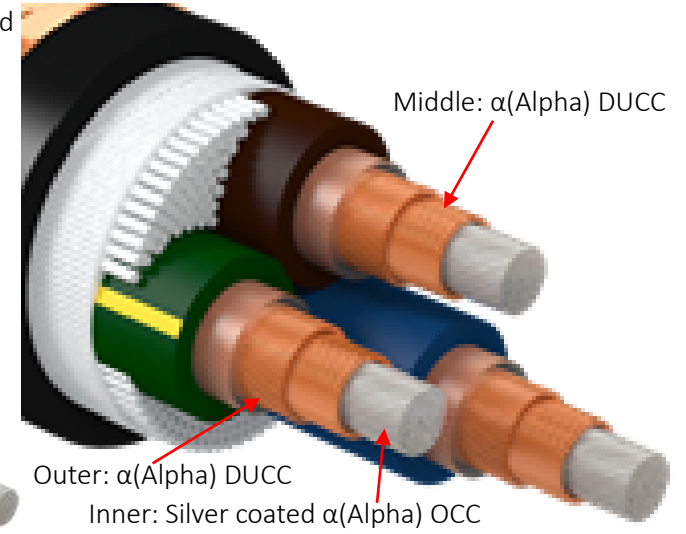
Designed to limit resonance and stress on the cable while remaining flexible, the special sleeve features high-grade soft damping polypropylene and cross weaved hard fiber. (0.02mm soft polypropylene / 0.25mm hard polypropylene)

Project V1 Cable Design

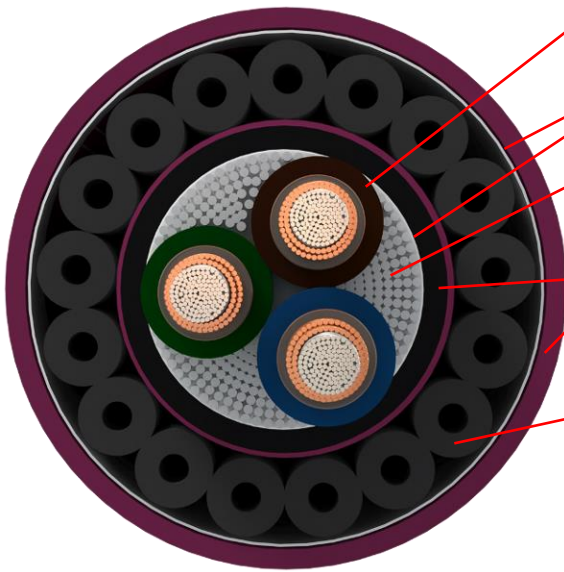
Cable construction image



Conductor material explanation

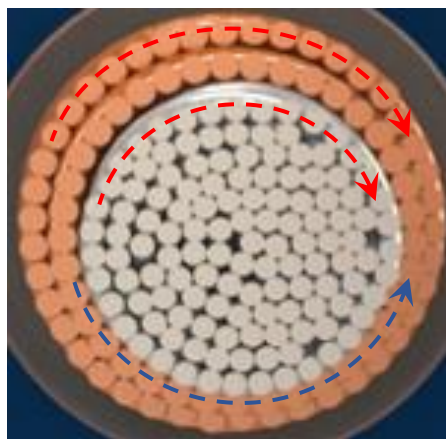


Cross Sectional View




- Two-layer insulation: Inner FEP (Fluoropolymer) & Outer Hybrid High-grade polyethylene
- Suppressed winding: Paper wrap
- Filler (1): Polyester fibers
- Sheath: RoHS complaint Nano-ceramic and carbon powder damping PVC
- Filler (2): ψ 4.0 Special Damping Tubes

Enlarged conductor strand direction image



- Inner: Silver coated α (Alpha) OCC (right twist)
- Middle: α (Alpha) DUCC (Left twist)
- Outer- α (Alpha) DUCC (Right twist)

Project V1 Specifications:

Item		Specification
Conductor	Material	Silver-Plated α (Alpha)-OCC + α -DUCC (7N Class)
	Construction (pcs/mm)	Inner - 127/0.18 α -OCC (Right rotate) Middle - 37/0.18 α -DUCC (Left rotate) Outer - 43/0.18 α -DUCC (Right rotate)
	Diameter (mm)	3.3 Approx.
	Size	10AWG / 5.267 Sq.mm
Insulation	Inner Material	Audio Grade FEP (Fluoropolymer)
	Outer Material	Audio Grade P.E. (Brown, Blue, Green + Yellow line)
	Diameter (mm)	5.5 Approx.
Twisting	Method	3 Cores Twisted Together
Fillers (1)		Polyester yarn
Barrier Layer		Non-Woven Fabric wrap
Inner Sheath (1)	Material	Audio Grade Flexible PVC (Black) Nano-Ceramic / Carbon particle compound
	Diameter (mm)	14.5 Approx.
Shield (1+2)	Method	Cu-Foil wrap + Braided (24x11/0.12 α - OFC) + Paper wrap
Sheath (2)	Material	Audio Grade Flexible PVC (Dark purple)
	Diameter (mm)	17.5 Approx.
Sleeve (1)	Material	Black PP yarn (0.25 tough yarn+0.02soft yarn)
Barrier Layer		Non-Woven Fabric wrap
Fillers (2)		ψ 4.0 Hollow Tube (Black) x18
Barrier Layer		Non-Woven Fabric wrap
Sheath (3)	Material	Audio Grade Flexible PVC (Dark purple)
	Nom. Thickness (mm)	7.25 Approx.
Sleeve (2)	Material	Black PP yarn (0.25 tough yarn+0.02 soft yarn)
Overall Diameter (mm)		32.0 Approx.
Marking: <PS>E JET FURUTECH α -DUCC Series NPS-V1 NCF Power Supply Cable D.U.C.C. supplied by MITSUBISHI  FURUTECH CABLE		

Specifications:

- Multi-material Hybrid conductor with special 3 tier concentric design
- Sound enhancing, resonance damping double insulation, double shielded, 3 sheath design
- Dual insulation : Inner FEP (Fluoropolymer) & Outer high-grade polyethylene
- RoHS complaint Nano-ceramic and carbon powder damping material
- cable outer diameter: 32.0mm
- Length : 1.8M Approx.

Product name	Product Introduction	Jan Code
Project V1 1.8M	Top-of-the-line High Performance Power Cord	

All metal parts are treated with *FURUTECH α (Alpha) Process (Super Cryogenic & Demagnetize Treatment.)

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