Craftsmanship from Japan

A world first! By using traditional Japanese forging processes, a new 'ultimate' conductor has been produced.

PC-triple C　(Pure　Copper -Continuous Crystal　Construction)

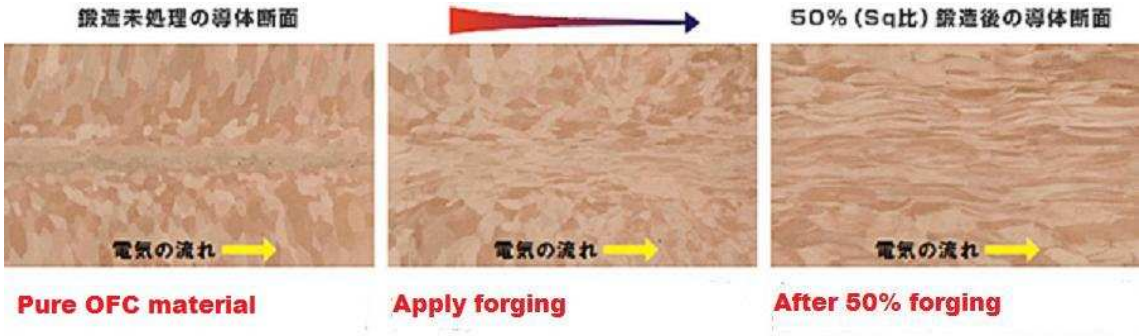
Forging process

Copper is compressed to 70% by forging tens of thousands of times by gradual application of pressure with a fixed angle and direction. (The constant angle continuation transfer forging method). By using this forging process, the transverse crystal grain boundary changes and becomes more longitudinal, crystals now have consecutive connections which makes current flow extremely smooth.

In addition, by forging, the conductor density is dramatically improved by destroying the internal air grains. This, in turn, improves the conductivity and the acoustic signature of the copper.

A conductor section

before forging process



The crystal structure and grain boundaries that are formed in a transverse state are a disturbance to the electric current and signal transmission.
The Crystals and grain boundaries that were in a transverse state are elongated and become more longitudinal when they are forged repeatedly in the same direction.

By further continuous forging, crystal structures and grain boundaries are subdivided and lined up longitudinally which generates a smoother signal transmission.

[Annealing process after core-wire processing]
PC-TripleC wire after "Continuous Crystal Construction" process is
further processed by Transfer Forging method for thinner wire.
Then Annealing process is carried out under a temperature and time
control depending on a thickness of the wire.
In result, crystals fuse each other and change into more consecutive crystal.