

Sustainability as The Driving Force for The Century's Biggest Change in Electrification

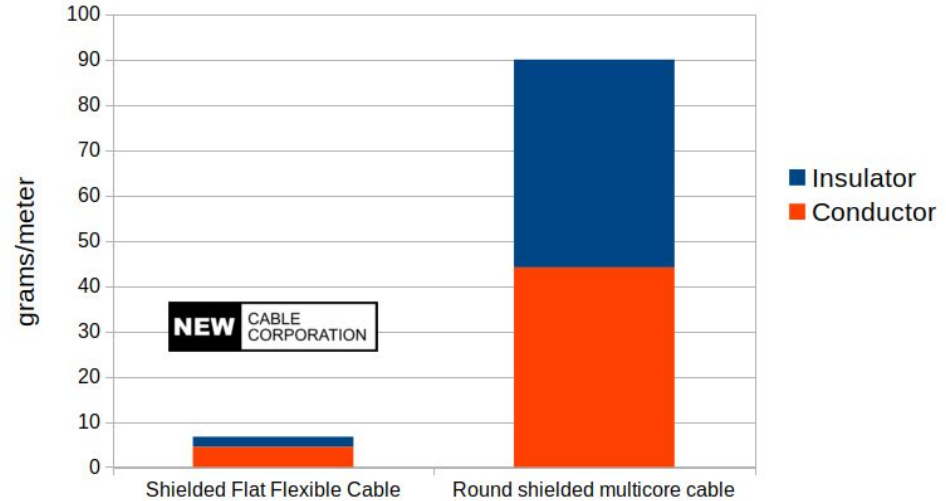
2024 Korea-Finland Sustainable and Circular Economy Symposium

August 30th 2024 | Metso Metals Oy

New Cable Corporation has developed and patented

- Shielded Flat Flexible Cables
- Compatible Connectors

Manufacturing of the flat cables utilises effective large scale roll-to-roll process



Comparison of material usage between matching performance electrical cables

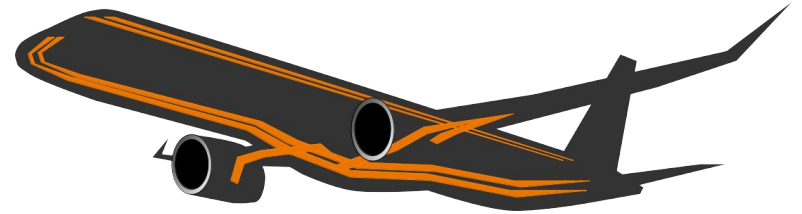
THE IMPACT – AVIATION EXAMPLE

The Weight of Electrical Cabling is approx. 10% of total weight in vehicles

Flat cabling solution reduces the weight of the electrical cable harness up to 80%

Supreme lifecycle impact in:

- material consumption
- energy consumption
- environmental strain



A Regional Aircraft (A320/737) has electrical cabling weighing approx. 2,500 kg. We estimate that 80% of this cable mass could be replaced with flat cables. This enables a total of **1,800 kg reduction to aircraft mass, while enabling yearly savings in the order off €300,000 per aircraft.**

Commonly used conductor materials

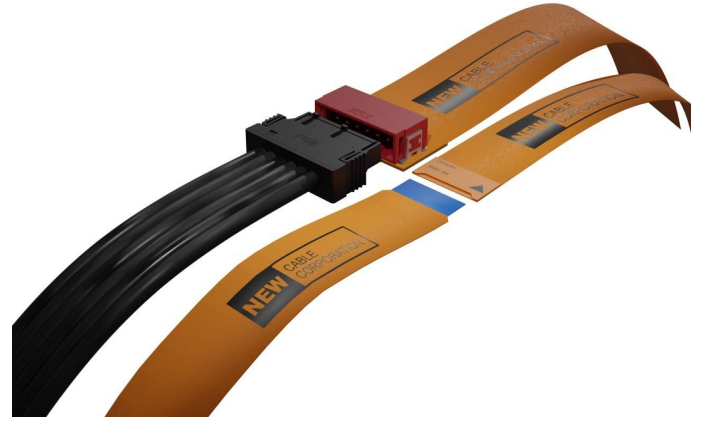
- Copper
- Aluminum
- Silver

Commonly used coating materials

- Nickel
- Silver

Prioritizing recycled materials

- Recycling process detail transparency and environmental effects?
- Recyclability of the flat cables?
- Lifecycle environmental effects of the flat cables?



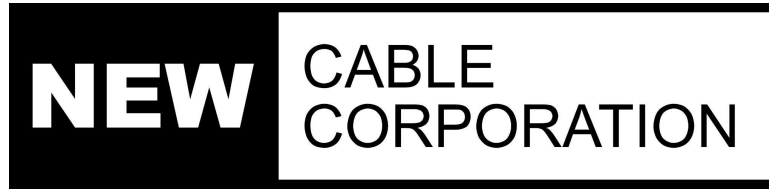
NEW

CABLE
CORPORATION

COLLABORATION



Deutsch-Finnische Handelskammer
Saksalais-Suomalainen Kauppakamari
Tysk-Finska Handelskammaren



Thank you!

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