# The Invention that Changed the World of Wires by Gorge Roger

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CCA Wire or copper clad aluminum wire is an innovation by Fushi Copperweld which is a world-wide leader of bimetallic conductor technology. The company is formed by the coming together of American Copperweld Bimetallics LLC and China based Fushi International. The combination of these two companies has given the world the best possible wires via the combination of materials to bring out their best qualities.

CCA wire are made by the combination of copper and aluminum by a process of cold cladding that binds aluminum to a layer of copper. The CCA is not just a combination of two metals; it is made with a flexible and lightweight aluminum and highly conductive copper. In fact, they have an excellent conductivity-to-weight ratio of approximately 63% IACS at only 37% density to that of pure copper making it not just lightweight, but also an excellent electrical conductor and easily installable and easy to maintain.

The CCA wire are used in every industry that is looking at reducing the weight of their products and/or increasing their performance. These wires can be found in many industries, some of them are:

Telecom: CCA wires have been with the telecom industry since the telecommunications revolution in 1980s. Apart from their high electrical conductivity and lightweight, they provide a huge cost benefit as well. They are used in this field as Coaxial Cables (as trunk or distribution cables), CATV drop cables, and telephone drop wires.

Utility: The popularity of these wires in the utility industry is due to the high possibility of damage to people and valuable equipment due to sudden high voltages. These wires are efficient in providing a grounding system that is extremely essential to avoid damage.

Railway: The most important things for railways are to be on time and be safe for their passengers. This depends a lot on signal circuits and communication and for this these wires are an excellent choice as they fulfill the need by being able to stay working even in adverse weather conditions. The wires are used in different conductivity grades, based on the requirements.

Automotive: This industry has benefitted a lot from these wires. With the increasing complexity of todayâ€™s automotive products, an important concern is the weight, and these wires not only counter that, they also carry current in an efficient manner.

Renewable energy: This is one of the fastest growing industries of our century but the renewable energy plants still face challenges and the CCA wires are an excellent replacement for copper to maximize performance

Other applications of these wires are:

1 Used as building wires

2 Used as spring wires

3 Have underwater applications

4 Used in RF antennas

5 Used in heart catheters and other devices

6 Used for cable manufacture

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Fushi Copperweld prides itself on providing the highest quality products at a tremendous value to our customers. To know more abuot a CCA Wire than, please visit our website.

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