

MINERALS IN TRANSPORTATION



As the summer nears and warm weather lingers, families pack their bags and spend the days vacationing and enjoying what this season has to offer. Whether by automobile, plane or train, copper and other metals can be found in the modes of transportation we use traveling to our favorite destinations.

ROAD VEHICLES: Copper is a vital component in our cars and trucks. A standard car contains 42 pounds of copper while a hybrid car requires 75 pounds of the mineral. Many motorcycle parts also feature copper, such as exhausts or plating pieces used for design purposes.

AIRCRAFT: Many aircraft use copper and aluminum to protect the plane from lightning strikes. The high conductivity and extreme heat of vaporization needed to handle current levels from lightning strikes can be found in both materials, making them perfect for the job.

TRAINS: A typical diesel-electric railroad locomotive uses about 11,000 pounds of copper. Rail sides in train cars also use copper to convey messages from the control center through power lines attached to track signals.

BOATS: Boats require copper and nickel-containing stainless steel. Copper is used in fuel lines and electrical wiring, while stainless steel is used for the propellers and headliners of leisure boats. Copper and nickel alloys are also ideal materials for saltwater boat hulls due to their corrosion resistance.

As you and your family leave home for summer adventures, look for copper in your modes of transportation. You never know where the material is hiding – it might just surprise you!

Sources:

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