



Copper: Essential to Confront the COVID-19 Crisis

The copper industry is a major contributor to the United States economy, with the metal being a key component in the cars and trucks, mobile phones, computers and electronic hardware that individuals need to carry out their daily business. Those companies manufacturing copper alloys and related products as well the copper mines, refineries, and other members of the industry directly create approximately 40,000 jobs, while supporting local and regional economies through the creation of downstream employment opportunities for plumbers, electricians, automotive workers and electronics manufacturers.

Copper alloys play a vital role in a wide variety of demanding aerospace and defense applications, including high-pressure valves, pumps, shafts, bolting, flanges, couplings, steering mechanisms and turret gears in tanks, aircraft undercarriage components, bearings and bushings for landing gears and cargo doors, ammunition casings and more.

Medical facilities and healthcare workers on the front lines of the pandemic rely on copper for critical equipment and functions like ventilator components, electricity delivery and storage, transportation, communication, and safe drinking water

Copper alloys are needed to produce oxygen regulators for medical applications and hospitals as well as machined components for other medical equipment including ventilators. Heavy trucks and trailers rely on copper alloy components to ensure they can deliver critical food and supplies to hospitals and communities.

Without copper, the use of cell phones, computers and other electronic devices would not be possible. In this crisis, data sharing and advanced communications demand a more sophisticated network to ensure content such as streaming video, business communications and file transfers reach their destinations without loss or interruption.

Copper wire and cables ensure the reliable delivery of distributed generation source coming from solar panels and ancillary services with power readily available that comes from battery storage. Both of these are independent of any centralized system and essential in ensuring that hospitals have power without system interruptions in both urban and rural areas across the country. In addition, copper pipes are the material of choice for the delivery of safe drinking water and medical gas that hospitals and medical facilities rely upon.

Copper surfaces also kill coronavirus (COVID-19)

Frequently touched surfaces made from copper alloys are naturally antimicrobial and self-sanitizing and can assist in slowing the spread of infectious diseases, including COVID-19, in current and future outbreaks.

[A recent study](#) conducted by the National Institutes of Health and the Centers for Disease Control and Prevention and published in the New England Journal of Medicine reported

that the SARS-CoV-2 virus, which causes the disease COVID-19, remained viable for up to 2 to 3 days on plastic and stainless steel surfaces vs. only 4 hours on copper. Earlier [research](#) also reported that copper alloy surfaces rapidly inactivated a similar strain of coronavirus.

EPA has already granted a public health registration to copper alloys (EPA Reg. Nos. 82012-1 to 6) after rigorous testing which demonstrated that uncoated copper alloy surfaces continuously kill >99.9% of six bacteria including the antibiotic-resistant hospital superbugs MRSA and VRE. Numerous antimicrobial copper products are available on the market including: bedrails, countertops, sinks, carts, faucets, and handles.

Local, state and federal governments must thus ensure that copper industry operations and employees are designated as “essential” and not included in any “shelter in place” or similar orders as we address the COVID-19 crisis.