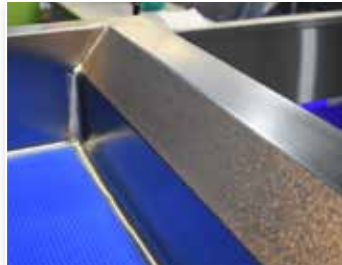
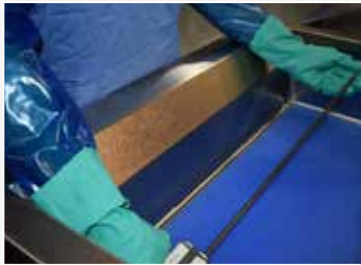


## PureSteel™ Healthcare Reprocessing Sinks

# Copper Clean® Anti-microbial Wrist Rest

The Copper Clean Anti-microbial Wrist Rest is designed to provide continuous anti-microbial, self-sanitizing properties at the reprocessing sink.

The wrist rest is made of a copper alloy known to reduce the microbial burden including bacterial and viral microorganisms such as Sars-Cov-2 (COVID-19).



## Contact by Copper

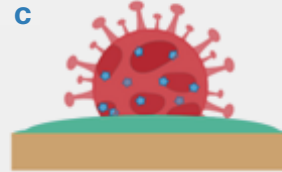
The tentative events in copper's contact killing.



Copper dissolves from the copper surface and causes cell damage.



The cell membrane ruptures because of copper and other stress phenomena, leading to loss of membrane potential and cytoplasmic content.



Copper ions induce the generation of reactive oxygen species, which cause further cell damage.



Genomic and plasmid DNA becomes degraded.

*Text and image adapted from the American Society of Microbiology.*

## Why Copper?

Copper is a versatile metal that has been utilized in many applications for a long time. It has antibacterial and antiviral properties that make it suitable for everyday use, such as in dishes and utensils.

Copper can resist corrosion and eliminate up to 99.9% of six common microorganisms in less than two hours. These microorganisms are: MRSA, VRE, C. Difficile, E.coli, Influenza A and Norovirus. Copper is already being applied effectively in various industries such as in airports and public transportation, plumbing, retail and more.

## Why Wrist Rests?

Reprocessing sinks feature many high touch points. Copper Clean installed at a decontamination sink provides additional safety and preventative care measures to our reprocessing teams. Copper Clean can reduce the microbial burden and pathogens being transferred via touch transference from a high touch point, such as a faucet, to staff, and then from staff to equipment or medical devices being handled.

## Healthcare Benefits

- ✓ Anti-microbial properties continuously kill off pathogens, reducing the formation of biofilm and spread of microorganisms.
- ✓ Adds a level of protection for staff on high touch areas including doorknobs, IV poles, faucet handles and other areas identified as prime harbor locations for pathogenic microbes.

## United States Environmental Protection Agency (EPA) support

*"Today, the U.S. Environmental Protection Agency (EPA) is announcing that certain copper alloys provide long-term effectiveness against viruses, including SARS-CoV-2, the virus that causes COVID-19. As a result of the EPA's approval, products containing these copper alloys can now be sold and distributed with claims that they kill certain viruses that come into contact with them. This is the first product with residual claims against viruses to be registered for use nationwide. Testing to demonstrate this effectiveness was conducted on harder-to-kill viruses."*

## Studies regarding copper use in acute care applications

*"A 2016 clinical trial at Sentara Leigh Hospital in Virginia found that copper oxide surfaces led to a 78% reduction in drug-resistant microbes. Another clinical trial carried out that same year in Iowa demonstrated the same."*

*"Schmidt published his latest research, a nearly two-year study that showed that copper beds inside the ICU of a hospital in Indiana harbored an average of 95% fewer bacteria."*

*"The protocols vary but researchers found copper alloys to neutralize nearly 100% of: Methicillin-Resistant Staphylococcus aureus (MRSA) - in 80 minutes."*

- (Gould et al., 2009); Vancomycin-Resistant Enterococci (VRE) - in 60 minutes (Gould et al., 2009); Escherichia coli O157:H7 (E. coli O157:H7) - in 15 min (Espirito Santo et al., 2008); Clostridium difficile (C. difficile) an anaerobic spore forming bacterium - in 24-48 hours (Weaver et al., 2008); Influenza A (H1N1) - 75% reduction in 60 min, nearly 100% reduction in 6 hours (Noyce, Michels, & Keevil, 2007); Norovirus - nearly 100% in 5 min under dry inoculum conditions (Warnes & Keevil, 2013)." (Copper Clean, 2020)



National Library of Medicine Study



STAT Reporting Copper in Healthcare