

BRASS

the Safe Choice

From firefighting equipment to airbag systems, components made from **brass rods** play a vital role in creating safer environments.

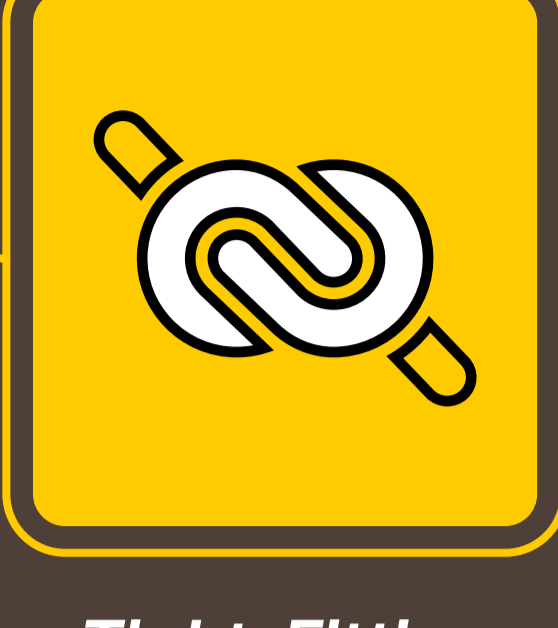


Why Brass?



Corrosion Resistant

Brass contains little to no iron, protecting it from oxidation, which can cause other materials to fail over time.



Tight-Fitting

The malleability of brass ensures tight and leak-free metal-to-metal seals for threaded joints, minimizing the risk of system failures.



Reliable

Countless industries depend on brass. Its durability ensures critical system components function properly for years.

Source: Copper Development Association Inc. (CDA)

Here are three use cases for brass:

Brass for Safe Water Systems

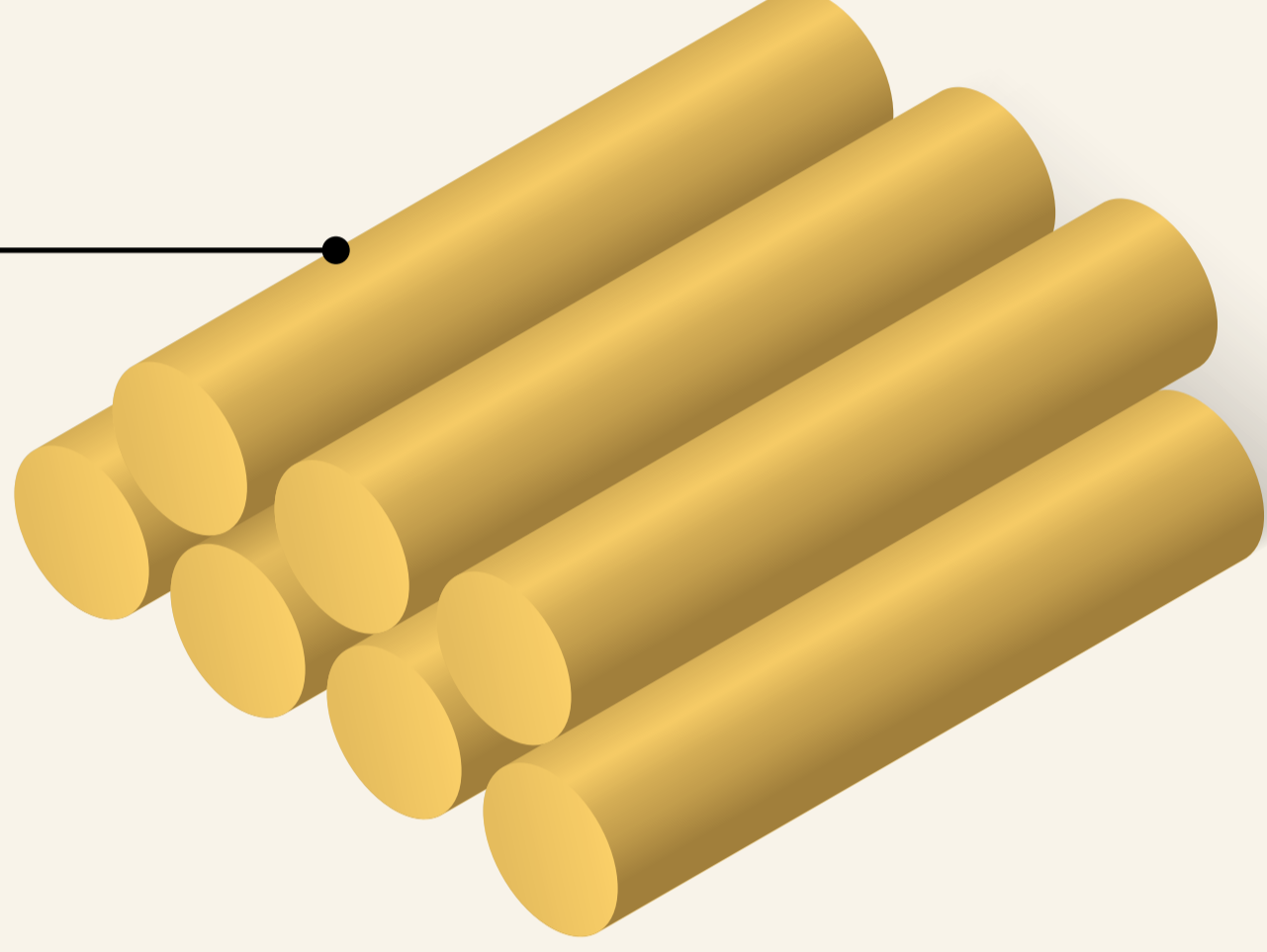


The U.S. reduced the permissible lead-leaching limit for components such as faucets and valves in the national drinking water health effects standard (NSF61) by **five times**.

Source: NSF International. Drinking Water System Components - Health Effects. NSF/ANSI/CAN 61.



Currently, only brass-rod alloys are designated as "acceptable materials" in NSF 61 against the lower lead-leaching criteria.



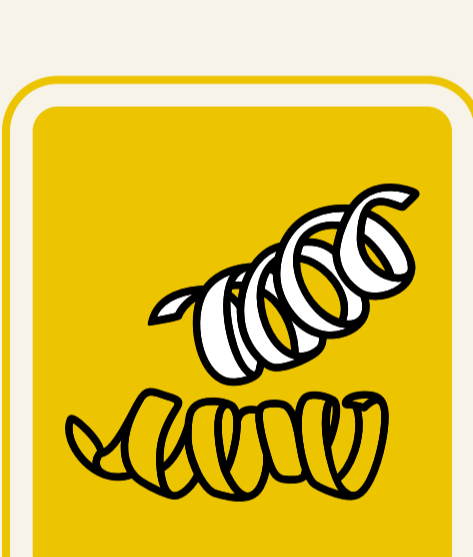
*Unified Numbering System codes for approved alloys: C27250, C27550, C49100, C69300, C69850, C89833, C89855. Source: NSF 61, Copper Development Association.

Brass is also essential for ensuring workplace safety, particularly in high-risk manufacturing environments.

Brass for Safe Manufacturing and Industrial Environments

Brass is used extensively in industrial applications like machinery components, valves, fittings, architectural elements, bearings, and gears.

The exceptional machinability of brass rod means longer tool life and higher productivity for manufacturers of precision parts.



Machining Hazards

The microstructure of brass helps break up metal chips generated during machining operations, preventing long and string chips that can crash machines and seriously injure operators.



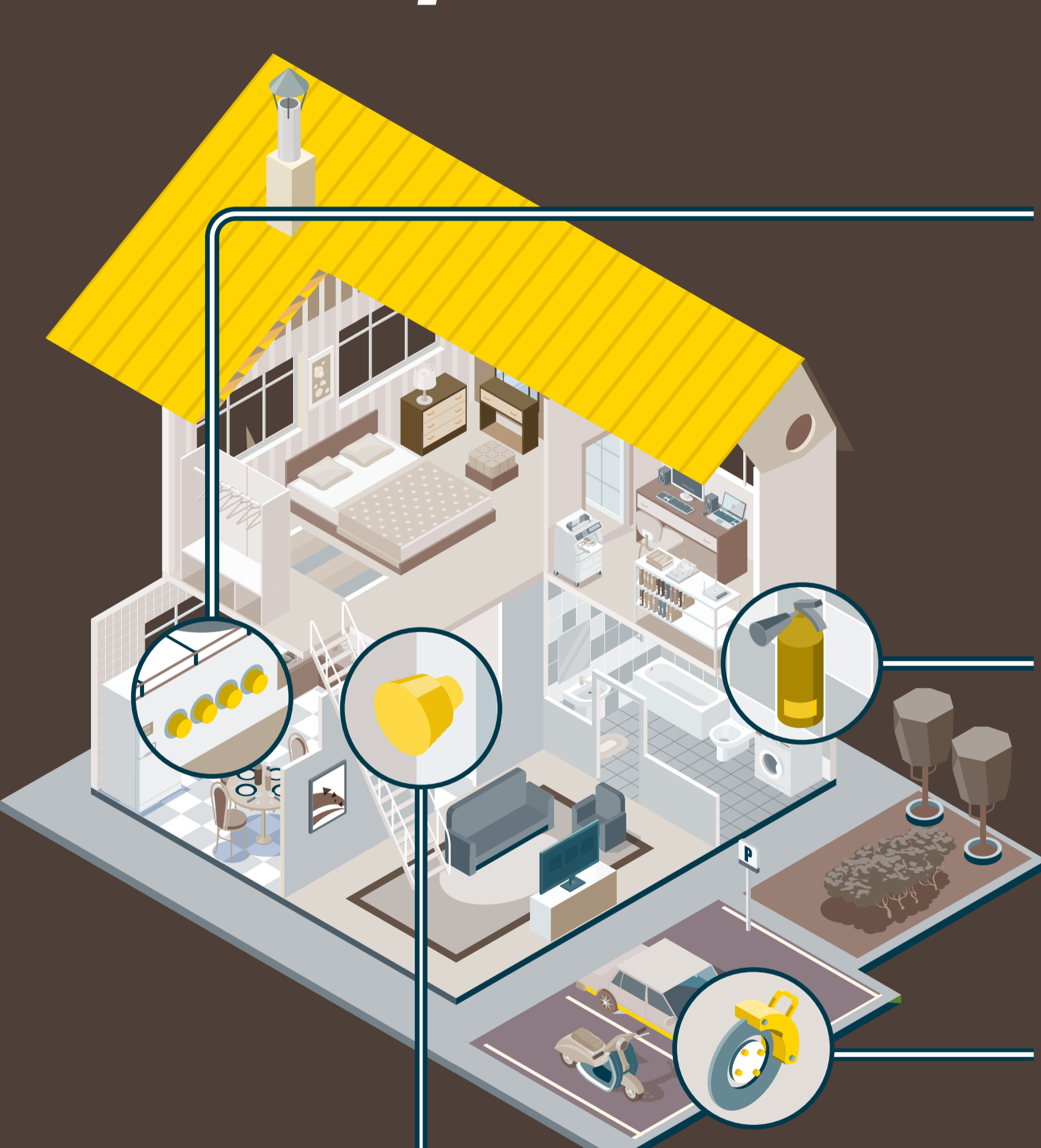
Explosive Environments

Brass's non-sparking properties make it ideal for tooling, fittings, and components in high-risk industries such as oil & gas, chemicals, pharmaceuticals, paint manufacturing, power plants, and explosives.

Source: Copper Development Association Inc. (CDA)

Many pieces of equipment rely on brass rod parts to function.

Brass for Safer Communities



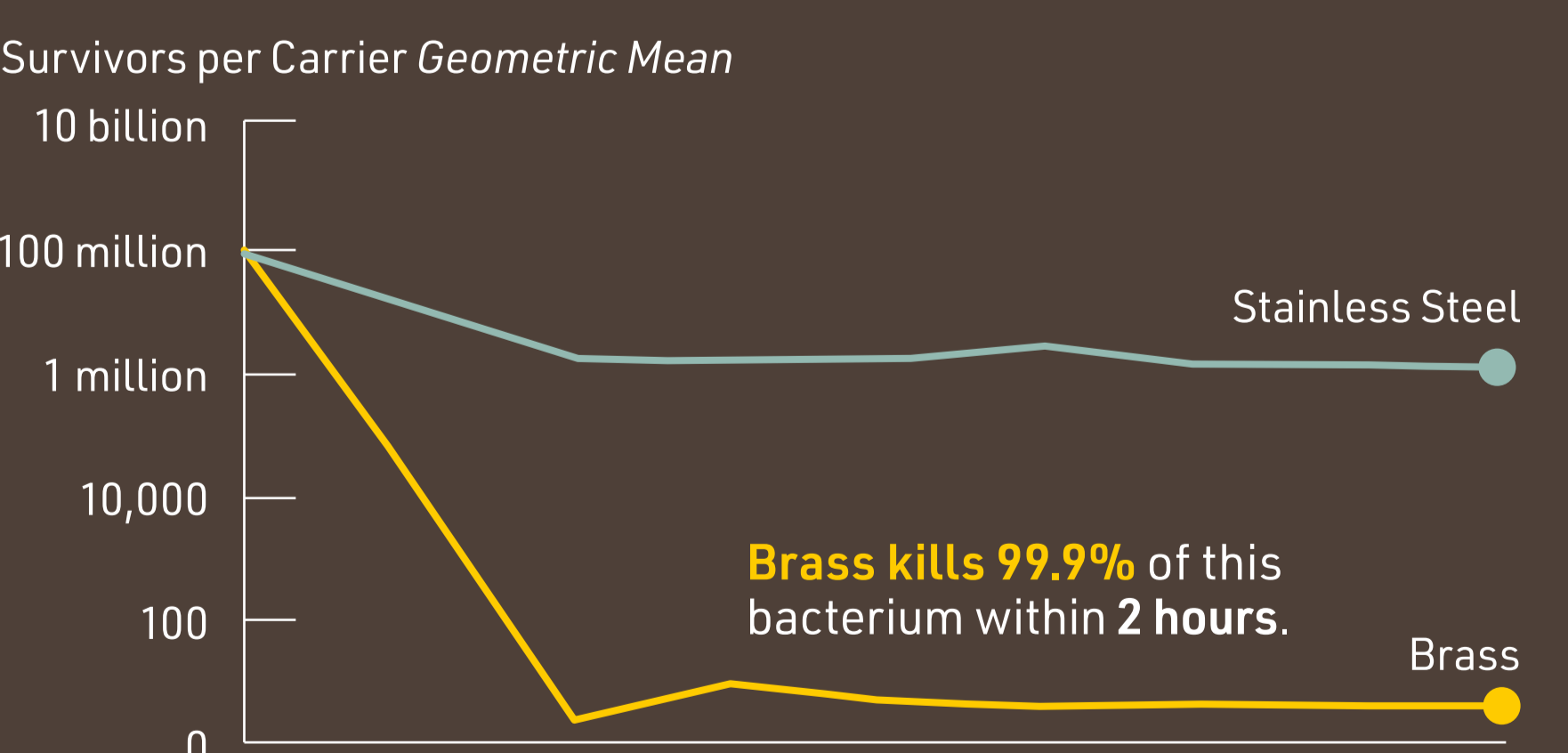
Consumer Products
Control valves in gas stoves, BBQs, and home furnaces made from brass rods reduce the risk of deadly gas leaks and fires.

Firefighting Equipment
Brass is ideal for firefighting equipment due to its corrosion resistance, durability, heat resistance, and non-sparking properties.

Braking and Airbag Systems
Fittings made from brass rods ensure that the brakes and airbags in our vehicles work when needed.

High-Touch Surfaces
Brass and other copper-based alloys are naturally antimicrobial:

Brass vs. Staphylococcus Aureus



Staphylococcus aureus is a common bacterium that can cause harmful or fatal "staph infections," especially in healthcare settings.

Source: Copper Development Association Inc. (CDA)

Brass rods have a vital role to play in building a safer world for everyone.

