Superior brass fittings and fixtures
Stronger, cheaper, and more resilient

A new class easily machinable and formable brasses. Superior physical and mechanical properties. Lighter in weight and 20% cheaper to produce than regular brasses.

The Technology
Is available under licence for free
The role of typical brasses and bronzes in the world today is astounding. The keys in your pocket, the key-ring, the locks they open and the hinges – the list goes on. Without doubt, brasses (and bronzes) are the most widely utilised family of materials on the planet.

This technology is a leap ahead for brass alloys. ‘Low-Cost High Entropy Brasses’ (HEBs) with their unique alloy composition are up to 20% cheaper to produce and have the potential to change the market landscape for common brass-based fixtures. These alloys consist of varying mixtures of copper, nickel, manganese, zinc, aluminium and tin allowing for specific tailoring of cost, strength, toughness and corrosion resistance and just like all brasses can be finished in chrome.

Key Benefits
- Cheaper – lower $/kg of constituent alloys
- Easy to work with – similar machining characteristics and higher forming ductility than standard brasses.
- More corrosion resistant for exterior or harsh environment applications
- Superior mechanical properties leading to higher strength, longer wearing components or less material required in the finished part.
- Can be chrome, nickel, silver or gold plated or coated in hard-wearing coatings.

Applications
- Hinges, latches, door knobs and locks, knockers, decorative fixtures
- Keys and Key Rings
- Taps, bathroom, outdoor or marine fixtures
- Plumbing fittings and hardware
- Clothing and Luggage Zippers
- Mobile phone casings / bezels

Opportunity
This technology is available as an Easy Access licence to companies and individuals within the field.

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