

# AMAZING FACTS ABOUT COBALT

## Rechargeable Batteries



Roughly 50% of the cobalt produced globally is found in rechargeable batteries, a vital technology for a **sustainable future**



Every tonne of cobalt applied as a **catalyst** mixture contributes to a sulphur oxides (SOx) **emission reduction of**

## 25,000 tonnes

and a nitrogen oxides (NOx) emission reduction of 750 tonnes

Cobalt is a **bioessential** element, being found at the **centre of**

## vitamin B12



It is needed for **healthy** red blood cell formation and neurological health in humans

**Chips are**

## 80 times more reliable

Thanks to the **cobalt** used to coat the microscopic copper wiring inside **semi-conductors**, it also prevents copper atoms from migrating



Such is the importance of cobalt to **industrial and technological development**, that in the EU in

## 2011

is **recognised as 'critical raw material'**

in the EU and strategically important in the USA

Cobalt based **superalloys** are also used in several other applications including:

- gas turbines
- space vehicles
- rocket motors
- nuclear reactors
- power plants
- chemical equipment



Compared to nickel superalloys, the stress rupture curve for cobalt superalloys is flatter and shows lower strength up to

## 930°C

The greater stability of the carbides, which **provide strengthening of cobalt** superalloys, is then exhibited

## Would you like to know more about Cobalt?

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**PROMOTING THE SUSTAINABLE AND RESPONSIBLE USE OF COBALT IN ALL FORMS**

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