

COPPER CONCENTRATE

01

Copper ore from Oyu Tolgoi mine is crushed and fed into the concentrator.



02

The concentrator's giant machines and processes create "Copper Concentrate" containing 25-30% copper and small amounts of gold, silver and molybdenum.



03

Independent testing of the concentrate ensures it is of good quality, and the Government knows exactly how much of each metal will be sold.

04

Paperwork is signed to sell the concentrate to customers at international prices



05

The concentrate is driven to Oyu Tolgoi's border warehouse and shipped to customers after payments are received.



6a

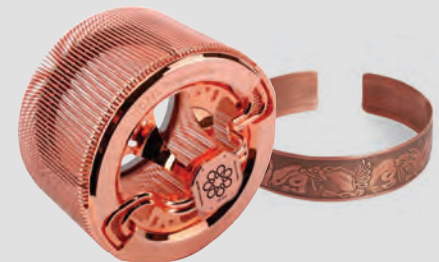
Royalties are paid to the Government

6b

Smelters and refineries turn the concentrate into almost pure metals

07

The metals are used in construction and to make electronics and other products used around the world



COPPER AND THE WORLD

Copper is found in nearly every home and vehicle. From the electricity that lights our homes, to the infrastructure that builds our cities, to the technology that connects our world, copper is an essential element in making modern life work.

The world uses more than 19 million tonnes of copper every year. As the world's leading economies continue to urbanise and industrialise, refined copper demand will increase by an additional 6.5 million tonnes by 2020 to around 25.5 million tonnes. Around 19 million tonnes of that will be met by mined copper with the remainder being supplied from scrap.

The International Copper Association estimates that an average single family home in the US contains 199kgs of

copper in wiring, tubing, plumbing, appliances and other hardware, which means that in 2011 Rio Tinto produced enough copper for over 2.6 million homes.

High-grade copper ore is one of the most challenging materials to extract. For centuries, it has been one of the world's most in-demand commodities. Malleable, durable, resistant to corrosion, hygienic and an excellent conductor of heat and electricity, copper is one of our most useful and versatile metals.

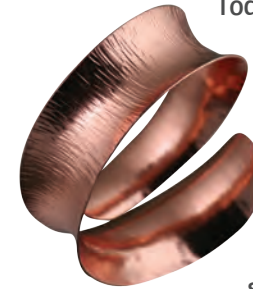
From the copper pipes of the Pharaohs to the 4,700 medals awarded at the London 2012 Olympic and Paralympic Games, wherever you look, you are sure to find copper or a metal produced as a by-product of the copper refining process.

Producing copper

Copper is produced either from open pit or underground mines – Oyu Tolgoi will be both. After the ore has been extracted from the mine, the copper production process takes place in various stages.

Crushed copper ore is finely ground, then concentrated, smelted and refined. At each of these stages, the copper content increases as impurities are removed. By-products from this process include gold, silver and molybdenum.

Eventually, refined copper of 99.99 per cent purity is produced. Here at Oyu Tolgoi, the onsite processing stops after the concentrating phase and copper concentrate is the product that is sold to customers.



Today, copper is a metal at the forefront of green innovation. Hybrid and electric cars rely on it, as do renewable energy sources such as solar power, wind farms, thermal and hydro-electricity.

From on-demand water heaters to solar panels and smart wiring, copper will be an integral part of the green homes of tomorrow, helping us drive forward into a more energy-efficient future.

