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The Mother of All Bullion Coins: The Krugerrand



Had it not been for the end of the gold standard and the removal of all legal barriers for the private gold trade, the Krugerrand would not have become so successful. It became the mother of all bullion coins, the currency that made it possible even for 'the man on the Clapham omnibus' (ie. ordinary people) to possess gold.

On 1 July 1967, the first Krugerrand was minted. The first edition's mintage was 40,000 specimens of normal quality and 10,000 proof specimens. In 1967, it was not a matter of course for the private customers to invest a part of their assets in gold.

On the contrary, some countries, including the UK and the US, banned private gold ownership if it exceeded a marginal order of magnitude. In most Eastern bloc countries and in China, a private gold trade was something beyond imagination. As a result, the range of customers of the first Krugerrands was rather manageable. The idea to issue gold coins as an investment was not fundamentally new. In many countries, circulation coins made of gold, as they had been in use prior to World War I, were traded as a kind of small gold bar, for which, however, VAT was charged, similar to the bars, as the larger units. What set the Krugerrand apart was that it was declared legal tender in South Africa, with the result that it could be sold without VAT.

The first years, though, witnessed only limited success. Between 1967 and 1969, the annual mintage amounted to 30,000-50,000 ounces. But in 1969, it became clear that the dollar did not work as reserve currency any more.

When several states intended to swap their dollar reserves for gold, it became apparent that the US could no longer fulfil its contractual obligation to exchange dollars for gold. A crisis of confidence in the dollar was the consequence.

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Change Arrives for the UK

As we go to press, the new £1 coin, which is used throughout the UK (unlike banknotes, which are different according to whether you live in England, Scotland or Northern Ireland), will be going into circulation.

This is the first redesign in over three decades (the \pounds 1 coin was first issued in 1983). And it is being upgraded because of increasing levels of counterfeiting: approximately one in 30 are fakes, a fact that has helped obtain the acceptance and support of the cash handling community, banks, retailers etc for the changeover.

The new $\mathfrak{L}1$ is unique and distinctive on a number of fronts. For a start, it is 12-sided rather than round. It is bimetallic (with a nickel-brass outer ring and a nickel-plated alloy inner ring) and contains a latent image (which changes from the \mathfrak{L} symbol to the number 1 when tilted), microlettering and milled edges with grooves on alternate sides. It also contains a forensic feature that will enable it to be 100% machine authenticated.

The front features a portrait of HM Queen Elizabeth II, while the reverse features a stylised image of the national symbols of the four countries that make up the United Kingdom – a thistle for Scotland, leek for Wales, rose for England and shamrock for Northern Ireland – all rising on a single stalk from a coronet.



The legal tender status of the 'round pound' will cease on 15 October, although people will still be able to change their old pound coins for new at banks.

Bullion from The Royal Mint

In the middle of 2015, the Royal Mint launched an online trading platform for precious metal products – mainly gold and silver. Director of Bullion and Executive Director at The Royal Mint, Chris Howard, talked about The Royal Mint's activities in the bullion sector.

Q: The Royal Mint offers an e-commerce platform where gold and other precious metals can be traded in real-time. What sets this platform apart from that of other internet dealers specialised in gold products?

A: First of all, trust. Since 1489, The Royal Mint has minted the gold Sovereign and has earned the trust of its customers. Our brand resonates with trust, peace of mind and heritage. This is what our customers like so much

Secondly, we offer the 'Complete Bullion Solution' on our platform. With us, you can obtain all services from a single source: physical gold, that is physical coins and bars, but also a personal pension plan. That is a product we have developed in collaboration with major UK pension providers.

With Signature Gold, in effect a Gold Accumulation plan, we offer a product that allows private investors to accumulate a fund of gold over time even with small monthly contributions. Our aim is to make gold available for everyone. For people like you and me.

Q: This aim is not new. In Germany, many middle-class people are already investing in gold.

A: In the UK, it's different. Actually, British people traditionally invest their money in property or in shares. Investing in precious metals, specifically gold, has become an interesting option for private investors over the past year in the UK, and Brexit, and the turbulence around this event has led to a surge in interest. Gold is seen as a safe haven and in an uncertain world, the precious metal is seen as a good investment.

Q: Who is your target audience?

A: We are a UK organisation but have real global reach. Many people do not realise that we mint circulation coins not just for the UK but over 60 other countries. We are the world's largest exporting mint.

For bullion, whilst our trading platform started life focused on the UK market, we are seeing real growth in the US and Europe. We already distribute our Britannia and Sovereign bullion coins across the world, and our Lunar series has gained real traction in China.



Chris Howard.

Q: Which parts of the bullion production are accomplished by The Royal Mint? In other words, does The Royal Mint refine? Does it also produce the blanks?

A: We employ over 1,000 people on a 20 hectare site and produce billions of coins a year, both in base metal, gold and silver. Due to the nature of the bullion industry, we use external refiners with a strong ethical track record to ensure purity and consistency so we can produce product that is synonymous with The Royal Mint values.

Q: How can you make sure that you have enough blanks when demand increases unexpectedly? After all, when gold is booming, every mint buys larger quantities of gold, which might lead to bottleneck situations in the supply chain.

A: To begin with, we have excellent suppliers. To us, this co-operation is very important – we see them not so much as suppliers but rather as a part of the team. Together with them, we develop a six month forecast that is under review every week. Furthermore, we have a large supply of blanks in stock at all times.

The nature of the bullion business is that customers want product immediately, not next week. So we have to plan very carefully. So far we have managed to keep up with demand.

Q: In the media, there is a growing call for ensuring that gold is obtained in an ethically impeccable way. How do you guarantee that your suppliers adhere to these standards?

A: To us, that presents one of the great challenges. The Royal Mint stands for trust. We mustn't lose our reputation. That is why we pay particular attention to this point. All our suppliers are members of the LBMA (the competent authority for the world bullion market). As such, they have signed up to the strict rules this institution imposes on its members. The LBMA has developed due diligence guidelines, to avoid contributing to conflict, human rights abuses, terrorist financing practices, and to avoid money laundering.

Gold can be melted down, and of course we can't guarantee every single aspect of its journey but whatever can be done to trade ethically- sound gold we will do, and this remains central to our beliefs.

Q: You offer your customers the service to store their gold in 'The Vault'. What are the practical details of this?

A: Back in the 1960s, the government decided to relocate several operations out of London. The Royal Mint was moved to Wales due to more space being needed and to protect the risks associated with the Cold War.

At the centre of the new mint, a vault was built which, it is rumoured, could be used to house the Crown Jewels in the event of war escalating. Whether this was true or not, today the same vault houses bullion for customers from The Royal Mint, under 24 hours security. Over 60% of our private investors choose to vault with us – once again they do so because of the trust and peace of mind in investing with us.

Q: And what will you do if the government decides to impose a ban on the possession of gold again one day?

A: I think those situations are so theoretical. In today's world the likelihood of this happening is virtually unimaginable.

The Technical Forum of the World Money Fair



The Coin Inspect Flex of the Mühlbauer Group.

Every year, the Technical Forum at the World Money Fair reports new attendance records. This year there were more than 400 participants. Visitors found a dazzling parade of new developments, introduced by mints and suppliers.

There are probably several reasons for the Technical Forum's big success. One is that participation is free of charge and the costs for a flight to Berlin are manageable, even with an overnight stay. That is why many mints take the opportunity of not only letting their senior staff participate in the event.

This may be one purely economic reason for the high number of participants, but surely it is not the only cause for technicians from around the world to come together at this event every year. The true fathers of the success are Dieter Merkle of Schuler Pressen and Thomas Hogenkamp of Spaleck. Every year, they succeed in composing a comprehensive programme of current developments, offering a display window for the coin producing industry and those who supply the mints.

50 years Krugerrand

The South African Mint was host for the World Money Fair 2017, on the occasion of the 50th birthday of the Krugerrand. In his presentation, Dr Mike Gradwell introduced the different jubilee products which feature many new technologies.

Among them are not only restrikes of the 1967 Krugerrand, minted with the original stamps, but also the biggest and the smallest Krugerrand with 50 ounces and 1/50 ounce respectively. Techical advances are apparent when comparing Krugerrands from the old and the latest dies: for example, the modern surface frosting imitates the hue of the South African springbok in a highly realistic manner, which would not have been conceivable in 1967.

Blanks, alloys, plating

Due to cost and security reasons, many mints are reviewing the material their blanks are made from. In this context, CoreBright Technologies suggested considering the use of anodised aluminium, which offers various colour possibilities.

Ken Tan of Singapore Mint presented a comprehensive test series, searching for a substitute for cupro-nickel as an alloy for commemorative coins. This entailed testing the corrosion resistance, abrasion resistance and mintabilities, such as press force, of nine materials in total.

After extensive tests, the mint decided on nickel plated zinc cores, since this combination achieved the best results and even exceeded the reference material cupro-nickel in practically all tests (whereas copper and brass plated zinc cores failed in nearly each comparison).

Reetta Riihiaho of the Mint of Finland summarised her research results on electro plating. According to her tests on wear and corrosion rate, it would be possible to reduce the copper plating of the steel euro cent blanks from the current 5% of its weight to 2% without significant loss durability and lifetime of the coins in circulation. Those who need particularly large precious metal blanks will probably have paid great attention to the talk by Giovanni Faoro of IKOI. He promoted the production of blanks inside the *Flameless Tunnel*[®], as there is neither precious metal waste nor complex settings for different weights with this melting and forming method.

Martin Preisl of Aichelin outlined the energy saving options available when using energy balanced heat treatment lines for annealing blanks.

ArtCAM, as it does every year, presented its current software innovations for creating dies. This year, the focus was mostly on even higher resolutions, allowing the crafting of even the smallest of details.

These developments by ArtCAM would not be possible without laser technology to convert the computer design into a die with incredible precision and detail. Alexander Aminidis of ACSYS showed what kind of precision can now be achieved with nanosecond and picosecond lasers, and what the future could look like.

At ACSYS, they are working on a subnano laser, which operates between 5 nanoseconds and 150 picoseconds, and on a femto laser, which will work with even more detail at a laser pulse of 0.000,000,000,000,001 seconds. ACSYS' new *Piranha*® μ *Pico* can be equipped with all four different types of laser.

Extending the bounds of minting

The Mint of Poland introduced a new project, which once again will advance the possibilities of minting blanks of various geometric forms. After cylinder, pyramid and sphere coins, the current challenge is to mint a leaf whose tip is bent, which will make it necessary to exert the minting pressure not only downward but upward and downward in one go.

This will be made possible by an elaborate interaction of computer-assisted stamp design and the production of several exceptionally shaped laser-engraved dies, which are used jointly.

Surface finished die bodies

Ingo Löken of Spaleck Oberflächentechnik explained a new procedure for obtaining better dies. He showed how die bodies can be optimally primed by using a simple chemical-mechanical preparation in order to eliminate the circular indents arising during the hobbing process.

This procedure causes less surface defects, a better surface texture promoting the material flow and increases the die life.

Automation

Borje Olsson of Scan Coin demonstrated what is possible in terms of automation in a mint. Loading the blanks into the coin presses can fully automated, just like unloading the minted coins from the containers. The conveyor belts of the system are installed directly under the ceiling in order to save space.

Quality inspection

Two companies from the field of inspection introduced new machines.

The *Leopard*, presented by Lutz Büker of InduVis, is intended for commemorative and bullion coins. It stands out due to its user-friendly control monitor, which does not need much training to operate. The switch from one kind of coin to another is completed in less than two minutes.

This is also a highly flexible system, which can be adjusted to the customer's needs. There is no need to emphasise the high precision of the system's sorting out of faulty coins or blanks (as this is taken for granted nowadays).

The Mühlbauer Group, too presented a much-noticed new system – the *Coin Inspect Flex.* The machine is suitable for blanks, for quality inspection of circulation coins and for authenticity checks of used circulation coins. All tests can be done by just one machine. It can examine up to 3,000 pieces per minute. The customer can decide which methods should be used during the check by individually exchanging the control module, in which the different tests are done.

Eco-friendly packaging

Let us end this outline of the presentation of new products at the World Money Fair with the development of Velec Systems for packaging. A customer wanted to reactivate the eco-friendly burlap bag type of packaging. Velec Systems succeeded in developing a packaging machine for it.

As a final remark on the activities at the WMF, there were only happy faces to be seen at the booths of the suppliers. The mood of some representatives was even enthusiastic. Various companies said that this was the best year they ever had at this show. The run on bullion and commemorative coins seems to have convinced many mints that it is now the best time to modernise their equipment.

Gold as a Safe Haven?

Since time immemorial, gold has been hoarded and traded as a valuable object. It is considered a safe haven throughout the world and, in times of uncertainty, sees a booming demand which many mints and private companies satisfy with their products for investors. But you should always keep in mind that private gold ownership is not a matter of course.

Everybody possessing gold coins in France after 1 August 1793 risked being guillotined. In 1939, an usher in the Moscow artist theatre was executed because his coin collection had been found in a raid. Most other countries in the 20th century did not inflict such draconian penalties for the ownership of gold, and yet, not only in the Communist East, the possession of gold was still prohibited less than half a century ago.

In the USA, a \$10,000 fine or 10 years imprisonment was the punishment for all those who refused to sell their gold coins, gold bars and gold certificates to the state at the compulsory price of \$20.67 a fine ounce before 1 May 1933. The only exemption was gold that was used for industrial or artistic purposes, or did not exceed the value of \$100. After the deadline, to penalise infringements, the government had all safes and lockers sealed systematically. They could only be opened in the presence of officials. Any gold found was confiscated without compensation. Most banks proved to be faithful agents of the state, preventing their clients from removing the gold from their lockers.

The American ban of gold ownership was lifted as late as 31 December 1974.

Further bans of gold ownership:

1918-1987	USSR
1923-1931	Germany
1936-1951	Germany
1933-1974	USA
1936-1937	France
1949-1982	China
1950-1989	Poland
1959-1976	Australia
1963-1990	India
1966-1971	Great Britain

The Krugerrand (Continued)

The Krugerrand made it possible for many middle class people to invest their money, threatened by inflation, in gold. In 1970, more than 200,000 bullion coins were produced. In 1974, the year the US lifted the ban on gold ownership, 3.2 million ounces were sold. 1978 was the record year: more than 6 million ounces of this coin went over the counter.

In 1979, the Krugerrand faced competition from the Maple Leaf, issued by the Royal Canadian Mint. Contrary to the Krugerrand, it had a fixed face value and a considerably higher fineness. Having entered the market with 1 million specimens, the Royal Canadian Mint increased the mintage to 1.2 million specimens the following year. In 1980, however, the gold's slide began, coinciding with more and more competitors entering the market.

- 1981 Mexico mints the first Libertad
- 1982 China lifts the ban on gold ownership and produces the first Pandas
- 1986 America introduces the Eagle
- 1986 Australia issues the first Nugget and starts its mass production in 1987
- 1989 The Austrian Mint releases the Philharmonic.

The declining gold price and the amount of competition were not, however, the decisive factors for the drastic decline of the Krugerrand's mintages. In 1986, the US, the European Community (as it then was), and Japan, as South Africa's most important trading partners, imposed economic sanctions against the country.

The import of the Krugerrand was only partially subject to sanctions: while Germany advised against the purchase, though still allowing the import, it was prohibited in the US, the Commonwealth and Great Britain as well as in the other EC member states.

Having declined already, the mintage halved in 1987, to 324,940 ounces sold. It did not increase again after the apartheid era was over. The new South Africa had other things on its mind than distributing a bullion coin in a market that had become extremely competitive.

In the present time of political and economic uncertainty, the Krugerrand constitutes an important option for gold investors again. Its 50th anniversary will win this first modern bullion coin even more attention.

The Precious Metals Cycle – Agosi's Closed Loop Concept for Precious Metals Supply

By Jürgen Weisheimer, Sales Manager – Investment Products, Agosi

The demand for responsibly-traded goods is increasing. Precious metals in jewellery, investment products and technical applications are no exception, with consumers paying more attention to sustainability, fair competition and ecofriendly factors that are directly linked to the extraction of raw materials. From this perspective, an environmentally-correct approach, the protection of human rights and social responsibility are key factors in the entire manufacturing process.



Jürgen Weissheimer.

As a precious metals supplier, Allgemeine Gold- und Silberscheideanstalt AG (Agosi) is fully aware of this responsibility towards customers, employees and the environment alike. In addition to its closed-loop concept, the company decided to enter the strict certification process of the RJC (Responsible Jewellery Council), resulting in Agosi being the first German precious metals refiner to be granted the RJC Certificate – a seal of quality for its products and its morally and ethically correct background.

At its Pforzheim location, Agosi sees itself as a long-established constant in the precious metals business, as an important manufacturer of semi-finished precious metals products and raw-material supplier of gold, silver, platinum and palladium resulting from its in-house recycling processes – a classical single-source solution that has proven to have been working efficiently for more than 125 years (founded in 1891, Agosi celebrated this anniversary last year).

In short, it can be said that Agosi's overall programme is to serve the precious metals cycle by recovering precious metals that have already been used in various products, and by re-introducing them into the manufacturing processes as fine metals or semi-finished products, or into the bullion markets as newly produced investment bars – a true secondary raw materials approach.



Melting process of low grade material (© Agosi).

This approach has proven to be fundamental for Agosi's philosophy that concentrates on recycling rather than using primary materials. For Agosi this attitude has always been perfectly logical, as it provides a neutral basis for raw material supply and is being honoured as such by its customers. In the light of present trends and changes in consumer awareness, however, it has become a real asset.

On fine gold, there is a special focus due to its being mined as a rare raw material. The most promising deposits are located in developing countries and politically unstable regions. Consequently, the population and the environment in these areas often suffer from inadequate mining methods.

The RJC is an international not-for-profit organisation bringing together more than 900 member companies. It aims at promoting human rights as well as social and environmental practices in a transparent and accountable manner throughout the jewellery industry, from mine to retail. With its membership of the RJC, Agosi supports the organisation in advancing these goals.

'It is our ambition to combine commercial success with social responsibility and a commitment to environmental protection,' says Dietmar Becker, CEO of Agosi. 'Our guidelines correspond perfectly with those of the RJC. Transparency and ethicallyresponsible business practices are of utmost importance – however, Agosi has gone one fundamental step further.'

This fundamental step has proven to be a further milestone for the company. Agosi is the first German precious metals recycler to have been granted both the RJC certified membership and, as a next step, the highly regarded Chain of Custody certification.

'We are proud to set an example as the first German supplier on the precious metals markets that offers fine gold of certified origin from conflict-free and ethically responsible sources', explains Becker.



High grade jewellery scrap (© Agosi).

The RJC CoC certificate is a landmark in precious metals markets. It stands for sustainability and testifies that the products were manufactured responsibly and conflict-free. In fact, this claim is becoming increasingly important for the entire precious metals businesses, the electrotechnical, IT and investment industries.

'The customer demands information on the origin and processing of the material. Our CoC certificate also complies with the standards of other international organisations, for example the Gold Guidance of the OECD', adds Becker.

For industrial applications, the CoC reflects the guidelines of the conflict-free smelter programme of the EICC (Electronic Industry Citizenship Coalition), and is recognised as such.

As an accredited Good Delivery Refiner on the London precious metals market, Agosi and its CoC status meet the standards of the Responsible Gold programme of the London Bullion Market Association (LBMA). 'This is another clear signal towards greater justice, more fairness and better transparency', says Becker.

Agosi is part of Umicore, of Brussels. Umicore is a materials technology group and focuses on catalysis, recycling, energy and performance materials in the hightech industries, with the overriding goal to produce 'materials for a better life' by means of sustainable value creation.

With its subsidiaries in Austria, the Netherlands, Switzerland, Thailand, North and South America, Agosi represents the core of the Umicore Business Unit Jewellery & Industrial Metals (BU JIM). It provides a closed-loop concept of precious metals services, products and refining on a global scale.

Coins in the News

Governor Hugo Frey Jensen of Danmarks Nationalbank travelled to Finland this month to celebrate the start of production of the first Danish coins to be minted outside the country. The Mint of Finland won the contract to make the coins. It will also mint silver collector coins in honour of the 50th wedding anniversary of HM Queen Margrethe II and HRH Prince Henrik.

Commenting on this milestone for both Denmark and the Mint, its CEO Jonne Hankimaa said: 'beginning with the tendering process, the Danish project has been a great learning experience for us. We are honoured to be able to celebrate the start of production with such ceremony.'

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Meanwhile, the governor said that 'Mint of Finland has been chosen following a transparent tender process and we are confident that they will be able to live up to our expectations.'

Last year, Mint of Finland won the tender organised by Danmarks Nationalbank following the closure of the Danish mint. In addition to cost-effectiveness, the tendering process addressed the quality, security and social responsibility of the projects.

Mint of Finland and Danmarks Nationalbank have signed a four-year framework agreement for the minting and delivery of Danish coins.



Hugo Frey Jensen of Danmarks Nationalbank at the Mint of Finland's facility in Vantaa, starting up production of the first Danish coins to be produced outside the country.

In Other News

• The Royal Canadian Mint has unveiled its 2017 Canada 150 circulating commemorative coin series, celebrating 150 years of confederation.

The reverse of the new coins feature designs by five Canadians, following a national contest called 'My Canada, My Inspiration' launched in March 2015 inviting the public to submit ideas for the new designs. Over a million votes were cast in a public vote to select the winning designs, from a selection that reportedly numbered in the thousands.



Each coin has its own theme: \$2 is Our Wonders, \$1 is Our Achievements, \$0.25 is Canada's Future, \$0.10 is Our Character, and \$0.05 is Our Passions.

The new coins will begin circulating during spring of 2017.

• Following the appointment of Londonbased Tower Mint by the Isle of Man Treasury last year, designs for a new set of circulating coins have been produced.

The designs include a \pounds 5 coin, of which 20,000 are expected to be issued. The \pounds 5 coin has been considered legal tender since its release in 1981 but, with around 260 coins issued per year on average, it has been considered a collector's coin. Circulating denominations consist of the 5, 10, 20 and 50 pence, and the \pounds 1, \pounds 2 and \pounds 5 coins. Unlike the UK, the Isle of Man will be keeping the 'round pound'.



The designs for the Isle of Man's new coins.

All seven coins have the inscription QUEEN ELIZABETH II – ISLE OF MAN and the year of issue on one side and an 'intrinsically Manx' image on the reverse. The latter include a Manx shearwater, peregrine falcons, a Viking longboat and the famous tail-less Manx cat. The £5 coin will feature the Triskelion, the three-legged symbol of the island depicted on the Manx flag and coat of arms.

Prior to last year's tender, the UK based Pobjoy Mint had produced coins for the Isle of Man, known as Manx currency, for more than forty years. Tower Mint begins its ten year contract with the Isle of Man Treasury in April.