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HEADS OR TAILS

Swissmint's customer magazine



Photo: BKW

EDITORIAL



Dear reader,

Renewable energy is the watchword in sustainable energy policy. Every day we use electricity to produce light and heat, to run machines and to transmit sound and images. The basis for these alternative forms of energy is provided by natural resources, such as water, wind and sun, and these will continue to meet the needs of future generations. They are available in unlimited quantities and are in line with the Energy Strategy 2050, which aims to ensure that Switzerland's energy supply is 100% renewable by 2050. Switzerland is one of the European leaders in terms of electricity production using renewable energies. Hydropower is the most important domestic source, accounting for around 96% of renewable energy.

Swissmint is honouring the promotion of renewable energies and the sustainable use of resources with its 20-franc silver coin "Hydropower". The coin is the prelude to the three-part series "Energy of the future" and stands out thanks to its colourful details, among other things. You will find more surprises in the product description.

Also on 9 September 2021, the trial minting will be released in a limited edition of only 500 coins. It features one of the best-known works of Swiss artist Sandro Del-Prete – "The Bridge of Life".

Take advantage of this opportunity and order an exceptional Christmas gift today! The 2021 Christmas coin set is a delight for all ages. You will also find our current stock list in this issue. This lists all coins still available, so this is the ideal moment to complete your collection and bring joy with a great gift.

We hope you enjoy reading this issue of **Head or Tails** and all the fascinating information on our new products and minting technology.

Marius G. Haldimann
Director

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ENERGY OF THE FUTURE – HYDROPOWER

Renewable energies – hydropower as a source of sustainability

Energy is a precious commodity and an indispensable part of our everyday lives; whether it's to make a coffee first thing in the morning, to warm up our meals at lunchtime or to tell children a bedtime story in dimmed light as part of the evening ritual. A sustainable energy supply plays an important role in this. Natural resources such as water, wind and sun will also meet the needs of future generations and reduce dependence on fossil fuels.

Energy Strategy 2050 – a milestone in sustainable energy policy

The energy revolution is on everyone's lips and is more topical than ever. The rethinking of fossil and nuclear energy sources began more than 30 years ago. The Chernobyl nuclear disaster on 26 April 1986 brought the issue of energy supply to the forefront of public interest. As a result, in the referendum in September 1990, the federal decree on the energy article in the Federal Constitution was accepted with 71.1% votes in favour. Energy policy has been firmly anchored in the Federal Constitution ever since. In the years that followed, the Energy Act and Ordinance were revised several times and supplemented at the turn of the millennium by what was then the CO₂ Act.

In 2011, another reactor disaster occurred, this time at the Fukushima Daiichi nuclear power plant in Japan, 9,500 kilometres away. This event also left its mark on Swiss politics. In May 2011, the Federal Council decided to phase out nuclear energy and drafted the Energy Strategy 2050, paving the way for a future without fossil fuels and atomic nuclear energy. The aim is to increase the share of hydropower plants and other renewable energies in the energy supply and to use only renewable energy sources from 2050. The Energy Act underwent a total revision and was approved by Swiss voters by referendum in 2017. A few weeks later, on 1 January 2018, the Federal Council brought the new law into force.

Renewable energies – long-term resources and environmental protection

Energy demand has risen sharply over the past 60 years. Per capita energy consumption is now two and a half times higher than it was in 1960. The main reasons for this increase are mobility, developments in housing standards and consumer goods. To meet this demand in the past, energy sources were mainly drawn from fossil fuels.

The decommissioning of the first nuclear power plant in 2019 was a major step forward in Switzerland's energy revolution. In that year, the Mühleberg nuclear power plant, which had been in operation since November 1972, was finally taken off the grid. The remaining four Swiss nu-



clear power plants are to follow in the next five to fifteen years. Nuclear energy accounts for 19% of Switzerland's energy supply (as of 2020) and is to be replaced by renewable energies in the future. The focus here is on the conservation of long-term resources and the environment, as well as on strengthening added value.

Switzerland is already one of the European leaders in terms of electricity production using renewable energies. The Energy Strategy 2050 aims to achieve a 100% energy supply from "green power". Hydropower is the most important domestic source, accounting for around 96% of renewable energy.

Hydropower – one of the oldest energy sources in the world

Hydropower is one of the oldest energy sources in the world and was already used more than 5,000 years ago. It offers an efficient, climate- and environmentally-friendly form of generating electricity. What is hydropower and how does it work?

Hydropower plants use the kinetic energy generated by flowing water. The water is passed through a turbine inside the hydropower plant. This begins to rotate under the pressure of the water and passes its kinetic energy onto a generator, which converts it into electrical energy. In

Switzerland, the hydropower plant network consists of run-of-river power plants (usually consisting of a barrage formed of a weir in a flowing body of water, e.g. river power plants), storage power plants (hydropower plants with natural or artificial water storage reservoirs) and pumped storage power plants (consisting of two water basins located at different heights, e.g. Grimsel). A total of 677 plants are in operation throughout the country, producing an average of around 36,741 gigawatt hours of electricity per year and thereby supplying 56% of Switzerland's energy needs. Around 11% of Switzerland's hydropower generation comes from centralised international hydropower plants on border waters.


Swissmint is honouring the promotion of renewable energies and the sustainable use of resources with its 20-franc silver coin "Hydropower". This fine coin is not only captivating with its colourful details, it also reveals another secret in the dark: the fluorescent elements printed on the coin begin to glow, which is another highlight in the history of Swiss coins. This is the first time that this special feature has been used on a coin issued by the Federal Mint Swissmint. The coin is part of the three-part "Energy of the future" series.

Sources

www.energieschweiz.ch, www.energie-experten.ch, www.strom.ch, www.bfe.admin.ch, www.solarspar.ch, www.wwf.ch, Wikipedia

DESIGN: BENJAMIN LÖBBERT



Benjamin Daniel Emil Löbbert, born in 1983, comes from Kempten in the Allgäu region of Bavaria. After training as a silversmith, he worked for a renowned Munich jeweller for the first few years of his career, until he decided to learn the profession of engraver in order to broaden and deepen his craftsmanship skills. He acquired these in 2012 in Neugablonz, and one year later he graduated from the school for master goldsmiths and silversmiths in Munich. Afterwards, Benjamin Löbbert worked as a freelance artist and took part in various private viewings and exhibitions with his paintings and sculptures. He came to Bern in 2017 and has been working as an engraver at Swissmint ever since. Benjamin Löbbert signs his works with his logo , a tradition from his silversmith days.

PRODUCT INFORMATION

COMMEMORATIVE COIN "HYDROPOWER"



Face value: 20 Swiss francs
Alloy: silver 0.835
Weight: 20g
Diameter: 33mm



Mintage Proof: 10,000 units*
Design: Benjamin Löbbert, Bern

Proof

Issue date: 9 September 2021
Sales period: until 8 September 2024 or while stocks last



Proof with certificate of authenticity



With fluorescent effect

*Sales per household are limited to two pieces.

The "Hydropower" silver coin **is not included in the subscription**. It has to be ordered separately.

Customers who have taken out a subscription for coins and coin sets had the opportunity to pre-order the "Hydropower" commemorative coin in July 2021. The invoice for the pre-ordered pieces will be sent on 06.09.2021.

Photo: BKW



"ILLUSION – THE BRIDGE OF LIFE" TRIAL MINTING

Optical illusions

On 29 January 2021, Swissmint launched the 20-franc silver coin "The Bridge of Life", designed around one of the best-known works by the Swiss illusionist Sandro Del-Prete.

Once a year Swissmint issues an "essay" (trial) coin. The reverse side of the coin bears the letter "E" as an identification mark which stands for "essay", as well as a small Swiss cross in a circle: This limited edition is supplied in a small, anthracite-coloured cardboard box (there is no numbered certificate of authenticity).

In contrast to the standard minting, the trial minting has been specially matted with a cloud on

the upper edge of the coin and shadows on the bridge.

The quantity which can be ordered is limited to **three** per customer or delivery address. Swissmint reserves the right to apply further restrictions. For more information concerning the order procedure, please see "Sales start" and "How are very limited edition products allocated?" on page 16.

DESIGN: SANDRO DEL-PRETE



Sandro Del-Prete was born in Bern in 1937 and completed his schooling with a commercial baccalaureate in Fribourg. His studies at Florence Academy of Fine Arts were the springboard for his artistic career. He studied the technique of light, shadow and structure through the works of the old masters. Back in Switzerland, he initially pursued a regular job. Only later was he able to devote himself solely to art. A chameleon with its eyes that looked in different directions inspired him to observe and draw things from different perspectives. This is how the first of many illusions came into being, both on paper and in the form of a statue. Sandro Del-Prete has exhibited his work at home and abroad and published books. Many of his works can be admired in his own museum "Illusoria Land" in Hettiswil near Hindelbank: www.illusoria-land.com.

PRODUCT INFORMATION

TRIAL MINTING "ILLUSION – THE BRIDGE OF LIFE"



Uncirculated

Face value: 20 Swiss francs
Alloy: silver 0.835
Weight: 20g
Diameter: 33mm

Mintage
Uncirculated: 500 units

Design: Sandro Del-Prete, Hettiswil

Issue date: 9 September 2021
Sales period: until 8 September 2024 or while stocks last



Trial minting

2021 CHRISTMAS COIN SET

Make someone happy this festive season!

Surprise your loved ones with the new 2021 Christmas coin set or add it to your own wish list. This brilliant gift idea combines the 2021 circulation coins with a shiny Christmas medal.

As early as in the Gospels, angels announced the joyful message of the birth of Christ at Christmas. For this reason, the graphic designer Jenny Leibundgut from Bern chose the trumpet-blowing angel and snow stars for the 2021 Christmas medal and its richly illustrated case. The struck design on the reverse of the medal shows the star of

Bethlehem, also known as the Christmas star. The medal is exclusively available in the Christmas coin set. By the way, you can also subscribe to receive this exclusive product.

DESIGN: JENNY LEIBUNDGUT



Jenny Leibundgut was born in Gümligen in 1959. At the start of her occupational training, she took the preliminary course at the Bern School of Design and then completed a diploma with a four-year apprenticeship under the well-known Swiss graphic artist Kurt Wirth in Bern. She won her spurs initially at Gottschalk+Ash in Zurich and later with Stuart Ash in Toronto, Canada. After two years working successfully with the internationally renowned design agency Landor Associates in San Francisco, she returned to Switzerland. Here as a lecturer, she taught specialisation in graphic art for nine years at the Bern School of Design. She has been running her own graphic art workshop in Bern since 1990. Her main fields of work include corporate design, typography, photography, illustration, posters and book and brochure design. Further information is available at leibundgutdesign.ch.

PRODUCT INFORMATION



Brilliant uncirculated

2021 CHRISTMAS COIN SET *Brilliant uncirculated with Christmas medal*

Face value:	8.85 Swiss francs
Alloy:	copper-nickel and aluminium-bronze
Measurements:	171 mm × 106 mm × 8 mm
Mintage:	1,500 units
Issue date:	9 September 2021
Sales period:	until 8 September 2024 or while stocks last



2021 COIN SETS

PRODUCT INFORMATION

2021 CLASSIC COIN SET

*Brilliant uncirculated
with "Fox" bimetallic coin*



Face value: 18.85 Swiss francs
Alloy: copper-nickel and aluminium-bronze
Measurements: 171mm x 106mm x 8mm



Brilliant uncirculated

Mintage: 8,000 units

Issue date: 21 January 2021
Sales period: until 20 January 2024
or while stocks last



2021 CLASSIC COIN SET

*Proof
with "Fox" bimetallic coin*



Face value: 18.85 Swiss francs
Alloy: copper-nickel and aluminium-bronze
Measurements: 171mm x 106mm x 8mm



Proof

Mintage: 2,500 units

Issue date: 21 January 2021
Sales period: until 20 January 2024
or while stocks last



PRODUCT INFORMATION

2021 BABY COIN SET *Brilliant uncirculated with bear medal*



Face value: 8.85 Swiss francs
Alloy: copper-nickel and
aluminium-bronze
Measurements: 171mm x 106mm x 8mm



Brilliant uncirculated

Mintage: 7,000 units
Issue date: 1 January 2021
Sales period: until 31 December 2023
or while stocks last



2021 BIRTHDAY COIN SET *Brilliant uncirculated with birthday medal*



Face value: 8.85 Swiss francs
Alloy: copper-nickel and
aluminium-bronze
Measurements: 171mm x 106mm x 8mm



Brilliant uncirculated

Mintage: 2,000 units
Issue date: 1 January 2021
Sales period: until 31 December 2023
or while stocks last



STOCK LIST

SILVER COINS

Issue date: 29.04.21

Illusion – The Bridge of Life



510000598 * CHF 30.00
510000600 + CHF 60.00

Issue date: 21.01.21

Friedrich Dürrenmatt



510000594 * CHF 30.00
510000596 + CHF 60.00

Issue date: 03.09.20

Susten Pass



510000504 * CHF 30.00
510000506 + CHF 60.00

Issue date: 03.09.20

Firefighters



510000498 * CHF 30.00
510000500 + CHF 60.00

Issue date: 23.01.20

Roger Federer



510000494 * CHF 30.00

Issue date: 12.09.19

Furka Pass



510000444 * CHF 30.00
510000446 + CHF 60.00

Issue date: 09.05.19

Moon landing



510000480 * CHF 30.00
510000482 + CHF 60.00

Issue date: 24.01.19

Blümlisalp steamboat



510000438 * CHF 30.00
510000440 + CHF 60.00

* Uncirculated in blister + Proof in presentation case

STOCK LIST

FOLDER WITH SILVER COINS

Issue date: 03.09.20

Susten Pass



510000505 - CHF 40.00

Issue date: 03.09.20

Firefighters



510000499 - CHF 40.00

Issue date: 12.09.19

Furka Pass



510000445 - CHF 40.00

Issue date: 24.01.19

Blümlisalp steamboat



510000439 - CHF 40.00

- Uncirculated in folder

BIMETALLIC COINS

Issue date: 21.01.21

Fox



510000590 * CHF 20.00
510000592 + CHF 45.00

Issue date: 23.01.20

Hare



510000490 * CHF 20.00
510000492 + CHF 45.00

Issue date: 24.01.19

Roe deer



510000430 * CHF 20.00
510000432 + CHF 45.00

* Uncirculated in blister + Proof in presentation case

STOCK LIST

FOLDER WITH BIMETALLIC COINS

Issue date: 21.01.21

Fox



510000591 - CHF 30.00

- Uncirculated in folder

Issue date: 23.01.20

Hare



510000491 - CHF 30.00

Issue date: 24.01.19

Roe deer



510000431 - CHF 30.00

CLASSIC COIN SET

2020

Issue date: 23.01.20

Classic coin set 2020 with bimetal coin "Hare"



510000510 CHF 40.00

Brilliant uncirculated



510000511 CHF 85.00

Proof

2019

Issue date: 24.01.19

Classic coin set 2019 with bimetal coin "Roe deer"



510000450 CHF 40.00

Brilliant uncirculated



510000451 CHF 85.00

Proof

STOCK LIST

BABY COIN SET

2020

Issue date: 01.01.20

Baby coin set 2020 with bear medal



510000509 CHF 40.00
Brilliant uncirculated

2019

Issue date: 01.01.19

Baby coin set 2019 with bear medal



510000449 CHF 40.00
Brilliant uncirculated

BIRTHDAY COIN SET

2020

Issue date: 01.01.20

**Birthday coin set 2020
with birthday medal**



510000508 CHF 40.00
Brilliant uncirculated

2019

Issue date: 01.01.19

**Birthday coin set 2019
with birthday medal**



510000448 CHF 40.00
Brilliant uncirculated

INSIDE SWISSMINT

AgieCharmilles LASER P 400 – high precision surface processing

In recent centuries, minting technology has been revolutionised in many areas. Not only have the raw materials become finer and purer, but the processes for making the coin dies have also constantly evolved. Where engravers used to work on each hallmark by hand, new technologies are now in use: high-precision lasers. This is also the case at Swissmint, where the LASER P 400 was recently introduced.

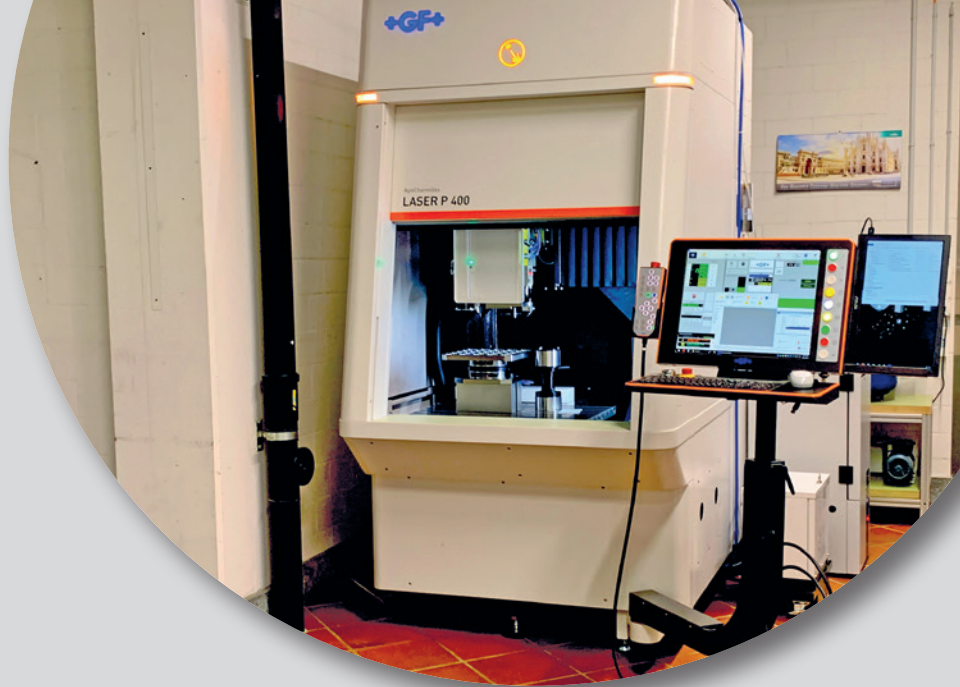
What is a laser and when is such a system used in minting?

The origin of the laser is based on the theoretical principles of Albert Einstein. It was not until four decades later, in 1960, that the American physicist Theodore Maiman succeeded in putting his theory

into practice. He managed to focus the light beam using mirrors and a ruby crystal. This was the birth of the first functioning laser.

At the Federal Mint, the laser is mainly used to produce the tools, especially the coin dies.





Higher precision in surface processing

Thanks to the ytterbium fibre laser source, the system guarantees completely burr-free surfaces and engravings. It operates in the nanometre range (one billionth of a metre) and with a very high repetition accuracy.



Laser technology enables Swissmint to add different and variable matting during the production of coin dies, which cannot be achieved by manual processing. The result is reflected in the final product, e.g. the trial minting of "Illusion – The Bridge of Life". A closer look at the cloud reveals all kinds of details regarding the dot density of the matting. In the past, the texturing of the dies was uniform compared to what is possible with the new laser method.

The new medals – playing with multifaceted matting

From 2022 onwards, the medal in the coin sets will also have a new look. By working the coin die, the grey tones are now more differentiated and pronounced. The laser achieves such matting by varying the intensity of the light beam shots. Darker areas are subjected to longer laser pulses, while the lighter shades are subjected to shorter pulses. The following images illustrate this.

The new laser system is paving the way for the future and will be one of the main players in the creation of coin dies at Swissmint. You can look forward to new coins that will impress not only with innovation but also with the highest quality.

Sources

GF Machining Solutions AgieCharmilles LASER P 400 user manual, Wikipedia



Old coin die



New coin die



From 2022 onwards, new medal baby coin set

SWISSMINT-NEWS

Sales start

Sales will start on the day of issue, 9 September 2021, at 8am. The new products will be available at www.swissmintshop.ch from this time. Alternatively, we can of course accept orders made using the enclosed order form. Please note that we **CANNOT** accept any orders by email or telephone.

How are very limited edition products allocated?

The following product is a very limited edition and the following quantity restriction applies per name and address:

Trial minting	Illusion – The Bridge of Life, "uncirculated"	3 units
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Swissmint does not accept reservations for very limited products. Small quantities of these special products are destined for sale online via www.swissmintshop.ch. Remaining stock (**for orders placed using the order form**) is distributed by drawing lots. Please note that we **CANNOT** accept any orders by email, telephone or other means. Thank you for your understanding.

Invoice and bank transfer in Swiss francs

All our invoices are issued in Swiss francs. If you make a transfer in euros to pay the invoice amount, you can often only estimate the amount to be debited (fluctuating exchange rate, possible additional fees by the financial institution used). We therefore ask you to make your payment in Swiss francs to avoid transferring too little or too much. Alternatively, you have the option of paying by credit card when ordering online at www.swissmintshop.ch. Your card issuer will automatically calculate the order amount in your country's currency.

Shipping after receipt of payment

Your products will be sent as an insured consignment immediately after your payment reaches our account. Special dispatch requests cannot be accommodated. The delivery time for shipments within Switzerland is approximately 5 to 10 working days after receipt of payment; international shipments will take longer.

Diary – We look forward to meeting you

Swissmint plans to be present with a stand at the following coin fair:

30 and 31 October 2021	Zurich International Coin Fair, Hotel Marriott, Zurich
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2022 coin programme

1 January 2022	Coin set	2022 birthday coin set
	Coin set	2022 baby coin set
20 January 2022	Bimetallic coin	"Morteratsch glacier" from the "Swiss glaciers" series
	Silver coin	"Mani Matter"
	Platinum coin	"Platinum"
	Coin set	2022 classic coin set, brilliant uncirculated
	Coin set	2022 classic coin set, proof
5 May 2022	Silver coin	"Klein Matterhorn" from the "Mountain railways" series
	Gold coin	"100 years of last minting 10-francs Vreneli"
8 September 2022	Silver coin	"Solar power", from the "Energy of the future" series
	Coin set	2022 Christmas coin set
	Trial minting	"Mani Matter"

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Subscribers should use this order form exclusively for additional orders.

ORDER FROM HEADS OR TAILS 3/2021

K1L

Item	Item number	Quantity	Price in CHF
Hydropower (Energy of the future series) / 20-franc piece, silver			
Proof in presentation case	510000604		80.–
The «Hydropower» silver coin is not included in the subscription . It has to be ordered separately. Customers who have taken out a subscription for coins and coin sets had the opportunity to pre-order the «Hydropower» commemorative coin in July 2021. The invoice for the pre-ordered pieces will be sent on 06.09.2021.			
Trial minting Illusion – The Bridge of Life / 20-franc piece, silver			
Uncirculated	510000606		200.–

Item	Item number	Quantity	Price in CHF
2021 coin sets			
Classic, brilliant uncirculated	510000580		40.–
Classic, proof	510000581		85.–
Baby coin set, brilliant uncirculated	510000582		40.–
Birthday coin set, brilliant uncirculated	510000583		40.–
Christmas coin set, brilliant uncirculated	510000584		40.–

We make no delivery charges to addresses in Switzerland and Liechtenstein. For all other countries please see the delivery rates at www.swissmintshop.ch. Prices include VAT for products subject to VAT. Subject to change without notice. This offer is applicable so long as stocks last.

Payment method:

Payment in advance (after receipt of the order, you will receive a bill).
You can order these fine products online and pay for them using your credit card: www.swissmintshop.ch

☐ Please send me an order form "Subscription".

By signing the order form, I unconditionally accept the Swissmint terms and conditions with which I am familiar (www.swissmint.ch).

Date of order/Signature:

Name, first name _____

Street or P.O. Box _____

Postal code, locality _____

Country _____

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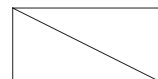
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