

## FAQ about the 100 forint coin made of new base material

### 1. Why did the MNB decide to issue 100 forint coins made of new base material?

The MNB decided on the use of new base material for coins with a view to increasing the security of the base material supply necessary for minting the 100 forint coins and facilitating more stable and reliable functioning of coin-operated vending machines.

The MNB issued the steel-based 100 forint coins currently in circulation in 1996. During the more than 20 years that elapsed since then major changes took place in coin production: new planchet and metal alloys – serving as base material for coins – of lower procurement price appeared; following the introduction of the euro coins, the European planchet manufacturer market was reorganised and became more concentrated; in addition, the coin acceptance units installed in the vending machines also improved a lot in technical terms. Apart from the diameter, thickness and weight they are able to check many other parameters (e.g. material composition, electric conductivity, etc.) simultaneously, and thus they became more reliable.

**The present 100 forint coins are distinguished from the other elements of the series of circulation coins in the fact that they are made of alloy-coated steel rather than of non-ferrous metal alloy.** By now there is only one manufacturer in Europe that is able to produce this special “sandwich-structured” base material. Since there is no other country, apart from Hungary, that uses this special base material for any of its circulation coins, the delivery terms (price, delivery and payment deadline) applicable to the base material necessary for the planchet manufacturing became more unfavourable than those applicable to the homogeneous alloys used as base material for the other forint coins or to the other base materials (e.g. galvanised metals or the Nordic gold used for euro coins) used in other countries.

During the use of steel-based 100 forint coins in vending machines, the MNB was notified on several occasions that the coins became magnetised from time to time, and the vending machine rejected the coin or accepted it only after several attempts. (This is why there is a metal surface on some of the vending machines, patting which with the coin will cause the coin to be accepted due to its changed magnetic attributes.) Such magnetism cannot occur with non-ferrous metal alloy base materials.

An additional advantage of the base material of the new 100 forint coin is that it is more advantageous to recycle the coins made of homogeneous alloy base material than the steel base material.

### 2. What is the difference/similarity of the 100 forint coin presently in circulation (old) and that made of the new base material?

When visually comparing the 100 forint coin made of the new base material with that already in circulation, no major difference can be perceived. The diameter and thickness, as well as the ratio of the ring and the core of both of them are the same, just like the image on the coin.

The base material of the bicolour coin, issued on 21 October 1996 and being still in circulation at present, is steel. The ring of the coin is of silver white (metal) colour due to the nickel coating, while the core is coated by golden yellow brass (Cu75%-Zn25%).

The 100 forint coin made of the new base material – on the model of the 200 forint denomination, being in circulation since 15 June 2009 – is not only of bicolour, but also of bimetal, i.e. the ring and

core are made of base materials of two types of alloy. Both parts of the coin are made of non-ferrous metal alloys (copper, nickel and zinc), but in order to make the colour of the ring and the core resemble the colour of the old coin, the composition of the alloys differs. The metal-colour ring is made of 65% copper, 15% nickel and 20% zinc, while the base material of the yellow core is made of 75% copper, 4% nickel and 21% zinc.

Although due to the different base materials the weight of the two types of 100 forint coins differs, the difference is pretty small, and can be hardly felt when holding the coins in your hand: while the old, steel-based 100 forint coin weighs 8.0 grams, the new one, made of non-ferrous metals weighs 6 tenth more, i.e. 8.6 grams.

In visual terms there is minimal difference only in the colour of the two types of 100 forint coins, namely in the core. That is, the core of the old coin is coated with brass, which – in the case of freshly minted, BU (Brilliant Uncirculated) coins – has metallic, lustrous golden yellow colour. The core of the new 100 forint coin has the same metal composition (Cu75Ni4Zn21) as the 5 and 20 forint denominations, being in circulation since 1993, and thus these coins may also serve as a good point of reference for the colour they are expected to take when used in circulation.

**Technical comparison:**

Description		Old 100 forint coin	New 100 forint coin
Base material	ring	nickel-coated steel	alloy of copper (65%), nickel (15%) and zinc (20%)
	core	steel coated with alloy of copper (75%) and zinc (25%)	alloy of copper (75%), nickel (4%) and zinc (21%)
Diameter		23.8 mm	23.8 mm
Thickness		2.6 mm	2.6 mm
Weight		8.0 grams	8.6 grams

**3. Is there anything to be done by the population in relation to the issuance of the 100 forint coins of new base material?**

The change in the base material will not be perceivable for the population, since the appearance and key parameters (colour, image on the coin, diameter, thickness) of the 100 forint coin presently in circulation remain unchanged.

**4. Does the MNB plan to withdraw the old, steel-based 100 forint coins?**

The MNB does not plan to withdraw the old 100 forint coins, made of steel; they will remain in circulation in parallel with the 100 forint coins made of new non-ferrous metal alloy.

**5. When will the 100 forint coin of new base material be put in circulation?**

Similarly to the banknotes, the 100 forint coins of new base material will be put into circulation in two steps; first it will become legal tender from 1 October 2019.

Following the promulgation of the decree on the issuance, the central bank provides the participants of the cash supply chain with six months to get prepared and also with technological support, particularly the operators of vending machines to configure their equipment for the acceptance of the 100 forint coins of new base material.

The new 100 forint coins will appear in circulation only after this, **in May 2020, at the earliest.**

**6. Which company supplies the base material for the 100 forint coins of new base material?**

The planchets necessary for the manufacturing of the 100 forint coins of new base material are delivered by the South Korean Posco (formerly Posco-Daewoo) trading house. Hungarian Mint Ltd. has smooth customer and supplier relations of several decades with this company, since the planchets for the manufacturing of the other forint coins are delivered by the same company. (Hungarian Mint Ltd. invites a tender every four years for the procurement of planchets serving as base material for the circulation coins, in order to secure continuous supply and enforce market trends through the renewal of the procurement procedures every four years and to procure the base material on the most favourable terms.)

**7. Is it not a risk that Hungarian Mint Ltd. purchases the planchets for all coin denominations from a single company?**

Procurement of planchets from a single manufacturer is rather an advantage than a disadvantage in the area of coin manufacturing. Namely, for the secure acceptance of the coins by the vending machine the stability of the planchet supplier – according to the international best practices – is expressly recommended. In terms of the flexibility of the delivery deadline and price the existence of a single supplier is an advantage.

There are other European manufacturers that are able to produce the planchet of homogenous alloy, used for the forint coins, should any problem arise in the availability of the South Korean company.

**8. Is the procurement price of the new planchet lower or higher?**

Despite the fact that the planchets of new base material are made of homogeneous copper-nickel-zinc alloy, they are cheaper by 30 percent compared to the old, steel-based coins. This is due to the fact that the processing cost of the sandwich-structured planchets of the former steel-based coins is substantially higher than the price of the base material.

**9. Which factors have been taken into consideration when selecting the base material for the new 100 forint coin?**

On behalf of the MNB, Hungarian Mint Ltd. asked for proposal for the base material of the new 100 forint coins from nine companies, being the largest European, North American and Asian suppliers. The nine planchet suppliers submitted proposals for a total of twenty different planchet specifications. When selecting the new base material and manufacturer, the MNB took into consideration the following key criteria:

- the composition of the material should be such that several suppliers should be able to produce it, the supplier should have its own metallurgy works and the delivery of the planchets should not depend on the availability of additional suppliers
- it should be possible to use it reliably in the vending machines
- it should not be easily mixed up with the coins used in the neighbouring countries
- preferably it should be cheaper than the old steel-based 100 forint coin. .

**10. What should the vending machine operators do to make their vending machines capable of accepting the new 100 forint coins?**

The MNB puts the 100 forint coins of new base material into circulation in May 2020 at the earliest, and thus the vending machine operators have more than six months to configure their vending machines to accept the 100 forint coins of new base material.

For the purpose of reconfiguring the vending machines to accept the 100 forint coins of new base material, the MNB provides test coins under an exchange of denominations arrangement. The test coins can be collected in person at the retail cash office of the MNB at

Budapest, 1013 Krisztina körút 55.

<https://www.mnb.hu/en/banknotes-and-coins/cashier-services-for-general-public/contact-us>. Please notify us of the number of coins you wish to collect at least two working days before the anticipated collection date by sending a mail to [penztar@mnb.hu](mailto:penztar@mnb.hu).

### **11. Why did the MNB not change the external parameters of the new 100 forint coins, if the material is changed anyway?**

In 2018 the MNB conducted a survey on the households' attitude related to coins and their coin usage habits. One of the main lessons learnt from the survey was that the vast majority of the households are essentially satisfied with the usability of the present forint coins, and find them easy to manage and aesthetic, particularly the 100 and 200 forint coins due to their bicolour finish. A number of people mentioned that as for the 100 forint coins they like that the coin is slightly thicker than the other denominations, and thus they can be easily distinguished purely based on the touch when diving in their pocket or purse.

In addition, several coin-operated vending machines – examining simple mechanical attributes – also decide on the acceptance of the coins based on the weight, thickness of edge and diameter. Since a large number of such equipment is in place in Hungary, the usage of the new coin requires less adjustment.

In view of the users' opinion mentioned above, the MNB opted for not altering the appearance of the new 100 forint coins.

### **12. Does the MNB plan to change the base material of the other coin denominations as well?**

The MNB continuously analyses whether the banknotes and coins in circulation fulfil their function and monitors the international trends related to the base material of banknotes and coins. At present the change of the base material of other coin denominations is not on the agenda.

### **13. How many 100 forint coins are in circulation? How fast the coins of new base material will be released to circulation?**

The 100 forint coins account for 10 percent of the almost 2 billion coins in circulation, i.e. the total number of them is 200 million. Roughly 10-12 million 100 forint coins are put in circulation annually. Since the steel-based 100 forint coins will remain in circulation also after the introduction of the 100 forint coins of new base material – although no new coins will be minted from this material – the ratio of the new 100 forint coins in circulation will increase slowly.

### **14. What can I do if the vending machine does not accept my 100 forint coin made of the new material? Can the operator of the vending machine be punished?**

The MNB provides the vending machine operators with more than six months to reconfigure their vending machines to accept the coins of new base material. Nevertheless, it may happen that by the time of putting the new coins into circulation, anticipated for May 2020, not all vending machines will be reconfigured and thus a few vending machines will not accept the new 100 forint coins. Since the MNB does not prescribe the types of payment instruments that the vending machines must

accept, it does not punish inadequate operation either. It is in the business interest of the operator companies to ensure the continuous functioning of the vending machines.

**For further, up-to-date details on the changes affecting forint coins and banknotes, please, visit the page entitled Banknotes and Coins on the MNB's website (<https://www.mnb.hu/en/banknotes-and-coins>).**