INTERSTATE COUNCIL FOR STANDARDIZATION, METROLOGY AND CERTIFICATION (MGS) INTERSTATE COUNCIL FOR STANDARDIZATION, METROLOGY AND CERTIFICATION (ISC)

INTERSTATE STANDARD ΓΟCT 28058-2015

GOLD BULLION

Technical conditions

Official publication

Preface

The goals, basic principles and the basic procedure for carrying out work on interstate standardization are established by GOST 1.0 2015 "Interstate Standardization System. The main provisions" and GOST 1.2-2015 "Interstate standardization system. Interstate standards, rules and recommendations on interstate standardization. Rules for development, acceptance, updating and cancellation")

Information about the standard

- 1 DEVELOPED by the Interstate Technical Committee for Standardization of MTK 304 "Precious metals, alloys and industrial products from them", Joint-Stock Company "Ekat-Rinburg Plant for processing non-ferrous metals"
 - 2 INTRODUCED by the Federal Agency for Technical Regulation and Metrology
- 3 ADOPTED by the Interstate Council for Standardization, Metrology and Certification (Protocol No. 81-P of October 27, 2015)

The adoption was voted for:

Short name of the country according to MK (ISO 3166) 004 97	MK Country Code (ISO 3166) 004 97	Abbreviated name of the national standardization body
Armenia Belarus	AM 1 BY	Ministry of Economic Development of the Republic of Armenia Gosstandart of the Republic of
Kyrgyzstan Russia	KG RU	Belarus Kyrgyzstandart Rosstandart
Tadjikistan	_TJ	Tajikstandart

4 By Order of the Federal Agency for Technical Regulation and Metrology No. 515-st dated June 3, 2016, the interstate standard GOST 28058 2015 was put into effect as the national standard of the Russian Federation from January 1, 2017.

5 INSTEAD OF GOST 28058 -89

Information about changes to the current standard is published in the annual information index "National Standards", and the text of changes and corrections in the monthly information index "National Standards". In case of revision (replacement) or cancellation of this standard, the corresponding notification will be published in the monthly information index "National Standards". The relevant information, notification and texts are also posted in the public information system - on the official website of the Federal Agency for Technical Regulation and Metrology on the Internet

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GOLD BULLION

Technical conditions

Gold In Ingots. Specifications

Date of introduction - 2017-01-01

1 Scope of application

This standard applies to refined gold bullion intended for the needs of the country and exports.

2 Regulatory references

This standard uses normative references to the following interstate standards:

GOST OIML R 76-1-2011 State system for ensuring the uniformity of measurements. Scales I non-automatic action. Part 1. Metrological and technical requirements. Trials

GOST 166 89 (ISO 359976) Calipers. Technical specifications

GOST 427-75 Measuring metal rulers. Technical specifications GOST

14192-96 Marking of goods

GOST 15150 69 Machines, devices and other technical products. Versions for various climatic regions. Categories, conditions of operation, storage and transportation in part effects of climatic factors of the external environment

GOST 17527-2014 (ISO 21067:2007) Packaging. Terms and definitions

GOST 26877-2008 Metal products. Methods for measuring shape deviations

GOST 27973.0 881) Gold. General requirements for analysis methods

GOST 27973.1-882) Gold. Methods of atomic emission analysis

GOST 27973.2 882) Gold. The method of atomic emission analysis with inductionplasma

GOST 27973-3 882) Gold. Atomic absorption analysis method

When using this standard, it is advisable to check the validity of reference standards in the public information system - on the official website of the Federal Agency for Technical Regulation and Metrology on the Internet or by the annual information index "National Standards", which is published as of January 1 of this year, and by issuekam of the monthly information index "National Standards" for the current year. If the filling standard is replaced (modified), then when using this standard, the replacement (modified) standard should be followed. If the reference standard is changed without replacement, then the provision in which the reference to it is given applies in the part that does not affect this reference.

¹⁾ In the Russian Federation, GOST R 52599-2006 "Precious metals and their alloys. Common regulrements for analysis methods".

² In the Russian Federation, along with the above, GOST R 53372-2009 "Gold. Methods analysis".

3 Terms and definitions

In this standard, the terms according to GOST 17527 are used, as well as the following terms with appropriate definitions:

- 3.1 ingot: Crystallized metaplast melt of a certain geometric shape and the masses.
- 3.2 Inclusion: A defect in the form of a solid foreign particle in a metal of various shapes and of a metallic or non-metallic (slag) origin.
- 3.3 concavity: The deviation of flatness, in which the removal of the points of the surface of the cross-section of the ingot from the adjacent horizontal surface increases from the edges in the middle.
 - 3.4 Burr: Excess metal remaining on the edges of the ingot after the processing process.
- 3.5 influx: A defect in the form of a solidified metal protrusion of various sizes and shapes on the ingot surfaces.
- 3.6 scratch: A surface defect in the form of a recess of irregular shape and arbitrary direction, formed as a result of mechanical damage, including during storage-research institute and transportation.

4 Classification, basic parameters and dimensions

4.1 Depending on the chemical composition, ingots are made of gold of the grades EVIL-1P, Evil-1, Evil-2, Evil-3, Evil-4.

An example of the symbol of the affinity of the gold plate of the Trademark-1:

Gold in bars of EVIL-1 GOST 28058 2015

- 4.2 Basic parameters and dimensions
- 4.2.1 Gold bars should have the form of a truncated pyramid, the bases of which are rectangles. The main sizes of ingots are given in Table 1.

Table 1

In millimeters

	The base is	s larger			The base i	s smaller		Heig	ıht
Len	gth	Widt	h	Len	gthı	Widt	th		
Namin. size	Before.	Nomin size	Before. off.	Nomin.	Before, off	Namin,	Before, off.	Nomin.	Before. off.
254	±5	88	±5	229	±5	59	±5	35	±8

Primehane-In agreement with the consumer, it is allowed to produce ingots of other shapes and otherof similar sizes.

4.2.2 Ingots are made weighing from 11000,0 to 13300,0 g.

Primeh a nie-By agreement of the manufacturer with the consumer, it is allowed to produce ingots of another the masses.

5 Technical requirements

- 5.1 Characteristics (properties)
- 5.1.1 Gold bullion (hereinafter referred to as bullion) must comply with the requirements of this standard and be manufactured according to the technological regulations approved by the established procedure.
- 5.1.2 The chemical composition of gold bars must comply with the norms and requirements, specified in table 2.

Ta bl and c a 2 - Chemical composition of gold in ingots

As a percentage:

Stamp	Mass fraction								
	Gold, at least	Impurities, no more							
		silver	Platinum	Palpadius i	Rhodium				
Evil-1P	99,995	0,0035	0,0005	0,0005	0,0005				
Evil-1	99,99	0,0050	0,0010	0,0030	0,0010				
Evil-2	99,98	0,0150	0,0050	0.0050	0,0010				
Evil-3	99,95	0,0350	0,0050	0.0100	0,0020				
Evil-4	99,90	_	_	_	_				

Continuation of table 2

				Mass fraction			
Stamp			Ir	npurities, no mor	rei		
	Copper	Lead	Iron)	Zinc	Bismuth	Tin	Manganese.
Evil-1P	0,0005	0,0005	0.0005	0,0005	0,0005	0,0005	0,0005
Evil-1	0,0010	0,0010	0,0010	0,0010	0,0010	0,0010	0,0005
Evil-2	0,0050	0,0050	0.0010	0,0010	0,0010	0,0010	0.0005
Evil-3	_			_	_	_	_
Evil-4	-	-	-	_	_	_	_

End of table 2

Stamp			Mass fra	action (
	Impurities, no more								
	Sillcon	Magnesium	Chrome	Nickel	Antimony	Total			
EvII-1P	0,0010	0,0010	0,0005	0,0005	0,0005	0,01			
Evil-1	0,0030	0,0030	0,0005	0,0005	0,0010	0,01			
Evil-2	_		0,0005	0,0005	0,0010	0,02			
Evil-3	_	_			_	0,05			
Evil-4	_	_	_	_	_	0,10			

- Notes
 1 The "-" sign means that the impurity is determined, but not normalized.
- 2 Column "Total" includes the sum of impurities indicated in the table.

It is allowed on the surface of the ingot to have a cleaned depth of no more than 1 mm and concavity. from shrinkage of metal with a depth of no more than 5 mm.

^{5.1.3} The surface of the ingots must be free of floats, burrs, scratches, fat spots, andronny inclusions.

5.2 Labeling, packaging

5.2.1 The following information should be applied on the larger base of each ingot:

- number (cipher1)) ingot;
- symbols of the manufacturer's state;
- trademark of the manufacturer:
- brand of gold; -

mass fraction of gold, %; - weight

of the ingot, g; - year

of manufacture.

5.2.2 Wrapped ingots packaging paper or plastic wrap, must be laid they are packed in solid wooden boxes, plastic containers or laid with solid gaskets packed in bags made of dense fabric.

the safety of ingots

The free space in the box (container) is filled with a soft packaging material, protecting ingots during transportation from mechanical damage.

Other types and materials of packaging can be used to ensure during transportation and storage. 5.2.3 On each box (container) or tag attached to the bag indicate:

- the name of the consumer company;
- gross weight, g;

parcel number.

Additionally, the tag may contain other necessary information (for example, net weight, value of the parcel, name of the manufacturer and its address, registry number, seal impressions, index of the storekeeper-packer, quality control stamp, etc.).

5.2.4 Boxes (containers) are sealed or sealed. Seals (seals) must have a clear impression.

Transport marking - according to GOST 14192, indicating the manipulative the sign "Fragile. Be careful."

- 5.2.5 Each) a batch) of gold # bullion is accompanied by a quality I document (passport, certificate) containing:
- the name of the manufacturer's company or trademark and the name of the companymanufacturer-
 - product symbol;
 - batch number;
 - -numbers (ciphers) of ingots;
 - number of ingots;
 - mass fraction of gold, %; -

mass fraction of each determined impurity 2), %; -

mass of ingots in the batch,

g; - specification number;

- year of

manufacture; - quality control stamp.

5.2.6 Each delivery of gold bars is accompanied by a specification containing:

- the name of the manufacturer;
- the symbol of the product;
- the numbers (codes) of the bars;
- number of ingots;
- the mass of each ingot, g;
- the mass fraction of gold in each ingot, %;
- the mass of gold in each ingot, g;
- the total mass of gold according to the specificationg;
- the total mass of ingots according to the specification, g
- the specification number;
- batch numbers;
- vear of release

The quality document and specification are enclosed in a package with accompanying documentation.

 $^{^{1\!} J}$ The principle of forming the ingot cipher is established by the manufacturer.

²⁾ It is allowed to specify the limit values of gold (no less) and impurities (no more).

6 Acceptance rules

- 6.1 Ingots are accepted in batches. The batch must consist of a single melting metal. The mass of the notbatch is limited.
- 6.2 Control of mass, surface quality and marking for compliance with requirements 4.2.2, 5.1.3, 5.2.1 each ingot must be exposed.
- 6.3 In order to check the chemical composition for compliance with the requirements of 5.1.2, the manufacturer takes a sample from the molten metal in the middle of pouring the batch into ingots. It is allowed to use another method of sampling according to its ownmethodologywhich does not impair the representativeness of the

sample. To check the chemical composition, the consumer takes a sample of 10% of the ingots from the batch, but not less than two ingots. It is allowed to accept the chemical composition of ingots according to the accompanying documents of the manufacturer.

- 6.4 In case of non-compliance with the requirements of 5.1.2, repeated tests are carried out on a doubled sample or a sample taken from the same melting. To assess compliance with the requirements of 5.1.2 in this case accept the results of repeated tests.
- 6.5 The size of the ingots is monitored at least once a month and on at least one ingot from the party.
- 6.6 Each packing place of the batch is checked for the quality of packaging and labeling.tara's tailor.

7 Control methods

7.1 The chemical composition is determined according to GOST 27973.0, GOST 27973.1, GOST 27973.2, GOST 27973.3 or other methods that provide the required accuracy. The

consumer selects the sample is drilled with a carbide drill with a diameter of at least 6 mm from two opposite corners and sides of the ingot to a depth of at least half the thickness of the ingot. The mass of the sample is not less than 25 g.

Other sampling rules may be applied that do not reduce the representativeness of the sample.

7.2 If the consumer has a claim to the assessment of the chemical composition, an analysis of the control sample stored by the manufacturer is performed. The shelf life of the control sample is at least 30 calendar days from the date of shipment to the consumer.

Pr and me h a n i e - It is allowed to set the shelf life of the control sample in agreement with thebitelem.

- 7.3 The mass of ingots is determined on scales that meet the requirements of GOST OIML R 76-1 and ensure the accuracy of weighing in accordance with the rules of accounting for precious metals.
- 7.4 The quality of the ingot surface is controlled by inspection without the use of magnifying glasses devices.
- 7.5 The dimensions of the ingots are measured with a caliper according to GOST 166 or a metal ruler by GOST 427.

It is allowed to use other measuring instruments that provide the required accuracy.

- 7.6 The concavity from shrinkage of the metal is measured in accordance with the requirements of GOST 26877.
- 7.7 The marking and packaging are checked by external inspection.

8 Transportation and storage

- 8.1 Transportation, storage and accounting of gold bullion is carried out in accordance with the procedurel for storage, transportation and accounting of precious metals.
- 8.2 During transportation and storage, ingots must be protected from contamination, mechanicalphysical damage, exposure to moisture, aggressive media, vapors of sulfur compounds.

Storage conditions in terms of exposure to climatic factors - 1 (L) according to GOST 15150 (tabpersons 13), transportation conditions -3 according to GOST 15150 (Table 13).

9 Manufacturer's guarantees

The manufacturer guarantees compliance of gold bars with the requirements of this standard when compliance with the conditions of transportation and storage established by this standard.

The shelf life of gold bullion is not limited.

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