



Shanghai Gold Exchange Standard

SGEB2-2019

Supersedes SGEB2-2004

Gold Bar

Release: 2019-09-03

Effective: 2019-12-01

Release by Shanghai Gold Exchange

Preface

This standard is drafted in accordance with the rules of GB/T 1.1-2009.

This standard supersedes SGE Standard for Gold Bar SGEB2-2004. Changes in this revision are as follows:

- Revised the format of the standard;
- Consolidated in Table 1 the bottom-side dimensions and deliverable weight for gold bars; removed the specific provisions on the deliverable weight;
- Added the weighing requirement for gold bars;
- Added a provision which permits the customized gold bars based on transaction needs;
- Added the requirement that all gold bars must be Au99.99;
- Added the requirements for determining the gold content of Au99.99;
- Updated the requirements for checking physical specifications;
- Added provisions on judging the external dimensions and weighing results.

This standard is proposed, drafted, and released by the Shanghai Gold Exchange.

This standard supersedes the following older standards:

- SGEB2-2004.

Gold Bar

1. Scope

This standard sets out the product designation, requirements, testing methods, testing rules, markings, packaging, transport, storage, and certificate of quality for gold bars deliverable through the Shanghai Gold Exchange.

This standard applies to the gold bars delivered through the Shanghai Gold Exchange.

2. Normative References

The following standards are mandatory for the application of this document. For dated references, only the dated version shall apply to this document. For undated references, the latest versions (including all subsequent amendments) shall apply to this document.

- GB/T 8170-2008: Rules of Rounding Off for Numerical Values & Expression and Judgment of Limiting Values
- GB/T 11066 (all parts): Methods for Chemical Analysis of Gold
- SGEB1-2019: Gold Ingot

3. Variety

Gold bars come in 50g and 100g variants.

4. Technical Requirements

4.1 Physical Specifications

4.1.1 Weight of standard gold bars: 50g and 100g.

4.1.2 The bottom face and four sides shall be rectangular, with an undercut of no more than 10° for the sides. The vertices of the bottom face and the four side edges should have rounded corners with a radius of 2-3 mm.

4.1.3 The permitted dimensional ranges for the bottom face and deliverable weight of a gold bar are given in Table 1.

Table 1

Specification	Length (mm)	Width (mm)	Permitted Deliverable Weight (g)
50g	40 ± 2	12 ± 2	50 $\begin{smallmatrix} +0.10 \\ 0.00 \end{smallmatrix}$
100g	60 ± 2	16 ± 2	100 $\begin{smallmatrix} +0.10 \\ 0.00 \end{smallmatrix}$

4.1.4 Negative tolerances are not allowed in gold bars. The weight of 50g gold bars is invariably treated as 50.00g; that of 100g gold bars is invariably treated as 100.00g.

4.1.5 Gold bars of customized specifications can be produced according to transaction needs.

4.2 Surface Quality

4.2.1 Gold bars should have intact edges and corners, smooth surfaces, and smooth transition from the top and bottom faces to the sides.

4.2.2 Gold bars should not have any cavities, excessive shrinkages, inclusions, pores, pitted surfaces, cold shuts, blisters, icicle-shaped marks, or other defects.

4.2.3 Save for relevant surface markings, gold bars should be free of machining marks.

4.3 Chemical Composition

4.3.1 Gold bars only have a single grade, Au99.99. The chemical composition of gold bars shall conform to the specifications in Table 2.

Table 2

Designation	Chemical Composition (%)							
	Au \geq	Impurity Content \leq						
		Ag	Cu	Fe	Pb	Bi	Sb	Total
Au99.99	99.99	0.005	0.002	0.002	0.001	0.002	0.001	0.01

4.3.2 In accordance with SGEB1-2019, the gold content of Au99.99 is determined by the subtraction method, i.e., 100% minus the measured impurity levels. The impurities to be measured include but are not limited to those listed in Table 2.

4.3.3 Other compositional requirements may be specified based on transaction needs.

4.4 Inspection and Acceptance

4.4.1 Manufacturer shall ensure the quality of gold bars it produces complies with this standard.

4.4.2 Where the gold bar received by the buyer does not conform to this standard, the buyer and the supplier shall negotiate for a solution. If arbitration is necessary, an SGE-designated quality inspection agency shall be responsible for the testing. The testing results shall form the basis for the ruling.

4.5 Testing Methods

4.5.1 The arbitration assay of the chemical composition of gold bar shall be conducted according to the method under GB/T 11066. Other methods are permissible provided the precision and accuracy is no lower than that required by GB/T 11066.

4.5.2 The surface quality of gold bar shall be determined by visual inspection.

4.5.3 The physical specifications of gold bar shall be examined with apparatus of appropriate precision levels.

4.6 Testing Rules

4.6.1 The chemical composition shall be assayed by manufacturing batch, with each batch consisting of gold bars from the same melt. If necessary, the composition can be assayed bar-by-bar.

4.6.2 The surface quality and physical specifications shall be shall be examined bar-by-bar.

4.6.3 An arbitration assay shall be conducted in the event of any dispute between the supplier and the buyer regarding the chemical composition of gold bar.

4.7 Sampling Rules

4.7.1 Gold bars are sampled by manufacturing batch, with the samples randomly collected by sheet/bar casting, water quenching, drilling, and other methods.

4.7.2 For spot-checking and arbitration, random samples shall be taken from 10% of the gold bars in each batch.

4.8 Judgment Rules

4.8.1 If the chemical composition of a bar is inconsistent with Article 4.3 of this standard, all bars in that batch shall be regarded as nonconforming.

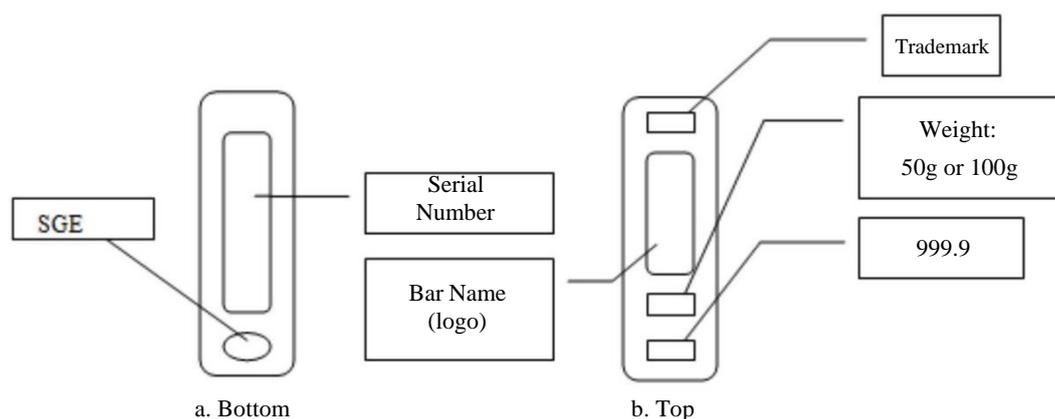
4.8.2 If the surface quality of a bar is inconsistent with Article 4.2 of this standard, that bar shall be regarded as nonconforming.

4.8.3 If the external dimensions or weight of a gold bar is inconsistent with Article 4.1 of this standard, that bar shall be regarded as nonconforming.

5. Markings, Packaging, Transport, Storage, and the Certificate of Quality

5.1 Markings

5.1.1 The surface of each bar should be stamped with the trademark, bar name, weight, the “SGE” logo (8 mm in diameter) and serial number. Their reference location is illustrated below:



5.1.2 Serial Numbering Rules

5.1.2.1 Each gold bar is assigned a nine-character code;

5.1.2.2 The first character is the brand code (A, B, C...) assigned by the Shanghai Gold Exchange;

5.1.2.3 The second and third characters are the year code (e.g., 04 for 2004);

5.1.2.4 The last six digits are a unique number given to the bars produced by that manufacturer that current year (e.g., 000001, 000002...).

5.2 Packaging

Gold bars should be individually packaged in transparent, heat-sealed shrink wraps with the corresponding certificate of quality, with ten bars forming a tray, then loaded into wooden or plastic crates to a gross weight of 25 kg.

5.3 Transport and Storage

Gold bars shall not be damaged or contaminated during transport and storage.

5.4 Certificate of Quality

5.4.1 Each batch of gold bars shall be accompanied by a certificate of quality, specifying the batch number, chemical composition, weight, bar count, serial number, manufacturer, and date of manufacture, among other information.

5.4.2 Each gold bar should also be accompanied by an individual certificate of quality, specifying its weight, serial number, manufacturer, and date of manufacture, among other information.