

BAR WEIGHTS & PURITIES

Gold bars are normally classified into two broad categories of weight. A **large** bar weighs more than 1000 g, a **small** bar weighs 1000 g or less.

Bars are manufactured in different millesimal gold purities (or fineness), most ranging between 965 and 999.9.

UNITS OF WEIGHT

Around the world, bars can be denominated or traded in different units of weight to accommodate the preferences of regions or countries. The most prominent units are the gram, troy ounce, tola, tael, baht, chi (or cay or luong), don and mesghal.

Although the London Good Delivery 400 oz bar, the world's most important large bar, is traded in troy ounces on the London Bullion Market, and the international gold price is quoted in US dollars per troy ounce, there is a worldwide trend for small cast and minted bars to be denominated in grams.

Although the table below provides a broad indication of where the listed units of weight for small bars are widely used, in many countries a variety of units is used.

Gram	International
Troy ounce	Mainly English-speaking countries: USA, UK and Australia
Tola	Mainly Indian Sub-Continent and Middle East
Tael	Mainly Hong Kong and Taiwan
Baht	Thailand
Chi	Vietnam
Don*	South Korea
Mesghal	Iran

* In South Korea, the weight in don is expressed in grams in accordance with government regulations.

To understand the comparative measure of each unit of unit, refer to the section, "Gold Conversion Tables".

LARGE BARS

There are three prominent large bars:

400 oz: Approximate weight. London Good Delivery, if manufactured by a LBMA-accredited refiner.

100 oz: Approximate weight. COMEX Good Delivery, if the brand is accredited to COMEX.

3000 g: Shanghai Gold Exchange Good Delivery, if manufactured by a SGE-accredited refiner.

Some refiners advise that other large bars are also occasionally made to precise or approximate weights. For example, in ounces (250 oz and 50 oz) and in grams (2 kg, 5 kg and 10 kg).



Rand Refinery
South Africa

More than 50 bar weights – in gram, troy ounce, tola, tael, baht and chi – are manufactured around the world.



The Perth Mint
Australia

London Good Delivery 400 oz bars.



COMEX Good Delivery 100 oz bar.



SMALL BARS

Among surveyed manufacturers, small bars around the world are available in a diverse range of more than 50 different cast or minted weights.

However, by far the most important small bar, widely used by fabricators and investors around the world, is the cast kilobar (1000 g).

Unit	Indicative Range	Number
Gram	1000, 500, 300, 250, 200, 100, 50, 30, 25, 20, 10, 8, 7, 6, 5, 4, 3, 2.5, 2, 1, 0.5, 0.3	22
Troy ounce	20, 10, 5, 2 1/2, 2, 1, 1/2, 1/4, 1/10	9
Tola	10, 5, 4, 3, 2, 1	6
Tael	10, 5, 1	3
Baht	50, 30, 25, 20, 15, 10, 5, 3, 2.5, 2, 1	11
Chi	10, 5, 2, 1, 1/2	5
Mesghal	Irregular weights up to around 50 mesghal	-
Total		56

Extensive information on large and small bars in their various units of weight can be found elsewhere on this website.



Zhongyuan
China

3000 g bars are traded on the Shanghai Gold Exchange.



Japan Mint
Japan

An historical 500 oz bar.

In the past, many refiners produced bars of this weight. The Japan Mint manufactured 500 oz bars from 1875 until 1988.



Lee Cheong
Hong Kong

Hong Kong Good Delivery 5 tael bars (6.017 oz).



Baht bars
Thailand

Manufactured by Members of the Gold Traders Association, Bangkok.

The bars can range in weight from 1 baht (0.4901 oz) to 50 baht or more.



BAR PURITIES

The declared purity (or fineness) of a bar's gold content is important as it enables its weight of "fine gold" to be calculated.

The purity is normally marked in parts gold per 100, 1,000 or 10,000 parts.

For example, the same gold purity (99.99% by weight) can be expressed as follows:

- 9999 9,999 parts gold in 10,000 parts
- 999.9 999.9 parts gold in 1,000 parts
- 99.99 99.99 parts gold in 100 parts

Although there is generally a widespread preference for **small bars** with a precise millesimal purity of 995 or 999.9, bars are also manufactured in other purities.

Large bars

In the case of some large bars, the gold fineness can vary. For example, as London Good Delivery 400 oz bars and COMEX Good Delivery 100 oz bars are permitted to vary between 995.0 and 999.9, a mark of 995.8 or 998.7 or 999.6 might be stamped on a bar.

Small bars

Although there is generally a widespread preference for small bars with a fineness of 999.9 or 995, bars are also manufactured in other purities.

Although the table below broadly indicates where specific purities for small bars are popular, in many countries bars are available in a variety of purities.

999.9	International
999.5	Mainly China
999	Mainly Indian Sub-continent
995	Mainly Middle East and Indian Sub-continent
990	Hong Kong
965	Thailand



Metalor
Switzerland

The fineness of cast gold bars can range from 965 to 999.9.



Moscow
Russia

Most minted gold bars have a fineness of 999.9.



Heraeus
Hong Kong

Some refiners manufacture gold bars or granules with a purity of 999.99, mainly for use in the fabrication of industrial products.



Valcambi
Switzerland
Assaying Laboratory.

Refer to disclaimer on website: www.goldbarsworldwide.com

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