

MINTED BARS DENOMINATED IN GRAMS

INTERNATIONAL

This supplement covers standard **minted bars** in rectangular, round and oval shapes – that are denominated in **grams**.

They are issued by refiners and issuers, whose “good delivery” bars are accepted by one or more of the associations and exchanges in **London, New York, Tokyo, Dubai and Istanbul**.

The supplement will be expanded over time as more information and photographs become available.

For background information, refer to the two sections listed under “Basic Information” on the home page: “Minted Bars”, and “Bar Manufacturers” – **where the accreditation status of each refiner and brand is recorded**.

SURVEY

At this stage, the survey covers 46 (66%) of the 70 refiners and brands that are accredited to one or more of the five associations and exchanges.

In summary:

- 20 (43%) of the 46 surveyed refiners and issuers issue standard minted bars in grams, ranging from 0.3 g to 1000 g. In total, 150 bars from 9 countries.
- Many new bars have been issued since 2000: 49 bars (33% of the total) from 5 refiners.
- PAMP (Switzerland) issues the most extensive range in grams: 27 bars, followed by Valcambi (Switzerland): 21 bars.

Terminology: In some countries, “minted bars” are referred to as “minted products”, or as “coins” when the shape is round, notably in the Indian Sub-continent and Middle East.

Unusual weights

Some accredited refiners and issuers include, within their standard range, unusual weights:



Heraeus
Germany

Rectangular minted bars in grams are manufactured in 15 known weights, from 0.3 g to 1000 g.



PAMP
Switzerland

Minted round and oval bars and products have been available since the 1990s.

Country	Refiner or Issuer	Weight	Shape	First Issued
Switzerland	Valcambi	1000 g	Rectangular	2008
Switzerland	Credit Suisse	500 g	Rectangular	1967
Switzerland	Credit Suisse	250 g	Rectangular	1967
Spain	SEMPSA	25 g	Rectangular	1968
Indonesia	Logam Mulia	25 g	Rectangular	2006
Switzerland	PAMP	8 g	Oval	1995
Switzerland	PAMP	7 g	Round	1995
Indonesia	Logam Mulia	3 g	Rectangular	2006
Switzerland	PAMP	0.5 g, 0.3 g	Rectangular	2007
Switzerland	Valcambi	0.5 g	Round	2006



Customized products

Many refiners also manufacture **customized** minted bars and products in grams for banks and other external entities.

For example, most customized minted products, issued in rectangular, round and oval shapes by banks in India, are manufactured by refiners in Switzerland.

Swiss refiners, notably Valcambi and Argor-Heraeus, also manufacture customized minted kilobars (1000 g) for banks in Europe.

For further information on customized products, refer to the supplements on “49 minted products issued by 10 Indian banks” manufactured by PAMP (Switzerland), and “28 customized bars for banks” manufactured by Argor-Heraeus (Switzerland) – under “New Bars & Acquisitions”.



Tanaka
Japan

The most widely manufactured rectangular bar is the 10 g.

RANGE OF MINTED BARS – RECTANGULAR

Among the surveyed refiners, standard rectangular bars in grams are issued in 15 weights, ranging from 0.3 g to 1000 g.

The most widely manufactured rectangular bar is the 10 g, followed by the 5 g and 50 g.

In total, 118 rectangular bars are issued by the surveyed refiners and issuers.

Region	Refiner or Issuer	RECTANGULAR – in Grams												Total
EUROPE														
Belgium	Umicore#	-	-	100	50	-	20	10	5	-	2.5	-	1	7
Germany	Commerzbank*	-	-	100	50	-	20	10	5	-	-	-	1	6
Germany	Heraeus	-	-	100	50	-	20	10	5	-	-	-	1	6
Spain	SEMPSA	-	-	-	50	25	-	10	5	-	-	-	-	4
Switzerland	Argor-Heraeus	-	-	100	50	-	20	10	5	-	2.5	2	1	8
Switzerland	Cendres+Métaux	-	-	100	50	-	20	10	5	-	2.5	2	1	8
Switzerland	Credit Suisse*	500	250	100	50	-	20	10	5	-	2.5	2	1	10
Switzerland	PAMP	-	-	100	50	-	20	10	5	-	2.5	-	1	9
													0.5	
													0.3	
Switzerland	UBS*	-	-	100	50	-	20	10	5	-	-	2	1	7
Switzerland	Valcambi	1000	-	100	50	-	20	10	5	-	2.5	-	1	8
MIDDLE EAST														
Turkey	Istanbul Gold	-	-	100	50	-	-	10	5	-	-	-	1	5
UAE	Emirates Gold	-	-	100	50	-	20	10	5	-	2.5	-	1	7
FAR EAST														
Indonesia	Logam Mulia	-	-	100	50	25	-	10	5	3	2.5	2	1	9
Japan	Ishifuku	-	-	-	-	-	20	10	5	-	2.5	-	-	4
Japan	Mitsubishi	-	-	-	-	-	20	10	5	-	-	-	-	3
Japan	Mitsui	-	-	100	50	-	-	-	-	-	-	-	-	2
Japan	Sumitomo	-	-	-	-	-	20	10	5	-	-	-	-	3
Japan	Tanaka	-	-	-	50	-	20	10	5	-	-	2	1	6
Japan	Tokuriki	-	-	-	50	-	-	10	5	-	-	-	-	3
AFRICA														
South Africa	Rand Refinery	-	-	100	50	-	-	10	-	-	-	-	-	3
TOTALS		2	1	14	17	2	14	19	18	1	9	6	15	118

Source: Refiners and issuers # Umicore's standard minted bars are manufactured by Schöne (Netherlands), its subsidiary accredited refinery in Amsterdam. * Commerzbank and UBS minted bars are manufactured by Argor-Heraeus, Credit Suisse minted bars by Valcambi.



TECHNICAL DESCRIPTION – RECTANGULAR

Country	Refiner or Issuer	Weight	Type	Fineness	Shape	Dimensions mm	First Issued*	Illustration Page
Switzerland	Valcambi	1000 g	Minted	999.9	Rectangular	117 x 53 x 8.7	2008#	-
Switzerland	Credit Suisse	500 g	Minted	999.9	Rectangular	90.5 x 40.5 x 8.2	1967	-
Switzerland	Credit Suisse	250 g	Minted	999.9	Rectangular	59.4 x 34.4 x 7	1967	6
Belgium	Umicore	100 g	Minted	999.9	Rectangular	55 x 31 x 3.2	2006	7
Germany	Commerzbank	100 g	Minted	995, 999.9	Rectangular	49.7 x 28.5 x 3.9	1999	7
Germany	Heraeus	100 g	Minted	999.9	Rectangular	49.7 x 28.5 x 3.9	2001	7
Switzerland	Argor-Heraeus	100 g	Minted	999.9	Rectangular	49.7 x 28.5 x 3.9	1952	7
Switzerland	Cendres+Métaux	100 g	Minted	999.9	Rectangular	50 x 28.8 x 3.7	1981	7
Switzerland	Credit Suisse	100 g	Minted	999.9	Rectangular	47 x 27 x 4.4	1967	7
Switzerland	PAMP	100 g	Minted	999.9	Rectangular	47 x 27 x 4.29	1979	7
Switzerland	UBS	100 g	Minted	999.9	Rectangular	49.7 x 28.5 x 3.9	1980	7
Switzerland	Valcambi	100 g	Minted	999.9	Rectangular	47 x 27 x 4.5	2003	7
Turkey	Istanbul Gold	100 g	Minted	995	Rectangular	50 x 29 x 3.8	2004	8
UAE	Emirates Gold	100 g	Minted	999.9	Rectangular	47 x 27 x 4.34	1992	8
Indonesia	Logam Mulia	100 g	Minted	999.9	Rectangular	50 X 30 X 3.65	2006	-
Japan	Mitsui	100 g	Minted	999.9	Rectangular	47.5 x 27.5 x 4.3	1982	8
South Africa	Rand Refinery	100 g	Minted	999.9	Rectangular	47.73 x 27.78 x 4.6	1998	8
Belgium	Umicore	50 g	Minted	999.9	Rectangular	46 x 26 x 2.3	2006	8
Germany	Commerzbank	50 g	Minted	999.9	Rectangular	49.7 x 28.5 x 2	1999	8
Germany	Heraeus	50 g	Minted	999.9	Rectangular	49.7 x 28.5 x 2	2001	8
Spain	SEMPSA	50 g	Minted	999.9	Rectangular	28.5 x 16.5 x 7.4	1968	-
Switzerland	Argor-Heraeus	50 g	Minted	999.9	Rectangular	49.7 x 28.5 x 2	1952	9
Switzerland	Cendres+Métaux	50 g	Minted	999.9	Rectangular	50 x 28.8 x 1.87	1981	9
Switzerland	Credit Suisse	50 g	Minted	999.9	Rectangular	47 x 27 x 2.4	1967	9
Switzerland	PAMP	50 g	Minted	999.9	Rectangular	47 x 27 x 2.13	1979	9
Switzerland	UBS	50 g	Minted	999.9	Rectangular	49.7 x 28.5 x 2	1980	9
Switzerland	Valcambi	50 g	Minted	999.9	Rectangular	47 x 27 x 2.4	2003	9
Turkey	Istanbul Gold	50 g	Minted	995	Rectangular	50 x 29 x 1.9	2004	10
UAE	Emirates Gold	50 g	Minted	999.9	Rectangular	47 x 27 x 2.17	1992	10
Indonesia	Logam Mulia	50 g	Minted	999.9	Rectangular	42.5 X 25.5 X 2.53	2006	-
Japan	Mitsui	50 g	Minted	999.9	Rectangular	44 x 26 x 2.9	1982	10
Japan	Tanaka	50 g	Minted	999.9	Rectangular	40 x 25 x 2.6	1981	10
Japan	Tokuriki	50 g	Minted	999.9	Rectangular	43.5 x 25.5 x 2.35	1982	10
South Africa	Rand Refinery	50 g	Minted	999.9	Rectangular	44.50 x 25.95 x 2.8	1998	10
Spain	SEMPSA	25 g	Minted	999.9	Rectangular	30 x 17 x 2.9	1968	10
Indonesia	Logam Mulia	25 g	Minted	999.9	Rectangular	33.3 X 20 X 2.07	2006	-
Belgium	Umicore	20 g	Minted	999.9	Rectangular	39 x 22 x 1.3	2006	11
Germany	Commerzbank	20 g	Minted	999.9	Rectangular	40.4 x 23.3 x 1.3	1999	11
Germany	Heraeus	20 g	Minted	999.9	Rectangular	40.4 x 23.3 x 1.3	2001	11
Switzerland	Argor-Heraeus	20 g	Minted	999.9	Rectangular	40.4 x 23.3 x 1.3	1952	11
Switzerland	Cendres+Métaux	20 g	Minted	999.9	Rectangular	31.2 x 18.2 x 1.87	1981	11
Switzerland	Credit Suisse	20 g	Minted	999.9	Rectangular	31.2 x 18.2 x 2.1	1967	11
Switzerland	PAMP	20 g	Minted	999.9	Rectangular	31 x 18 x 1.97	1979	11
Switzerland	UBS	20 g	Minted	999.9	Rectangular	40.4 x 23.3 x 1.3	1980	11
Switzerland	Valcambi	20 g	Minted	999.9	Rectangular	31 x 18 x 2.2	2003	11
UAE	Emirates Gold	20 g	Minted	999.9	Rectangular	31 x 18 x 1.97	1992	11
Japan	Ishifuku	20 g	Minted	999.9	Rectangular	30 x 17 x 2	1979	12
Japan	Mitsubishi	20 g	Minted	999.9	Rectangular	31.3 x 18.3 x 2	1980	12
Japan	Sumitomo	20 g	Minted	999.9	Rectangular	30 x 17 x 2	1987	12
Japan	Tanaka	20 g	Minted	999.9	Rectangular	33 x 20 x 1.6	1981	12



Country	Refiner or Issuer	Weight	Type	Fineness	Shape	Dimensions mm	First Issued*	Illustration Page
Belgium	Umicore	10 g	Minted	999.9	Rectangular	31 x 18 x 1	2006	12
Germany	Commerzbank	10 g	Minted	999.9	Rectangular	31.5 x 18.5 x 1	1999	12
Germany	Heraeus	10 g	Minted	999.9	Rectangular	31.5 x 18.5 x 1	2001	12
Spain	SEMPSA	10 g	Minted	999.9	Rectangular	25 x 15 x 1.63	1968	12
Switzerland	Argor-Heraeus	10 g	Minted	999.9	Rectangular	31.5 x 18.5 x 1	1952	12
Switzerland	Cendres+Métaux	10 g	Minted	999.9	Rectangular	25.7 x 15.5 x 1.3	1986	12
Switzerland	Credit Suisse	10 g	Minted	999.9	Rectangular	25.4 x 15.4 x 1.6	1967	12
Switzerland	PAMP	10 g	Minted	999.9	Rectangular	25.5 x 15.5 x 1.38	1979	12
Switzerland	UBS	10 g	Minted	999.9	Rectangular	31.5 x 18.5 x 1	1980	12
Switzerland	Valcambi	10 g	Minted	999.9	Rectangular	25.3 x 15.2 x 1.6	2003	13
Turkey	Istanbul Gold	10 g	Minted	995	Rectangular	25.7 x 15.8 x 2	2004	13
UAE	Emirates Gold	10 g	Minted	999.9	Rectangular	25.5 x 15.5 x 1.39	1992	13
Indonesia	Logam Mulia	10 g	Minted	999.9	Rectangular	27.5 X 16.5 X 1.22	2006	-
Japan	Ishifuku	10 g	Minted	999.9	Rectangular	26 x 15 x 1.3	1979	13
Japan	Mitsubishi	10 g	Minted	999.9	Rectangular	25.5 x 15.5 x 1.5	1980	13
Japan	Sumitomo	10 g	Minted	999.9	Rectangular	26 x 15 x 1.3	1987	13
Japan	Tanaka	10 g	Minted	999.9	Rectangular	27 x 16.5 x 1.18	1979	13
Japan	Tokuriki	10 g	Minted	999.9	Rectangular	25 x 15 x 1.355	1982	13
South Africa	Rand Refinery	10 g	Minted	999.9	Rectangular	25.74 x 15.73 x 1.95	1998	13
Belgium	Umicore	5 g	Minted	999.9	Rectangular	24 x 14 x 0.9	2006	13
Germany	Commerzbank	5 g	Minted	999.9	Rectangular	23 x 14 x 1.8	1999	13
Germany	Heraeus	5 g	Minted	999.9	Rectangular	23 x 14 x 1.8	2001	13
Spain	SEMPSA	5 g	Minted	999.9	Rectangular	22.5 x 13 x 1.02	1968	13
Switzerland	Argor-Heraeus	5 g	Minted	999.9	Rectangular	23 x 14 x 1	1952	13
Switzerland	Cendres+Métaux	5 g	Minted	999.9	Rectangular	23.4 x 14.1 x 0.8	1981	13
Switzerland	Credit Suisse	5 g	Minted	999.9	Rectangular	23.2 x 14 x 1.1	1967	13
Switzerland	PAMP	5 g	Minted	999.9	Rectangular	23.3 x 14 x 0.83	1979	13
Switzerland	UBS	5 g	Minted	999.9	Rectangular	23 x 14 x 1	1980	13
Switzerland	Valcambi	5 g	Minted	999.9	Rectangular	23 x 13.85 x 1	2003	14
Turkey	Istanbul Gold	5 g	Minted	995	Rectangular	23.3 x 14 x 1.2	2004	14
UAE	Emirates Gold	5 g	Minted	999.9	Rectangular	23.1 x 13.8 x 0.86	1992	14
Indonesia	Logam Mulia	5 g	Minted	999.9	Rectangular	20 X 12.3 X 1.09	2006	-
Japan	Ishifuku	5 g	Minted	999.9	Rectangular	22.5 x 13 x 0.9	1979	14
Japan	Mitsubishi	5 g	Minted	999.9	Rectangular	23 x 14 x 1	1980	14
Japan	Sumitomo	5 g	Minted	999.9	Rectangular	22.5 x 13 x 0.9	1987	14
Japan	Tanaka	5 g	Minted	999.9	Rectangular	20 x 12.5 x 1.05	1979	14
Japan	Tokuriki	5 g	Minted	999.9	Rectangular	23.5 x 13.5 x 0.84	1982	14
Indonesia	Logam Mulia	3 g	Minted	999.9	Rectangular	16.7 X 10 X 1.03	2006	-
Belgium	Umicore	2.5 g	Minted	999.9	Rectangular	24 x 14 x 0.5	2006	14
Switzerland	Argor-Heraeus	2.5 g	Minted	999.9	Rectangular	19 x 11.5 x 0.7	1980	14
Switzerland	Cendres+Métaux	2.5 g	Minted	999.9	Rectangular	22 x 13 x 0.8	1987	14
Switzerland	Credit Suisse	2.5 g	Minted	999.9	Rectangular	22 x 13 x 0.6	1980	14
Switzerland	PAMP	2.5 g	Minted	999.9	Rectangular	22.1 x 13.1 x 0.46	1981	14
Switzerland	Valcambi	2.5 g	Minted	999.9	Rectangular	19 x 11.5 x 0.8	2003	14
UAE	Emirates Gold	2.5 g	Minted	999.9	Rectangular	23.1 x 13.8 x 0.43	1992	14
Indonesia	Logam Mulia	2.5 g	Minted	999.9	Rectangular	16.7 X 10 X 0.83	2006	14
Japan	Ishifuku	2.5 g	Minted	999.9	Rectangular	16 x 10 x 0.9	1979	14
Switzerland	Argor-Heraeus	2 g	Minted	999.9	Rectangular	19 x 11.5 x 0.6	1980	15
Switzerland	Cendres+Métaux	2 g	Minted	999.9	Rectangular	19 x 11.5 x 0.8	1987	15
Switzerland	Credit Suisse	2 g	Minted	999.9	Rectangular	19.1 x 10.6 x 0.58	1980	15
Switzerland	UBS	2 g	Minted	999.9	Rectangular	19 x 11.5 x 0.6	1980	15



Country	Refiner or Issuer	Weight	Type	Fineness	Shape	Dimensions mm	First Issued*	Illustration Page
Indonesia	Logam Mulia	2 g	Minted	999.9	Rectangular	15.6 X 9.4 X 0.75	2006	-
Japan	Tanaka	2 g	Minted	999.9	Rectangular	18 x 11 x 0.52	1981	15
Belgium	Umicore	1 g	Minted	999.9	Rectangular	15 x 8.5 x 0.5	2006	15
Germany	Commerzbank	1 g	Minted	999.9	Rectangular	15 x 8.7 x 0.5	1999	15
Germany	Heraeus	1 g	Minted	999.9	Rectangular	15 x 8.7 x 0.5	2001	15
Switzerland	Argor-Heraeus	1 g	Minted	999.9	Rectangular	15 x 8.7 x 0.5	1980	15
Switzerland	Cendres+Métaux	1 g	Minted	999.9	Rectangular	15 x 8.6 x 0.78	1987	15
Switzerland	Credit Suisse	1 g	Minted	999.9	Rectangular	15 x 8.5 x 0.5	1980	15
Switzerland	PAMP	1 g	Minted	999.9	Rectangular	14.5 x 8.6 x 0.43	1980	15
Switzerland	UBS	1 g	Minted	999.9	Rectangular	15 x 8.7 x 0.5	1980	15
Switzerland	Valcambi	1 g	Minted	999.9	Rectangular	15 x 8.5 x 0.55	2003	15
Turkey	Istanbul Gold	1 g	Minted	995	Rectangular	8.7 x 15.3 x 0.4	2004	15
UAE	Emirates Gold	1 g	Minted	999.9	Rectangular	14.6 x 8.8 x 0.42	1992	15
Indonesia	Logam Mulia	1 g	Minted	999.9	Rectangular	13 X 7.8 X 0.51	2006	15
Japan	Tanaka	1 g	Minted	999.9	Rectangular	14 x 9 x 0.41	1981	15
Switzerland	PAMP	0.5 g	Minted	999.9	Rectangular	8 x 12 x 0.35	2007	15
Switzerland	PAMP	0.3 g	Minted	999.9	rectangular	6 x 9.5 x 0.35	2007	15

Source: Refiners and issuers * First issued in current dimensions: the markings on some bars, and some company names, have changed over time. # Valcambi is reported to having first manufactured 1000 g minted bars with the Credit Suisse official stamp and the Valcambi certification mark as far back as 1967.

RANGE OF MINTED BARS – ROUND AND OVAL

Although round and oval minted bars are manufactured by few accredited refiners, in recent years they have become popular, notably in the Middle East and India, where customized products have also been issued by many banks.

Round bars are manufactured in 10 weights, ranging from 0.5 g to 100 g.

Oval bars are manufactured in 8 weights, ranging from 1 g to 100 g.

In total, 32 standard round and oval bars are produced.

Region	Refiner	Shape	ROUND and OVAL – in Grams										Total	
Switzerland	PAMP	Round	-	50	20 (2)	10 (2)	-	7	5 (2)	2.5 (2)	2	-	-	11
Switzerland	Valcambi	Round	100	50	20	10	-	-	5	2.5	-	1	0.5	8
Switzerland	PAMP	Oval	-	50	20	10	8	-	5	2.5	-	1	-	7
Switzerland	Valcambi	Oval*	100	50	-	10	-	-	5	2.5	-	1	-	6
Totals			2	4	4	5	1	1	5	5	1	3	1	32

Source: Refiners *Valcambi: the company's standard oval minted bars incorporate a circular hole.

TECHNICAL DESCRIPTION – ROUND AND OVAL

Country	Refiner or Issuer	Weight	Type	Fineness	Shape	Dimensions mm	First Issued	Illustration Page
Switzerland	PAMP	50 g	Minted	999.9	Round	40 x 40 x 2.04	1995	16
Switzerland	PAMP	20 g	Minted	999.9	Round	33 x 33 x 1.2	1995	-
Switzerland	PAMP	20 g	Minted	999.9	Round	24 x 24 x 2.26	1995	16
Switzerland	PAMP	10 g	Minted	999.9	Round	24 x 24 x 1.13	1995	-
Switzerland	PAMP	10 g	Minted	999.9	Round	22 x 22 x 1.35	1995	16
Switzerland	PAMP	7 g	Minted	999.9	Round	22 x 22 x 0.94	1995	16
Switzerland	PAMP	5 g	Minted	999.9	Round	18 x 18 x 1.0	1995	16



Country	Refiner or Issuer	Weight	Type	Fineness	Shape	Dimensions mm	First Issued	Illustration Page
Switzerland	PAMP	5 g	Minted	999.9	Round	16 x 16 x 1.27	1995	-
Switzerland	PAMP	2.5 g	Minted	999.9	Round	18 x 18 x 0.50	1995	-
Switzerland	PAMP	2.5 g	Minted	999.9	Round	16 x 16 x 0.63	1995	16
Switzerland	PAMP	2 g	Minted	999.9	Round	13.9 x 13.9 x 0.78	1995	-
Switzerland	Valcambi	100 g	Minted	999.9	Round	45 x 45 x 3.9	2005	16
Switzerland	Valcambi	50 g	Minted	999.9	Round	36 x 36 x 2.9	2005	16
Switzerland	Valcambi	20 g	Minted	999.9	Round	26 x 26 x 2.3	2005	16
Switzerland	Valcambi	10 g	Minted	999.9	Round	22 x 22 x 1.6	2005	16
Switzerland	Valcambi	5 g	Minted	999.9	Round	20 x 20 x 1.1	2005	16
Switzerland	Valcambi	2.5 g	Minted	999.9	Round	14 x 14 x 1.1	2005	16
Switzerland	Valcambi	1 g	Minted	999.9	Round	10 x 10 x 0.85	2005	16
Switzerland	Valcambi	0.5 g	Minted	999.9	Round	10 x 10 x 0.45	2006	16
Switzerland	PAMP	50 g	Minted	999.9	Oval	45 x 30 x 2.46	1995	17
Switzerland	PAMP	20 g	Minted	999.9	Oval	45 x 30 x 0.98	1995	17
Switzerland	PAMP	10 g	Minted	999.9	Oval	26.8 x 16.5 x 1.46	1995	-
Switzerland	PAMP	8 g	Minted	999.9	Oval	26.8 x 16.5 x 1.3	1995	17
Switzerland	PAMP	5 g	Minted	999.9	Oval	22.5 x 14 x 1.2	1995	17
Switzerland	PAMP	2.5 g	Minted	999.9	Oval	22.5 x 14 x 0.515	1995	17
Switzerland	PAMP	1 g	Minted	999.9	Oval	14.5 x 9 x 0.51	1995	-
Switzerland	Valcambi	100 g	Minted	999.9	Oval	55 x 32.3 x 4.6	2007	17
Switzerland	Valcambi	50 g	Minted	999.9	Oval	50 x 29.4 x 2.8	2007	-
Switzerland	Valcambi	10 g	Minted	999.9	Oval	29 x 17 x 1.70	2007	17
Switzerland	Valcambi	5 g	Minted	999.9	Oval	24 x 14.1 x 1.25	2007	17
Switzerland	Valcambi	2.5 g	Minted	999.9	Oval	21.3 x 12.5 x 0.86	2007	-
Switzerland	Valcambi	1 g	Minted	999.9	Oval	14.5 x 8.5 x 0.75	2007	-

Source: Refiners

RECTANGULAR

250 g



Credit Suisse
Switzerland



100 g



Umicore
Belgium



Commerzbank
Germany



Heraeus
Germany



Argor-Heraeus
Switzerland



Cendres+Métaux
Switzerland



Credit Suisse
Switzerland



PAMP
Switzerland



UBS
Switzerland



Valcambi
Switzerland





Istanbul Gold
Turkey



Emirates Gold
UAE



Mitsui
Japan



Rand Refinery
South Africa

50 g



Umicore
Belgium



Commerzbank
Germany



Heraeus
Germany





Argor-Heraeus
Switzerland



Cendres+Métaux
Switzerland



Credit Suisse
Switzerland



PAMP
Switzerland



UBS
Switzerland



Valcambi
Switzerland





Emirates Gold
UAE



Istanbul Gold
Turkey



Mitsui
Japan



Tanaka
Japan



Tokuriki
Japan



Rand Refinery
South Africa

25 g



SEMPSA
Spain



20 g



Umicore
Belgium



Commerzbank
Germany



Heraeus
Germany



Argor-Heraeus
Switzerland



Cendres+Métaux
Switzerland



Credit Suisse
Switzerland



PAMP
Switzerland



UBS
Switzerland



Valcambi
Switzerland



Emirates Gold
UAE





Ishifuku
Japan



Mitsubishi
Japan



Sumitomo
Japan



Tanaka
Japan

10 g



Umicore
Belgium



Commerzbank
Germany



Heraeus
Germany



SEMPSA
Spain



Argor-Heraeus
Switzerland



Cendres+Métaux
Switzerland



Credit Suisse
Switzerland



PAMP
Switzerland



UBS
Switzerland





Valcambi
Switzerland



Istanbul Gold
Turkey



Emirates Gold
UAE



Ishifuku
Japan



Mitsubishi
Japan



Sumitomo
Japan



Tanaka
Japan



Tokuriki
Japan



Rand Refinery
South Africa

5 g



Umicore
Belgium



Commerzbank
Germany



Heraeus
Germany



SEMPSA
Spain



Argor-Heraeus
Switzerland



Cendres+Métaux
Switzerland



Credit Suisse
Switzerland



PAMP
Switzerland



UBS
Switzerland





Valcambi
Switzerland



Istanbul Gold
Turkey



Emirates Gold
UAE



Ishifuku
Japan



Mitsubishi
Japan



Sumitomo
Japan



Tanaka
Japan



Tokuriki
Japan

2.5 g



Umicore
Belgium



Argor-Heraeus
Switzerland



Cendres+Métaux
Switzerland



Credit Suisse
Switzerland



PAMP
Switzerland



UBS
Switzerland



Valcambi
Switzerland



Emirates Gold
UAE



Ishifuku
Japan



2 g



Argor-Heraeus
Switzerland



Cendres+Métaux
Switzerland



Credit Suisse
Switzerland



UBS
Switzerland



Tanaka
Japan

1 g



Umicore
Belgium



Commerzbank
Germany



Heraeus
Germany



Argor-Heraeus
Switzerland



Cendres+Métaux
Switzerland



Credit Suisse
Switzerland



PAMP
Switzerland



UBS
Switzerland



Valcambi
Switzerland



Istanbul Gold
Turkey



Emirates Gold
UAE



Tanaka
Japan

0.5 g



PAMP
Switzerland

0.3 g



PAMP
Switzerland



ROUND



20 g



50 g



10 g



7 g



5 g



2.5 g

PAMP
Switzerland



20 g



100 g



10 g



5 g



2.5 g



50 g



1 g



0.5 g

Valcambi
Switzerland



OVAL



50 g



20 g



8 g



5 g



2.5 g

PAMP
Switzerland



10 g



100 g



5g

Valcambi
Switzerland



REFINERS THAT DO NOT ISSUE MINTED BARS

The 24 accredited refiners listed below are understood not to manufacture standard minted bars in grams:

Region	Refiner
EUROPE	
Germany	Norddeutsche
Italy	Chimet
Sweden	Boliden
Switzerland	Metalor
NORTH AMERICA	
Canada	Xstrata
Canada	Johnson Matthey
Canada	Royal Canadian Mint
USA	ASARCO
USA	Heraeus*
USA	Johnson Matthey
USA	Kennecott
USA	Metalor
USA	Sabin
LATIN AMERICA	
Brazil	AngloGold Ashanti
Brazil	Umicore*
FAR EAST	
Hong Kong	Heraeus*
Hong Kong	Metalor
Japan	Matsuda
Japan	Nippon
South Korea	LS Nikko
South Korea	Korea Zinc
AFRICA	
Zimbabwe	Fidelity
AUSTRALIA	
Australia	AGR Matthey
CIS	
Kazakhstan	Kazzinc

Source: Refiners * Heraeus (USA and Hong Kong) have access to Heraeus Group minted bars. Umicore (Brazil) has access to Umicore Group minted bars.



Among accredited refiners, the smallest known **round** minted bar is the 0.5 g bar, manufactured by Valcambi (Switzerland) since 2006.



Among accredited refiners, the smallest known **rectangular** minted bar is the 0.3 g bar, manufactured by PAMP (Switzerland) since 2007.

Refer to disclaimer on website: www.goldbarsworldwide.com

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