

## UNITED STATES MINT

### FORMER MANUFACTURER OF GOLD BULLION BARS

#### SECTIONS

<b>Introduction</b>	
Range of Gold Bars	2
Historical Gold Assay Locations	2
Technical Description	3
Accreditation to London Gold Market	3
<b>Examples – Historical 400 oz Bars</b>	
Range	4
Photographs	4
1916 – United States Assay Office – New York	5
1941 – United States Assay Office – New York	6
1980 – United States Assay Office – New York	7
1954 – United States Mint – Denver	8
1961 – United States Mint – Denver	9
1949 – United States Mint – San Francisco	10
1957 – United States Mint – San Francisco	11
<b>Historical Documentation</b>	
Stamped Markings	12
Positioning of Markings	13
<b>Status Report of U.S. Treasury-Owned Gold</b>	14



400 oz – 1949

United States Mint  
San Francisco

The United States Mint, in the past, manufactured 400 oz bars in New York, Denver and San Francisco.

Many are held by central banks around the world as part of national gold reserves.



1916

United States Assay Office  
New York

The **United States Department of the Treasury** owns 261 million troy ounces (8,134 tonnes) of fine gold.

Almost all the gold, mainly in the form of 400 oz bars, is held by the **Federal Reserve Bank of New York**, and at **United States Mint** storage facilities in **Fort Knox** (Kentucky), **West Point** (New York State) and **Denver** (Colorado).

This supplement is based on accessible information at this time. It may be revised as more information becomes available.



**INTRODUCTION**

**RANGE OF GOLD BARS**

The **United States Mint** (founded in 1792) is known to have issued cast gold bars in at least 9 weights: 400 oz (2 versions), 250 oz, 50 oz, 30 oz, 25 oz, 20 oz, 15 oz, 10 oz and 5 oz.

It is understood that the bars had a minimum purity of 995+ parts gold in 1,000 parts, with the exception of those 400 oz bars that contained "Coin Gold".

"Coin Gold" 400 oz bars were manufactured by melting down and then casting into bars gold coins that had been withdrawn from public circulation, mainly as a result of the prohibition in 1933 of private gold ownership in the United States. The gold purity of these bars reflected the purity of U.S. gold coins, usually 900 or 916 parts gold in a 1,000 parts.

**HISTORICAL GOLD ASSAY LOCATIONS**

Gold refining and the manufacture of bars are known to have taken place in some form at all United States Mint facilities, as well as Assay Offices.

Some examples, where the manufacture of 400 oz bars is known to have occurred, include:

**United States Assay Office – New York (1854 – 1982)**

Authorized by the Act of 3 March 1853, the Office began operations on 10 October 1854. It closed on 30 December 1982.

**United States Mint – San Francisco (1854 – 1956)**

The San Francisco Mint was opened in 1854. It closed on 30 June 1956. Coinage operations at the San Francisco Mint were discontinued on 31 March 1955. Public Law 87-534, 11 July 1962, changed the designation of the San Francisco Mint to the United States Assay Office at San Francisco. Title II, section 201 of Public Law 89-91, signed 23 July 1965, authorized the production of coins at the San Francisco Assay Office.

**United States Mint – Denver (1863 – 1957)**

The United States Denver Mint was opened for production purposes in September 1863. Its gold refinery closed on 30 June 1957.

In addition to the **United States Assay Office (New York)**, there were six other Assay Offices specifically functioned for assay purposes.

The role of the Assay Offices was to melt, assay and verify bullion deposits for payment. The accumulated bullion was then transferred to one of the United States Mint facilities for production purposes.



1941

United States Assay Office  
New York

An official stamp applied to New York 400 oz bars from at least 1917 until at least 1961.



1980

United States Assay Office  
New York

An official stamp known to have been applied to New York 400 oz bars in 1979 – 1980.

The depiction of the eagle is different.

United States Assay Office Location	Established or Authorised by Acts	Opened or Began Operations	Closed	Approximate Years in Operation
Boise, Idaho	19 February 1869	March 1872	30 June 1933	61
Helena, Montana	12 May 1874	15 January 1877	30 June 1933	56
St Louis, Missouri	1 February 1881	1 July 1881	30 June 1911	30
Deadwood, South Dakota	11 June 1896	20 April 1898	30 June 1927	29
	19 February 1897			
Seattle, Washington	21 May 1898	Not known	31 March 1955	57
Salt Lake City, Utah	30 May 1908	1 February 1909	30 June 1933	24

Source: United States Mint



**TECHNICAL DESCRIPTION**

**In inches. 1 inch = 2.54 cm**

The weights and dimensions of United States Mint bars, as recorded in the table below, are taken from an archive document dated 14 March 1969, when the United States Assay Office (New York) was the only United States Mint facility still refining gold and manufacturing bars.

It is not known when the bar weights recorded in the document were each first made (or last made), or whether other bar weights were issued or other dimensions were applied prior to 1969 by the United States Assay Office (New York) or by the United States Mint's other facilities.



An eagle, a national emblem of the United States of America, was depicted on 400 oz bars either as a separate motif or within the official stamp.

Troy Weight	Dimensions Inches#			Radius of		Draft per Side	Avoirdupois Weight		
				Corners	Edges				
400 oz	7	x	3-5/8	x	1-3/4	1/4	1/8	1/16	438.857 oz
400 oz*	7	x	3-5/8	x	2-1/8	1/4	1/8	1/16	438.857 oz
250 oz	7	x	3-9/16	x	1-1/6	1/4	1/8	1/32	274.285 oz
50 oz	2-3/8	x	3-5/8	x	5/8	3/16	1/16	1/64	54.857 oz
30 oz	2-1/4	x	1-1/2	x	15/16	3/16	1/16	1/64	32.914 oz
25 oz	2-1/4	x	1-1/2	x	3/4	3/16	1/16	1/64	27.428 oz
20 oz	2-1/4	x	1-1/2	x	5/8	1/8	1/16	1/64	21.942 oz
15 oz	2-1/4	x	1-3/8	x	7/16	1/8	1/16	1/64	16.457 oz
10 oz	2-1/4	x	1-3/8	x	5/16	3/16	1/16	1/64	10.971 oz
5 oz	1-17/32	x	1-1/32	x	10/32	1/8	1/16	1/64	5.485 oz

Source: United States Mint. Document dated 14 March 1969. #Dimensions record "bar cavity measurements". \*Coin Gold. Note: "400 oz" weights are indicative.

**ACCREDITATION TO THE LONDON GOLD MARKET**

The United States Assay Office (New York) and the United States Mint (Denver) and the United States Mint (San Francisco) were first listed in 1919 as manufacturers of bars that were accepted as London Good Delivery.

Until 1955, the United States Mint was the only institution in the United States manufacturing London Good Delivery 400 oz bars for the international market.

Source: *The London Good Delivery List – Building a Global Brand 1750 – 2010*. Authors: Timothy Green (Part I) and Stewart Murray (Part II). Published by the LBMA, 2010.



1961

United States Mint  
Denver

An official stamp applied to Denver 400 oz bars from at least 1957 until at least 1963.



1954

United States Mint  
Denver

An official stamp applied to Denver 400 oz bars from at least 1948 until at least 1954.

The year of manufacture is not incorporated within the stamp.



**EXAMPLES – HISTORICAL 400 OZ BARS**

**RANGE**

Information in the files of the **London Bullion Market Association (LBMA)** provides some understanding of the range of 400 oz bars, manufactured by the United States Assay Office (New York) and the United States Mints (Denver and San Francisco), and the periods during which the different bars were made.

The bars are normally described as having a “vertical” or “landscape” design:

**Vertical:** The official stamp is centred at the top across the narrow width of the bar.

**Landscape:** The official stamp is positioned at the bottom and to the far left of the length of the bar.

In summary, the files record five different “landscape” bars and two different “vertical” bars:

**United States Assay Office – New York**

Three known versions:

- Landscape 1 – Observed year dates: 1916
- Landscape 2 – Observed year dates: 1917 – 1961
- Landscape 3 – Observed year dates: 1979 – 1980

**United States Mint – Denver**

Two known versions:

- Vertical – Observed year dates: 1948 – 1954
- Landscape – Observed year dates: 1957 – 1963

**United States Mint – San Francisco**

Two known versions:

- Vertical – Observed year dates: 1946 – 1950
- Landscape – Observed year dates: 1957

**PHOTOGRAPHS**

To illustrate the diversity of bars, photographs in LBMA files depict six different 400 oz bars, which record dates ranging from 1916 until 1980.

Photographs from The Industry Collection of Gold Bars Worldwide depict an additional 400 oz bar dated 1949.

For security reasons, the gold storage vault, where the LBMA photographs were originally taken, required the **serial numbers** on each bar to be **blacked out with black strips**.



1949

United States Mint  
San Francisco

An official stamp applied to San Francisco 400 oz bars from at least 1946 until at least 1950.

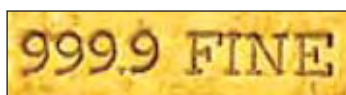
The year of manufacture is not incorporated within the stamp.



1957

United States Mint  
San Francisco

An official stamp applied to San Francisco 400 oz bars in 1957 and possibly other years.



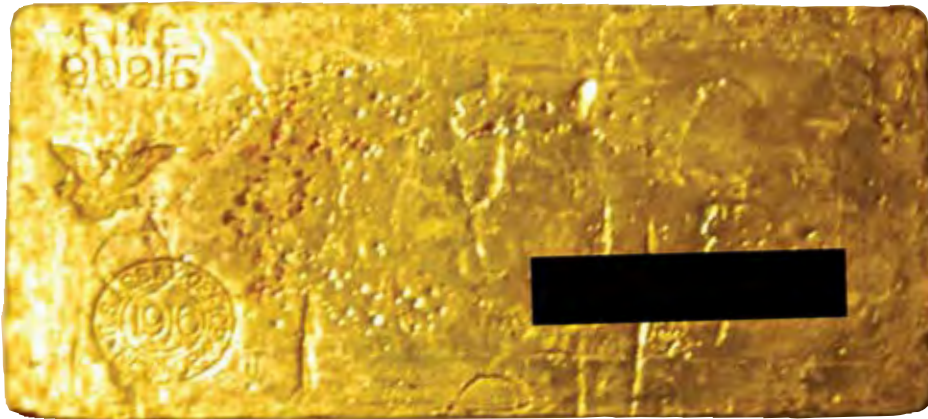
Many 400 oz bars, formerly issued by United States Mint, have a gold purity that is close to, or exactly, 999.9.





UNITED STATES ASSAY OFFICE – NEW YORK

LANDSCAPE VERSION 1 – 1916



This bar, dated 1916, incorporates the earliest observed New York official stamp, as recorded in LBMA files.

Photographs: © London Bullion Market Association



UNITED STATES ASSAY OFFICE – NEW YORK

LANDSCAPE VERSION 2 – 1941



This 1941 bar is representative of observed New York 400 oz bars, dated 1917 – 1961,

This version accounted for the majority of observed United States Mint bars.

Photographs: © London Bullion Market Association



UNITED STATES ASSAY OFFICE – NEW YORK

LANDSCAPE VERSION 3 – 1980



This 1980 bar is representative of observed New York 400 oz bars, dated 1979 – 1980.

The bars have more rounded edges.

Photographs: © London Bullion Market Association





UNITED STATES MINT – DENVER

VERTICAL VERSION – 1954



This 1954 bar is representative of observed Denver 400 oz vertical bars, dated 1948 – 1954.

The official stamp is different from that applied to the observed landscape bars.

Photographs: © London Bullion Market Association





UNITED STATES MINT – DENVER

LANDSCAPE VERSION – 1961



This 1961 bar is representative of observed Denver 400 oz landscape bars, dated 1957 – 1963.

Photographs: © London Bullion Market Association



UNITED STATES MINT – SAN FRANCISCO

VERTICAL VERSION – 1949



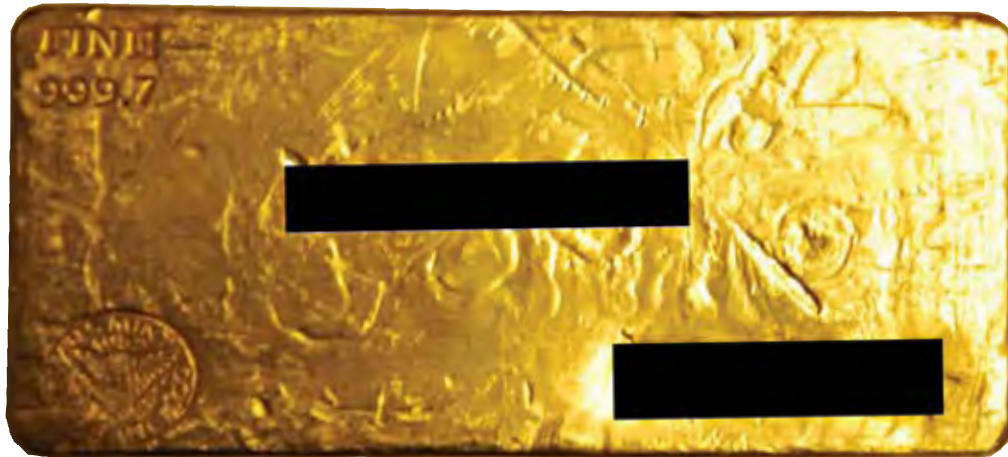
This 1949 bar is similar to other observed San Francisco 400 oz vertical bars, dated 1946 – 1950, as recorded in LBMA files.

Photographs: © The Industry Collection of Gold Bars Worldwide



UNITED STATES MINT – SAN FRANCISCO

LANDSCAPE VERSION – 1957



Observed San Francisco 400 oz landscape bars were all dated 1957.

Photographs: © London Bullion Market Association





**HISTORICAL DOCUMENTATION****STAMPED MARKINGS ON GOLD BARS**

From United States Mint document dated 14 March 1969\*

**General**

Bars manufactured by the Bureau of the Mint will be stamped with steel dies to produce identifying markings in accordance with regulations in this Section.

**Identifying marks**

The markings which may be stamped on bars manufactured by the Mint shall be limited to the following:

- the seal of the manufacturing office;
- the fineness;
- the gross weight;
- the melt number;
- and the bar number.

**Restrictions on the use of markings**

The identifying markings, required by these regulations to be stamped on bars manufactured by the Mint, shall be of a size as specified in this section.

**Fineness**

The size of the letters for the word "Fine" shall be 3/16" high. The size of the numerals indicating the fineness shall be 1/4" high.

**Melt numbers**

- Gold bars 50 oz or less      1/4" high numerals
- 250 oz gold bars            1/2" high numerals
- 400 oz bars                    3/4" high numerals

**Weights**

All gold bars                    1/4" high numerals

**Bar or serial number  
(when applicable)**

All gold bars                    1/4" high numerals

**Ounces – "OZS."  
(when applicable)**

All gold bars – OZS.            All 1/8" high

**Manufacture of seal**

All seals shall be manufactured by the Philadelphia Mint, of standard design, one (1) inch in diameter, and the name of the field office and the fiscal year shall be part of the seal.

Source: \*United States Mint. The text on "Stamped Markings" is reproduced verbatim (but excluding references to silver bars) from a document marked: "Chapter 15: Part D – Processing", dated 14 March 1969.



**HISTORICAL DOCUMENTATION**

**POSITIONING OF MARKINGS ON GOLD BARS**

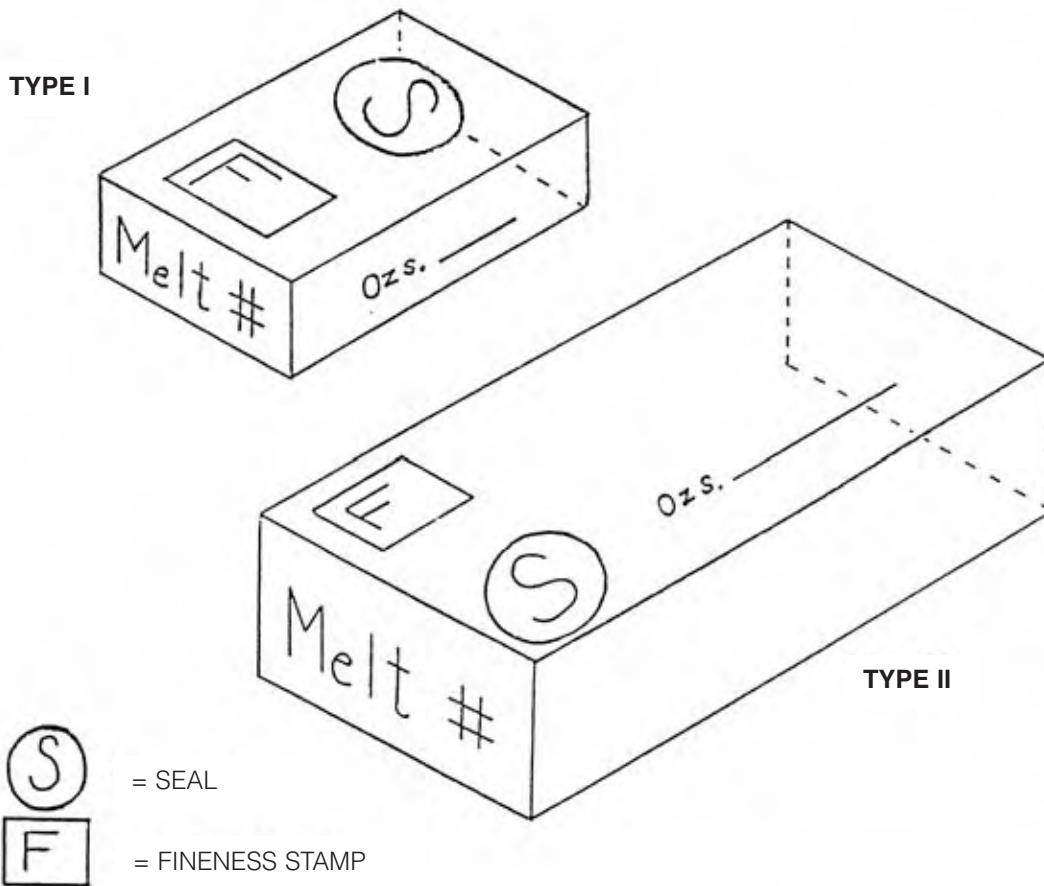
**From United States Mint document dated 14 March 1969\***

The markings required by these regulations to be stamped on Mint bars shall be positioned as shown in the sketch below.

The bottom face of the bar as cast shall be used for the fineness and seal stamping, and in Type II bars, ounces also.

TYPE I Bars: Gold bars up to 50 ounces.

Type II Bars: 250 and 400 oz gold bars.



Source: \*United States Mint. The text on "Positioning of Markings" is reproduced verbatim (but excluding references to silver bars) from a document marked: "Chapter 15: Part D – Processing", dated 14 March 1969.



**STATUS REPORT OF U.S. TREASURY-OWNED GOLD**

31 October 2011

**Department of the Treasury  
Financial Management Service**

The Status Report records the amounts of gold in Fine Troy Ounces.

An equivalent amount in Fine Metric Tonnes has been included on the basis of 1 tonne = 32,150.70 troy ounces.

At 31 October 2011, U.S. Treasury-Owned Gold amounted to **261 million troy ounces** of fine gold, equivalent to **8,134 metric tonnes**.

**SUMMARY**

Category	Fine Troy Ounces	Book Value US\$	Equivalent Fine Metric Tonnes*
Gold Bullion	258,641,851.485	10,920,427,976.54	8,045
Gold Coins, Blanks, Miscellaneous	2,857,047.831	120,630,509.50	89
<b>Total</b>	<b>261,498,899.316</b>	<b>11,041,059,486.04</b>	<b>8,134</b>

**BREAKDOWN**

Category	Fine Troy Ounces	Book Value US\$	Equivalent Fine Metric Tonnes*
<b>Mint-Held Gold - Deep Storage</b>			
Denver, CO	43,853,707.279	1,851,599,995.81	1,364
Fort Knox, KY	147,341,858.382	6,221,097,412.78	4,583
West Point, NY	54,067,331.379	2,282,841,677.17	1,682
<i>Subtotal - Deep Storage Gold</i>	<i>245,262,897.040</i>	<i>10,355,539,085.76</i>	<i>7,629</i>
<b>Mint-Held Treasury Gold - Working Stock</b>			
All locations - Coins, blanks, miscellaneous	2,783,218.656	117,513,614.74	87
<i>Subtotal - Working Stock Gold</i>	<i>2,783,218.656</i>	<i>117,513,614.74</i>	<i>87</i>
<b>Grand Total - Mint-Held Gold</b>	<b>248,046,115.696</b>	<b>10,473,052,700.50</b>	<b>7,715</b>
<b>Federal Reserve Bank-Held Gold</b>			
Gold Bullion:			
Federal Reserve Banks - NY Vault	13,376,961.126	564,804,728.53	416
Federal Reserve Banks - display	1,993.319	84,162.25	< 1
<i>Subtotal - Gold Bullion</i>	<i>13,378,954.445</i>	<i>564,888,890.78</i>	<i>416</i>
Gold Coins:			
Federal Reserve Banks - NY Vault	73,808.979	3,102,070.31	2
Federal Reserve Banks - display	20.196	15,824.45	< 1
<i>Subtotal - Gold Coins</i>	<i>73,829.175</i>	<i>3,117,894.76</i>	<i>2</i>
<b>Total - Federal Reserve Bank - Held Gold</b>	<b>13,452,783.620</b>	<b>568,006,785.54</b>	<b>418</b>
<b>Total - Treasury-Owned Gold</b>	<b>261,498,899.316</b>	<b>11,041,059,486.04</b>	<b>8,134</b>





**Deep Storage:** Deep-Storage gold is the portion of the U.S. government-owned Gold Bullion Reserve that the United States Mint secures in sealed vaults, which are examined annually by the Department of Treasury’s Office of the Inspector General. Deep-Storage gold comprises the vast majority of the Reserve and consists primarily of gold bars. This portion was formerly called “Bullion Reserve” or “Custodial Gold Bullion Reserve.”

**Working Stock:** Working-Stock gold is the portion of the U.S. government-owned Gold Bullion Reserve that the United States Mint uses as the raw material for minting congressionally authorized coins. Working-Stock gold comprises only about 1 percent of the Reserve and consists of bars, blanks, unsold coins, and condemned coins. This portion was formerly listed as individual coins and blanks or called “PEF Gold.”

Source: Financial Management Service, United States Department of the Treasury. \*The amounts in Fine Metric Tonnes were calculated by Grendon International Research (GIR).

**U.S. TREASURY-OWNED GOLD  
INDICATIVE NUMBER OF 400 OZ BARS**

If the “deep storage gold” held by the **United States Mint**, and the “gold bullion” held by the **Federal Reserve Bank**, were all in the form of 400 oz bars, each containing exactly 400 oz of fine gold, the number of bars would be as follows:

<b>United States Mint-Held Gold Deep Storage Locations</b>	<b>Indicative Number of 400 oz Bars</b>
Fort Knox (Kentucky)	368,000
West Point (New York State)	135,000
Denver (Colorado)	109,000
<b>Federal Reserve Bank-Held Gold</b>	
Gold Bullion – New York Vault	33,000
<b>Total</b>	<b>645,000</b>

Source: Derived from Status Report of U.S. Treasury-Owned Gold. 31 October 2011.



**SOURCES OF INFORMATION AND PHOTOGRAPHS**

This supplement is based on mainly on information kindly provided by the Historian’s Office of the **United States Mint** in 2010, and previously by the Assistant to the Director in 1990 (for inclusion in GIR’s publication “Gold Refiners & Bars Worldwide”, published in 1991).

The **London Bullion Market Association** (LBMA) kindly provided additional information, derived from its files on United States Mint 400 oz bars, as well as copyrighted photographs relating to six of the seven 400 oz bars illustrated in this supplement.

**The Industry Collection of Gold Bars Worldwide** provided copyrighted photographs of the London Good Delivery 400 oz gold bar, manufactured by the United States Mint (San Francisco) in 1949. The bar was included in the Industry Collection in 2009 with the support of **Credit Suisse** and **JP Morgan Chase Bank**.

Refer to disclaimer on website: [www.goldbarsworldwide.com](http://www.goldbarsworldwide.com)

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