

METALOR GROUP

SWITZERLAND – USA – HONG KONG – CHINA

METALOR TECHNOLOGIES SA – SWITZERLAND

LOCATION

Metalor Technologies SA, a leading international gold refiner and bar manufacturer, has its headquarters in Neuchâtel, an historical town overlooking Lake Neuchâtel, about 150 km from Zurich.

Most of the Group's precious metals refining and the manufacture of bars and other products takes place at its refinery in Marin near Neuchâtel.

The company also operates gold refineries in three other countries:

USA	Metalor Technologies Corporation USA*
Hong Kong	Metalor Technologies (Hong Kong) Limited*
China	Metalor Technologies (Suzhou) Limited#

Accreditation: * London Bullion Market Association. # Shanghai Gold Exchange.

The Metalor Technologies Group is the only precious metal company to operate major refineries in three geographical zones: Europe, Americas and Far East.

OWNERSHIP

Metalor Technologies SA is a private company. It is owned by the French Private Equity Astorg Partners SA, Swiss bankers and businessmen.

ACCREDITATION

1934*	London Bullion Market Association (LBMA)
1974	CME Group – Market Contract: COMEX
2005	Dubai Multi Commodities Centre
2007	Tokyo Commodity Exchange

* Accredited in 1934 to the London Gold Market under the name of Société de Banque Suisse, which owned the original Métaux Précieux refinery. The accreditation functions of the London Gold Market were absorbed by the LBMA in 1987.

Central Office of Precious Metal Control, Berne
Swiss Association of Manufacturers and Traders in Precious Metals

In 2004, the London Bullion Market Association (LBMA) appointed Metalor Technologies SA as one of five Referees to the London Good Delivery system.

BACKGROUND

Metalor Technologies SA traces its origins back to 1852 with the establishment of a watchcase manufacturer and gold smelting company, Martin, de Pury & Cie, which merged with the Bank of Le Locle in 1864.

In 1918, the company was taken over by Swiss Bank Corporation and formally established as a subsidiary under the name of Métaux Précieux SA in 1936.



Metalor has been associated with the refining of gold since 1852.



Metalor has manufactured London Good Delivery 400 oz bars since 1934.



Kilobars are manufactured to a fineness of 995, 999 and 999.9 for the international market.



In 1947, the company's headquarters was relocated from Le Locle to Neuchâtel where a new precious metals refinery had been built.

In 1978, the company's name was modified to Métaux Précieux SA Metalor.

In 1986, Usine Genevoise Degrossissage d'Or (UGDO) was acquired. Established in 1875 in Geneva, its 400 oz bars had held London Good Delivery status.

In 1998, when Swiss Bank Corporation merged with Union Bank of Switzerland (UBS), majority ownership was taken over by a group of industrial investors. Its name was modified to Metalor Technologies SA in 2001.

In 2007, the Metalor Technologies Group acquired the gold and silver refinery of Johnson Matthey Hong Kong Ltd. In total, the Group has subsidiaries in 16 countries in Europe, the Americas and Far East.

The Group has refined gold in the USA (North Attleboro, Massachusetts) since 1989, in Hong Kong since 1982 and in China (Suzhou) since 2006.

Apart from gold, the Group refines silver, platinum, palladium and rhodium, producing bars, grains, billets and powders for numerous industrial applications. It also produces very high purity fine metals for hi-tech or medical usage.

Number of employees: 1,650

GOLD SERVICES

Metalor Technologies SA focuses on:

- (1) Gold refining and the recycling of scrap
- (2) Gold products for the jewellery industry
- (3) Gold products for the electronics and decorative industries
- (4) Gold bars

GOLD REFINING AND RECYCLING OF SCRAP

The company normally accepts the following gold-bearing materials for refining to specified purities up to 999.9:

- Semi-refined bullion
- Mine doré: predominantly gold
- Mine doré: predominantly silver
- Loaded carbon
- Old jewellery
- Jewellery manufacturers scrap
- Electronic scrap
- Dental scrap
- Old coins and medals
- Chemical solutions

Gold refining methods include wet chemical chlorination (aqua regia) and electrolysis.

Annual gold refining capacity is recorded at approximately 650 tonnes worldwide.

GOLD BARS

A standard range of 9 cast and minted bars:

Cast: 400 oz, 1000 g, 500 g, 250 g, 100 g, 10 tola

Minted: 100 g, 50 g, 1 oz



Melting gold at the large refinery in Marin near Neuchâtel.



Pouring molten gold.



Manufacturing small cast bars.



TECHNICAL DESCRIPTION

Weight	Type	Fineness	Shape	Dimensions mm	First Issued	Serial Number System	System Introduced
400 oz	Cast	995+, 999.9	Rectangular	245 x 87 x 42 213 x 50 (base)	1934	6 numbers Plus year date	1978 2001
1000 g	Cast	995, 999.9	Rectangular	117 x 52 x 9	1965	Letter Plus 6 numbers	1991
500 g	Cast	999.9	Rectangular	86 x 38 x 8.5	1965	Letter Plus 6 numbers	1991
250 g	Cast	999.9	Rectangular	58 x 30 x 8	1965	Letter Plus 6 numbers	1991
100 g	Cast	999, 999.9	Rectangular	45 x 25 x 5	1965	Letter Plus 6 numbers	1991
10 tola	Cast	999, 999.9	Rectangular	45 x 27 x 6	1960s	-	-
100 g	Minted	999.9	Rectangular	27.5 x 47.5 x 4.35	2011	6 numbers	2011
50 g	Minted	999.9	Rectangular	25.7 x 44.2 x 2.65	2011	6 numbers	2011
1 oz	Minted	999.9	Rectangular	24 x 41 x 1.9	2011	6 numbers	2011

Source: Metalor Technologies SA. All cast bars, with the exception of 400 oz and 10 tola bars, are issued with a numbered certificate.

The company also produces customized bars for external entities.

HISTORY OF GOLD BAR MANUFACTURE

Bar manufacture dates back formally to 1918 when Swiss Bank Corporation acquired the Bank of Le Locle.

In 1934, London Good Delivery 400 oz bars were issued, the first bars in Switzerland to be recognized by the London Gold Market. From 1934 until 1954, the bars were issued under the name of Société de Banque Suisse. Since 1954 they have been issued with a Metalor-related stamp.

Prior to 1934, "kilobars" with an approximate weight of 1000 g had been introduced. In 1955, when the weight became exactly 1000 g, their dimensions were altered, changing again in 1965.

In 1965, 5 smaller cast bars, whose dimensions have remained the same since that time, were launched: 500 g, 250 g, 100 g, 50 g and 10 oz, followed by 10 tola bars in the 1960s and 5 tael bars in 1981.

The new METALOR® official stamp of Metalor Technologies SA, introduced in 2001, replaced the original stamp of Métaux Précieux SA which had been in use since 1952. The same certification mark has been applied since 1988. An earlier mark was issued in 1934, revised in 1952.

Serial numbering systems for cast bars have been applied since 1924 (est), modified in 1951 and 1978. While the system for 400 oz bars has remained unchanged since 1978, a new system for smaller cast bars was introduced in 1991.

Although most bars were issued under the name of Swiss Bank Corporation between 1934 and 1998, branded Metalor-related bars were also issued over this period.

Since 2000, most bars have been issued under the name of Metalor, although the company continues to manufacture cast bars for UBS and other companies.

Between 1974 and 1998, the company also manufactured minted bars: 100 g, 50 g, 20 g, 10 g, 5 g, 2 g, 1 g; 1 oz and 1/2 oz (rectangular and round); 1 tael. The round 1 oz and 1/2 oz bars were launched in 1974, the 10 other minted bars in 1981.

OFFICIAL STAMP

METALOR®

On 400 oz and other cast bars issued under the name of Metalor Technologies SA, since 2001.

The official stamp is also applied to bars manufactured by Metalor refineries in the USA, Hong Kong and China.

HISTORICAL OFFICIAL STAMP



On bars issued under the name of Métaux Précieux SA Metalor between 1988 and 2001.



In 2011, however, the company reintroduced a range of 3 minted bars: 100 g, 50 g and 1 oz.

The refining of gold to 999.9 purity dates back to around 1924.

TRADE COMMUNICATION

Enquiries by industrial customers to the Refining Division can be directed to the headquarters of Metalor Technologies SA in Neuchâtel or to its representative offices around the world, whose communication details are recorded on the company's website:

Headquarters

Metalor Technologies SA
Avenue du Vignoble
CH-2009 Neuchâtel
Switzerland

Website: www.metalor.com

Refining Division

Metalor Technologies SA
Chemin des Perveuils
CH-2074 Marin
Switzerland

Tel: 41-32-7206 111
Fax: 41-32-7206 602
Email: refining@metalor.com

EXAMPLES OF GOLD BARS



The international headquarters of the Metalor Group in Neuchâtel.

CERTIFICATION MARK



On all bars manufactured by Metalor Technologies SA, since 1988.



London Good Delivery 400 oz bar.





1000 g



250 g



100 g

**MINTED GOLD INVESTMENT BARS
WITH DATAMATRIX CODES**



Metalor issued an innovative range of minted bars in January 2011: 100 g, 50 g and 1 oz.

The company engraves on each bar not only a serial number but also a DataMatrix code, which offers the possibility of recording diverse information relating to the fabrication and origin of the bar.



METALOR TECHNOLOGIES CORPORATION USA

LOCATION

Metalor Technologies Corporation USA, a leading gold refiner and bar manufacturer in the United States, has its headquarters in North Attleboro, Massachusetts, about 40 miles (65 km) south of Boston.

Gold refining and the manufacture of bars and other precious metal products take place in North Attleboro.

OWNERSHIP

Metalor Technologies Corporation USA is a wholly owned subsidiary of Metalor Technologies SA, whose international headquarters are located in Neuchâtel, Switzerland.

ACCREDITATION

1991 London Bullion Market Association
 1989 CME Group – Market Contract: COMEX
 1992 Tokyo Commodity Exchange

Certification

2008 ISO: 9001
 2011 Audit and Certified Member of Responsible Jewelry Council

BACKGROUND

Metalor Technologies Corporation USA has been known by this name since 2001. It was established as Metalor USA Refining Corporation in 1989 by its parent company following the acquisition of the assets of the gold and silver refinery in North Attleboro of Leach & Garner Corporation.

In 1989, Metalor was the first to issue “Kilo Bottles” of granules, widely used in the USA by the jewellery fabrication industry.

In 2001, the company’s name was modified to Metalor Technologies Corporation USA.

In 2011, **significant expansion** plans are under way to increase gold and silver refining capacity. The refining operations provide the precious metal feedstock for the various value added businesses, notably the Advanced Coatings and Electrotechnics Divisions.

Apart from gold, the company refines silver, producing bars and other products for the silver industries.

Number of employees: 90

GOLD SERVICES

Metalor Technologies Corporation USA focuses on:

- (1) Gold refining and the recycling of scrap
- (2) Gold products for the jewellery industry
- (3) Gold bars

GOLD REFINING AND RECYCLING OF SCRAP

The company normally accepts the following gold-bearing materials for refining to specified purities up to 999.99:



Metalor (USA) has manufactured London Good Delivery 400 oz bars since 1991.



Kilobars are manufactured to a fineness of 999.9.



- Old jewellery
- Jewellery manufacturers scrap
- Semi-refined bullion
- Mine doré: predominantly gold
- Mine doré: predominantly silver
- Electrolytic slimes derived from silver
- Precipitated gold slimes

Gold refining methods include pyrometallurgical chlorination and electrolysis.

Annual gold refining capacity is recorded at around 150 tonnes.

GOLD BARS

A standard range of 4 cast bars: 400 oz, 100 oz (2) and 1000 g.

GOLD BARS – TECHNICAL DESCRIPTION

Weight	Type	Fineness	Shape	Dimensions mm	First Issued	Serial Number System	System Introduced
400 oz	Cast	995+, 999.9	Rectangular	270 x 76 x 44 235 x 57 (base)	1989	6-8 numbers	1989
100 oz	Cast	995, 999, 999.9	Rectangular	156 x 78 x 13 154 x 74 (base)	1989	6-8 numbers	1989
100 oz*	Cast	999.9	Rectangular	112 x 57 x 27 109 x 54 (base)	1989	6-8 numbers	1989
1000 g	Cast	999.9	Rectangular	110 x 54 x 8	1989	6-8 numbers	1989

Source: Metalor Technologies Corporation USA * 100 oz bars manufactured for COMEX delivery.

Serial numbers

All cast bars. 6-8 numbers record the last two digits of the year (1st/2nd nos), the day of the year on which the bar was manufactured (3rd/4th/5th nos, ranging from 1-365/366) and the bar serial number (6th/7th/8th, ranging from 1-999). For example, "0612662" on a 400 oz bar means it was made in 2006, on the 126th day, the 62nd bar since the bar serial number last reached 999.

HISTORY OF BAR MANUFACTURE

Metalor Technologies Corporation USA issued its standard range of 4 cast bars in 1989: 400 oz, 100 oz (2) and 1000 g.

Historically, the gold refinery, originally owned by Leach & Garner Corporation, had issued bars in weights of 100 oz, 1000 g (1985) and 400 oz (1986).

The official stamp is the same as that used by Metalor Technologies SA. The certification mark is a variation, recording the letters "MUS", indicating that the bar is manufactured by Metalor's US company.

TRADE COMMUNICATION

Enquiries by gold dealers and industrial customers should be directed to the company's headquarters in North Attleboro.

Metalor Technologies Corporation USA
 255 John L Dietsch Boulevard
 North Attleboro
 MA 02763
 USA

Tel: +1-508-699 8800
 Fax: +1-508-695 1603
 Website: www.metalor.com



"100 oz" bar.



The company has manufactured COMEX Good Delivery "100 oz" bars since 1989.



METALOR TECHNOLOGIES (HONG KONG) LIMITED

LOCATION

Metalor Technologies (Hong Kong) Limited, a major gold refiner in Hong Kong, has its headquarters in the Hum Hong district.

Gold refining and the manufacture of bars take place at the company's refinery in the Kwai Chung district.

OWNERSHIP

Metalor Technologies (Hong Kong) Limited is a wholly-owned subsidiary of Metalor Technologies International SA, whose headquarters are in Neuchâtel in Switzerland.

ACCREDITATION

2007 London Bullion Market Association
 2009 Dubai Multi Commodities Exchange

BACKGROUND

Metalor Technologies (Hong Kong) Limited, established in 1974, has refined gold since 2000, when its original refinery was opened in the Aberdeen district in 1986.

In 2007, when the company acquired the assets of the Kwai Chung operations and the gold and silver businesses of Johnson Matthey Hong Kong Ltd, all refining was transferred to the former Johnson Matthey refinery in Kwai Chung.

Johnson Matthey Hong Kong Ltd had refined gold in Kwai Chung since 1993. In 2001, its 400 oz bars were accepted as London Good Delivery by the London Bullion Market Association.

As part of the Metalor Group, the company services the Asia-Pacific region. It also has access to the precious metal products and services offered by the Metalor Group worldwide.

Number of employees: 77

GOLD SERVICES

Metalor Technologies (Hong Kong) Limited focuses on:

- (1) Gold refining and the recycling of scrap
- (2) Gold products for the jewellery, electronics and metal surface finishing industries
- (3) Gold bars

GOLD REFINING AND RECYCLING OF SCRAP

The company normally accepts the following gold-bearing materials for refining to specified purities up to 999.9:

- Semi-refined bullion
- Old jewellery
- Jewellery manufacturers scrap
- Old coins and medals

Gold refining methods include wet chemical chlorination (aqua regia), electrolysis, wet chemical parting, solvent extraction and electric furnace smelting.

Annual gold refining capacity is around 200 tonnes.



Metalor has refined gold in Hong Hong since 2000.



Pouring molten gold in the Melt Shop.



Kilobars are manufactured to a fineness of 995 and 999.9.



GOLD BARS

A standard range of 2 cast bars: 400 oz, 1000 g

TECHNICAL DESCRIPTION

Weight	Type	Fineness	Shape	Dimensions mm	First Issued	Serial Number System	System Introduced
400 oz	Cast	995+, 999.9	Rectangular	256 x 85 x 37 230 x 63 (base)	2001	6 numbers Plus year date	2001
1000 g	Cast	995, 999.9	Rectangular	116 x 52 x 9.5	1993	Letter Plus 5 numbers	1993

Source: Metalor Technologies (Hong Kong) Limited * Manufactured to order in bulk quantities.

TRADE COMMUNICATION

Enquiries by gold dealers and industrial customers should be directed to the company's headquarters:

Metalor Technologies (Hong Kong) Limited
 Suite 1705 Metropolis Tower
 10 Metropolis Drive
 Hung Hom
 Hong Kong

Tel: +852-2521 4131
 Fax: +852-2845 1791
 Email: sales.hk@metalor.com
 Website: www.metalor.com



Laboratory



400 oz



METALOR TECHNOLOGIES (SUZHOU) LIMITED – CHINA

LOCATION

Metalor Technologies (Suzhou) Limited is located at Suzhou in the province of Jiansu.

Gold refining and the manufacture of bars take place at the company's refinery in Suzhou Industrial Park.

OWNERSHIP

Metalor Technologies (Suzhou) Limited is a wholly-owned subsidiary of Metalor Technologies SA, whose international headquarters are in Neuchâtel in Switzerland.

ACCREDITATION

2008 Shanghai Gold Exchange

BACKGROUND

Metalor Technologies (Suzhou) Limited was established in 2001 to manufacture precious metal salts for the electronics and decorative industries.

In 2006, the company commissioned the gold refining process. Its first gold bars were produced in December 2006.

Number of employees: 98

GOLD SERVICES

Metalor Technologies (Suzhou) Limited focuses on:

- (1) Gold refining of mine doré and the recycling of precious metal bearing scraps
- (2) Gold products for the jewellery, electronics and metal surface finishing industries
- (3) Gold bars

GOLD REFINING AND RECYCLING OF SCRAP

The company normally accepts the following gold-bearing materials for refining to specified purities up to 999.9:

- Semi-refined bullion
- Mine doré
- Old jewellery and industrial wastes
- Jewellery manufacturers scrap
- Old coins and medals

Gold refining methods include chemical refining processes.

Annual gold refining capacity is around 30 tonnes.

GOLD BARS

A standard range of 2 cast bars: 3000 g, 1000 g

On request, non-standard cast bars are also manufactured, including the following weights: 3000 g, 1000 g, 500 g, 50 g, 20 g, 10 g, 30 oz, 10 oz, 5 oz, 2 oz, 1 oz and 1/3 oz.



Metalor has refined gold in China since 2006.



Casting gold at the refinery in Suzhou.



Waste water treatment plant.



TECHNICAL DESCRIPTION

Weight	Type	Fineness	Shape	Dimensions mm	First Issued	Serial Number System	System Introduced
3000 g	Cast	999.5	Rectangular	320 x 70 x 7	2007	2 letters Plus 7 numbers Plus year date	2007
1000 g	Cast	999.9	Rectangular	116 x 52.5 x 9	2007	Letter Plus 7 numbers Plus year date	2007
1/3 oz – 3000 g	Cast	999.9	Rectangular	According to customer's request	2010	According to customer's request	2010

Source: Metalor Technologies (Suzhou) Limited

TRADE COMMUNICATION

Enquiries by gold dealers and industrial customers should be directed to:

Metalor Technologies (Suzhou) Limited
8 Zhao Yang Road,
Suzhou Industrial Park
Jiansu Province
China 215123

Tel: +86 512 6593 6181
Fax: + 86 512 6593 6171
Website: www.metalor.com

CERTIFICATION MARK



On cast bars manufactured by Metalor Technologies (Suzhou) Limited, to be started in 2007.



3000 g bars for the gold market in China.

Refer to disclaimer on website: www.goldbarsworldwide.com

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