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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Andorra	Refinery	Ordino	L'Orfebre, S.A.
Australia	Refinery	Sydney, New South Wales	ABC Refinery (Australia) Pty (Pallion Group Pty Ltd.)
Australia	Refinery	Melbourne, Victoria	CPG Group
Australia	Refinery	Perth, Western Australia	The Perth Mint owned and operated by the Gold Corp. (wholly-owned by the Government of Western Australia)
Austria	Refinery	Vienna	Ögussa Österreichische Gold- und Silber-Scheideanstalt GmbH (Umicore S.A. Business Unit Precious Metals Refining)
Belgium	Refinery	Antwerp, Flanders	Industrial Refining Co.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Belgium	Refinery	Hoboken, Antwerp, Flanders	Umicore S.A. Business Unit Precious Metals Refining
Brazil	Refinery	Nova Lima, Minas Gerais	AngloGold Ashanti Córrego do Sítio Mineração
Brazil	Refinery	Cuiaba, Minas Gerais	AngloGold Ashanti Córrego do Sítio Mineração
Brazil	Refinery	Rio de Janeiro, Rio de Janeiro	Casa da Moeda do Brasil (Brazil Mint)
Brazil	Refinery	Belém, Pará State	North Star Refino S.A.
Brazil	Refinery	Guarulhos, São Paulo	Umicore Brasil Ltda.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Canada	Refinery	Brampton, Ontario	Asahi Refining Canada Ltd. (ARE Holdings, Inc.)
Canada	Smelter	Horne Smelter, Rouyn-Noranda, Québec	Glencore Canada Corp.
Canada	Refinery	Ottawa, Ontario	Royal Canadian Mint
Central African Republic	Refinery	Bangui	Fonderie Sawa Sawa
Central African Republic	Refinery	Bangui	Société Aurelia SARL
Central African Republic	Refinery	Bangui	Societé Fonderie D'or Gonga

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Central African Republic	Refinery	Bangui	Société Fonderie Kotto
Central African Republic	Refinery	Bangui	Société IBIGOLD SARL (IBIGOLD Fonderie)
Chile	Refinery	Mejillones, Antofagasta	Planta Recuperadora de Metales SpA (LS-Nikko Copper Inc., 66%, and Corporación Nacional del Cobre de Chile, 34%)
China	Refinery	Shandong	China Mining Gold Co. Ltd.
China	Refinery	Shenzhen, Guangdong	China National Gold Group Gold Jewerllery Co. Ltd. (China National Gold Group Co. Ltd.)
China	Refinery	Huadian, Jilin	China National Gold Group Jiapigou Mining Co. Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
China	Refinery	Huangshi, Huabei	Daye Nonferrous Metals Co., Ltd.
China	Refinery	Suzhou, Jiangsu	Dongwu Gold Group Co., Ltd.
China	Refinery	Fujian	Fujian Jinyu Deshang Refining Technology Co. Ltd.
China	Refinery	Chengdu, Sichuan	Great Wall Precious Metals Co. Ltd. [China Banknote Printing and Minting Corp. (CBPM)]
China	Refinery	Hetai, Gaoyao, Guangdong	Guangdong Jinding Gold Co. Ltd.
China	Refinery	Jiyuan, Henan	Henan Yuguang Gold & Lead Co. Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
China	Refinery	Sanmenxia, Henan	Henan Zhongyuan Gold Smelter Co. Ltd.
China	Refinery	Fanling, New Territories, Hong Kong	Heraeus Ltd.
China	Refinery	Huadian, Jilin	Huadian Gold Co. Ltd.
China	Refinery	Huaihua, Hunan	Hunan Chenzhou Mining Co., Ltd.
China	Refinery	Hohhot, Inner Mongolia	Inner Mongolia Qiankun Gold and Silver Refining Co. Ltd.
China	Refinery	Guixi City, Jiangxi	Jiangxi Copper Co., Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
China	Refinery	Jinchang, Gansu	Jinchuan Group Co. Ltd.
China	Refinery	Luoyang, Henan	Lingbao Gold Group Co. Ltd.
China	Refinery	Lingbao, Henan	Lingbao Jinyuan Tonghui Gold Refinery Co. Ltd.
China	Refinery	Luoyang, Henan	Luoyang Zijin Yinhui Gold Smelting Co. Ltd.
China	Refinery	Suzhou, Jiangsu	Metalor Precious Metals (Suzhou) Co. Ltd.
China	Refinery	Suzhou, Jiangsu Province	Metalor Precious Metals (Suzhou) Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
China	Refinery	Yuen Long, New Territories, Hong Kong	Metalor Precious Metals Hong Kong Ltd.
China	Refinery	Sanmenxia, Henan	Sanmenxia Jinqu Group Co. Ltd.
China	Refinery	Xi'an, Shaanxi	Shaanxi Gold Group Xi'an Qinjin Co., Ltd.
China	Refinery	Laizhou, Shandong	Shandong Gold Smelting Co. Ltd. (under Shandong Mining Co. Ltd.)
China	Refinery	Yantai, Shandong	Shandong Humon Smelting Co. Ltd.
China	Refinery	Zhaoyuan, Shandong	Shandong Zhaojin Gold & Silver Refinery Co. Ltd. (under Shandong ZhaJin Group Co. Ltd.)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
China	Refinery	Shanghai	Shanghai Tiancheng Gold Co., Ltd.
China	Refinery	Shanghai	Shanghai Xinye Copper Co., Ltd.
China	Refinery	Shenzhen, Guangdong	Shenzhen Cuilu Gold Refining Co. Ltd. (a subsidiary Shenzhen Cuilu Gold Industry Co. Ltd.)
China	Refinery	Shenzhen, Guangdong	Shenzhen Dianjin Precious Metal Refining Co. Ltd.
China	Refinery	Shenzhen City, Guangdong	Shenzhen Point Gold Refining Co., Ltd.
China	Refinery	Shenzhen, Guangdong	Shenzhen Yuexin Precious Metals Co. Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
China	Refinery	Shenzhen, Guangdong	Shenzhen Zhonghenglong Industrial Co. Ltd.
China	Refinery	Chengdu, Sichuan	Sichuan Tianze Precious Metals Co., Ltd.
China	Refinery	Tongling, Anhui	Tongling Nonferrous Metals Group Co. Ltd.
China	Refinery	Urumqi, Xinjiang	Urumqi Tianshanxing Precious Metal Smelting Co., Ltd. (Xinjiang Xinxin Mining Industry Co. Ltd.)
China	Refinery	Shifo, Yanggu, Shandong	Yanggu Xiangguang Copper Co., Ltd.
China	Refinery	Zhaoyuan, Shandong	Yantai Guoda Precious Metal Smelting Co. Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
China	Refinery	Penglai, Shandong	Yantai Penggang Gold Industry Co., Ltd.
China	Refinery	Kunming, Yunnan	Yunnan Copper Industry Co., Ltd. (Yunnan Copper Co., Ltd.)
China	Refinery	Kunming City, Yunnan	Yunnan Dianjin Investment Co., Ltd.
China	Refinery	Qujing, Yunnan	Yunnan Gold Mining Group Co., Ltd.
China	Refinery	Hunan, Chenzhou	Yunnan Precious Metals New Materials Holding Group Co. Ltd. (Sino-Platinum Metals Co. Ltd.)
China	Refinery	Zhaoyuan, Shandong	Zhaoyuan Gold Refining Co. Ltd. (Shandong Zhaojin Group Co. Ltd.)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
China	Refinery	Fuye, Zhejiang	Zhejiang Fuye Group Co. Ltd.
China	Refinery	Zhuzhou, Hunan	Zhuzhou Smelting Group Co. Ltd.
China	Refinery	Shanghang, Fujian	Zijin Mining Group Gold Smelting Co., Ltd. (Zijin Mining Group Co., Ltd.)
Czechia	Refinery	Vestec, Harare	SAFINA A.S.
Estonia	Refinery	Maardu, Harju Maakond	Toma Group
Finland	Smelter	Harjavalta	Boliden Harjavalta Oy (Boliden Mineral AB)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
France	Refinery	Paris, Ile-de-France	SAAMP Groupe SAS
Germany	Refinery	Pforzheim, Baden-Württemberg	Agosi AG
Germany	Refinery	Hamburg	Aurubis AG
Germany	Refinery	Pforzheim, Baden-Württemberg	C. Hafner GmbH + Co. KG
Germany	Refinery	Pforzheim, Baden-Württemberg	DODUCO GmbH
Germany	Refinery	Hanau, Hesse	Heraeus Deutschland GmbH & Co. KG

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Germany	Refinery	Halsbrücke, Saxony	SAXONIA Edelmetalle GmbH (Saxonia Group, 100%)
Germany	Refinery	Pforzheim, Baden-Württemberg	SAXONIA Edelmetalle GmbH (Saxonia Group, 100%)
Ghana	Refinery	Accra, Ghana	Gold Coast Refinery Ltd.
Ghana	Refinery	Accra, Ghana	M&C Gold and Precious Metals Refinery
Ghana	Refinery	Accra, Ghana	Royal Ghana Gold Ltd. (joint venture between the Precious Minerals Marketing Co. and Rosy Royal Ltd.)
Ghana	Refinery	Accra, Ghana	Sahara Royal Gold Refinery Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
India	Refinery	Rudrapur, Uttarakhand	ABANS Jewels Pvt. Ltd. (ABANS Group.)
India	Refinery	Manesar, Haryana	Agnis Bullion House LLP
India	Refinery	Hamirpur, Himachal Pradesh	AJ Refinery Pvt. Ltd.
India	Refinery	Rudrapur, Uttarakhand	Altim Metals Pvt. Ltd. (Dindayal Group)
India	Refinery	Rudrapur, Uttarakhand	Augmont Enterprises Pvt. Ltd.
India	Refinery	Mumbai, Maharashtra	AUPTAG Refinery Pvt. Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
India	Refinery	Bangalore, Karnataka	Bangalore Refinery Pvt. Ltd.
India	Refinery	Udham Singh Nagar, Uttarakhand	Bright Metal Refiners
India	Refinery	Aluva, Ernakulam District, Kerala	CGR Metalloys Pvt. Ltd.
India	Refinery	Kalamassery, Ernakulam District, Kerala	CGR Metalloys Pvt. Ltd.
India	Refinery	MG Road Dist: Ernakulam District, Kerala	CGR Metalloys Pvt. Ltd.
India	Refinery	Udham Singh Nagar, Uttarakhand	Diamond Forever International

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
India	Refinery	Coimbatore, Tamil Nadu	Emerald Jewel Industry India Ltd.
India	Refinery	Chennai, Tamil Nadu	Golden Star Trading Pvt. Ltd.
India	Refinery	Ahmedabad, Gujarat	Gujarat Gold Centre (GGC) Pvt Ltd.
India	Refinery	Chennai, Tamil Nadu	Harshini Maple Leafs
India	Refinery	Sanand, Ahmedabad, Gujarat	Hindustan Gold Industries Pvt. Ltd.
India	Refinery	Mumbai, Maharashtra	Hindustan Platinum Pvt. Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
India	Refinery	Aliporte, Kolkata	Indian Government Mint (unit of Security of Printing and Mining Corporation India Ltd.)
India	Refinery	Mumbai, Maharashtra	Indian Government Mint (unit of Security of Printing and Mining Corporation India Ltd.)
India	Refinery	Telangana, Hyderabad	Indian Government Mint (unit of Security of Printing and Mining Corporation India Ltd.)
India	Refinery	Chandi Chowk, New Delhi	Jalan and Company
India	Refinery	Rudrapur, Uttarakhand	Khandwala Finstock Pvt. Ltd
India	Refinery	Haridwar, Uttarakhand	Kundan Care Products Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
India	Refinery	Gurugram, Gurgaon, Haryana	Kundan Refinery Pvt. Ltd.
India	Refinery	Thirumudivakkam, Chennai	Lalithaa Jewelry Mart Pvt. Ltd.
India	Refinery	Rudrapur, Uttarakhand	M.D. Overseas Pvt. Ltd.
India	Refinery	Mewat District, Haryana	MMTC-PAMP India PVT Ltd. (joint venture MMTC Ltd. and PAMP SA Switzerland)
India	Refinery	Mumbai, Maharashtra	Narrondass Manordass Precious Metals Refinery
India	Refinery	Mumbai, Maharashtra	National India Bullion Refinery

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
India	Refinery	Mumbai, Maharashtra	National Refinery Pvt Ltd.
India	Refinery	Rudrapur, Uttarakhand	OMGL Refinery LLP
India	Refinery	Kundli, Sonipat, Haryana	Onkar Jewellers Pvt. Ltd.
India	Refinery	Ahmedabad, Gujarat	Parker Precious Metals LLP
India	Refinery	Kannur, Kerala	Quality Assay and Hallmarking Centre Pvt. Ltd
India	Refinery	Rohtak, Haryana	R.K. Jewels

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
India	Refinery	Rudrapur, Uttarakhand	Rajesh Exports Ltd.
India	Refinery	Rudrapur, Uttarakhand	RG Refineries Pvt. Ltd.
India	Refinery	Sidcul, Uttarakhand	Salasar Synthetics Pvt. Ltd.
India	Refinery	Shirpur city, Dhule, Maharashtra	Shirpur Gold Refinery Ltd. (owned by Zee Gold DMCC of Dubai)
India	Refinery	Ahmedabad, Gujarat	Shree Ambica Touch
India	Refinery	Pune, Maharashtra	Sonigara Jewellers Pvt. Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
India	Refinery	Ahmedabad, Gujarat	Sovereign Metals Ltd.
India	Refinery	Gautam Buddh Nagar, Uttar Pradesh	Tasha Gold Private Ltd.
India	Refinery	Krishnagiri, Tamil Naidu	Titan Company Ltd.
India	Refinery	Ranga Reddy, Telangana, Hyderabad	Yash Oro India Private Ltd.
India	Refinery	Ahmedabad, Gujarat	Zaveri & Co. Pvt. Ltd.
Indonesia	Refinery	Jakarta, Java	PT Aneka Tambang Tbk – UBPP Logam Mulia

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Iran	Refinery	15 kilometers from Takht-e Soleyman, Takeb Region	Zarshouran Gold Mine and Mining Industries Development Co. [Iranian Mines & Mining Industries Development & Renovation (IMIDRO)]
Italy	Refinery	Pero, Lombardia	8853 S.p.A.
Italy	Refinery	Arezzo, Tuscany	Chimet S.p.A.
Italy	Refinery	Arezzo, Tuscany	Italpreziosi S.p.A.
Italy	Refinery	Arezzo, Tuscany	Safimet S.p.A.
Italy	Refinery	Arezzo, Tuscany	T.C.A S.p.A

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Japan	Refinery	Bando, Ibaraki Prefecture	Asahi Metalfine Inc.
Japan	Refinery	Koriyama, Fukushima	Asaka Riken Co., Ltd.
Japan	Refinery	Ota, Tokyo	Chugai Mining Co. Ltd.
Japan	Refinery	Soka, Saitama	Ishifuku Metal Industry Co., Ltd.
Japan	Refinery	Kita-Ku, Osaka	Japan Mint
Japan	Refinery	Saganoseki, Oita	JX Advanced Metals Corp.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Japan	Refinery	Sayama, Saitama	Kojima Chemicals Co., Ltd.
Japan	Refinery	Kosaka, Akita	Kosaka Smelting and Refining Co. Ltd. (a subsidiary of Dowa Eco-System Co. Ltd., a part of the Dowa Holding Co. Ltd.)
Japan	Refinery	Iruma, Saitama	Matsuda Sangyo Co., Ltd.
Japan	Refinery	Naoshima, Kagawa	Mitsubishi Materials Corp.
Japan	Refinery	Takehara, Hiroshima	Mitsui Mining and Smelting Co., Ltd.
Japan	Refinery	Noda, Chiba	Nihon Material Co., Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Japan	Refinery	Nara city, Nara	Ohura Precious Metal Industry Co., Ltd.
Japan	Refinery	Saijo, Ehime	Sumitomo Metal Mining Co., Ltd.
Japan	Refinery	Hiratsuka City, Kanagawa	Tanaka Kikinzoku Kogyo K.K.
Japan	Refinery	Kuki, Saitama	Tokuriki Honten Co., Ltd.
Japan	Refinery	Konan, Kochi	Yamakin Co., Ltd.
Japan	Refinery	Sagamihara, Kanagawa	Yokohama Metal Group

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Kazakhstan	Refinery	Balkhash, Karaganda Province	Kazakhmys Smelting LLP
Kazakhstan	Refinery	Ust-Kamenogorsk, East Kazakhstan Province	Kazzinc Ltd. (Glencore plc, 69.7%)
Kazakhstan	Refinery	Nur-Sultan, Akmola province	Tau-Ken Altyn LLP (JSC NMC Tau-Ken Samruk)
Kenya	Refinery	Nairobi	Africa Gold Exporters
Korea, North	Refinery	Chongju, Pyonganbuk	2.16 (or Chongju) Refinery
Korea, North	Refinery	Hungnam, Hamgyeongnam	July 27th Refinery (Hungnam 2nd refinery)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Korea, North	Refinery	Munchon, Kangwon	Munpyong (Korea Zinc Industrial Group)
Korea, North	Refinery	Mooncheon, Gangwon	September 21st Refinery (Munchon Refinery)
Korea, Republic of	Refinery	Jincheon, Chungbuk	TSK Pretech
Korea, Republic of	Refinery	Incheon	Daesung Metal Co., Ltd.
Korea, Republic of	Refinery	Gimpo, Gyeonggi	DSC (Do Sung Corp.)
Korea, Republic of	Refinery	Gimpo, Gyeonggi	DSC (Do Sung Corp.)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Korea, Republic of	Refinery	Onsan, Ulsan	Korea Zinc Co., Ltd.
Korea, Republic of	Refinery	Onsan, Ulsan	LS MnM Inc. (formetly LS Nikko Copper Inc.)
Korea, Republic of	Refinery	Incheon	LT Metal Ltd. (LT Group)
Korea, Republic of	Refinery	Namdong, Incheon	Samduck Precious Metals Co., Ltd.
Korea, Republic of	Refinery	Gunsan, Jeollabuk	SungEel HiMetal Co. Ltd.
Korea, Republic of	Refinery	Asan, South Chungcheong	Torecom Corp. (LS MnM Inc.)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Kyrgyzstan	Refinery	Talas Province	Alliance Altyn LLC (OJSC Vostok-Geoldobycha)
Kyrgyzstan	Refinery	Karabalta, Karabalta	Kygyzaltyn JSC
Lebanon	Refinery and smelter	Bourj Hammud, Bierute	Lebanor s.a.l.
Mali	Refinery	Outside of Bamako	KMR Srl.
Mali	Refinery	Bamako	Marena Gold Refinery (subsidiary of Vemanti Group, Inc.)
Mexico	Refinery	Torreon, Coahuila	Metalúrgica Met-Mex Peñoles S.A. De C.V.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Mexico	Refinery	La Caridad complex, Nacozari, Sonora	Southern Copper Corp. (Grupo México S.A.B. de C.V.)
Netherlands	Refinery	Moerdijk, North Brabant	REMONDIS PMR B.V.
New Zealand	Refinery	Penrose, Auckland	Morris and Watson Ltd.
New Zealand	Smelter	Macraes, Otago	OceanaGold Corp.
Nigeria	Refinery	Lagos	Dukia Gold & Precious Metals Refining Co. Ltd.
Oman	Refinery	Sohar Port and Free Zone	Strategic & Precious Metal Processing Co. (SPMP) (DNR Industries Ltd., 33.33%; Oman Investment Fund, 33.33%; Tristar Resources Ltd., 33.33%)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Philippines	Refinery	Quezon City, Manila	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)
Poland	Refinery and Smelter	Glogow	KGHM Polska Miedz Spolka Akcyjna
Russia	Refinery	Verkhnyaya Pyshma, Sverdlovskaya Oblast	AO Ekaterinburg Non-Ferrous Metal Processing Plant
Russia	Refinery	Novosibirskaya Oblast'	AO Novosibirsk Refinery
Russia	Refinery	Kasimov, Ryazanskaya Oblast'	AO Prioksky Plant of Non-Ferrous Metals
Russia	Refinery	Verkhnyaya Pyshma, Sverdlovskaya Oblast'	AO Uralelectromed

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Russia	Refinery	Moscow	Moscow Special Alloys Processing Plant
Russia	Refinery	Krasnoyarsk, Krasnoyarskiy Kray	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)
Russia	Refinery	Shyolkovo, Moscow Region	SOE Shyolkovsky Factory of Secondary Precious Metals
Russia	Refinery	Chelyabinsk, Chelyabinskaya Oblast'	ZAO Kyshtym Copper-Electrolytic Plant (subsidiary of Russian Copper Co.)
Serbia	Refinery	Majdanpek	Zlata Majdanpek Gold Refinery (Serbia Zijin Copper DOO)
Singapore	Refinery	Tuas, West Region, Singapore	Metalor Technologies Singapore Pte. Ltd. (TANAKA Holdings Co. Ltd.)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
South Africa	Refinery	Johannesburg, Gauteng	AU Traders and Refiners
South Africa	Refinery	Germiston, Gauteng	Rand Refinery (Pty) Ltd.
South Africa	Refinery	Lethabong	Siyanda Refining Services (Pty) Ltd.
Spain	Refinery	Madrid	Metales y Barcelona 2011 S.L.U
Spain	Refinery	Madrid	SEMPSA Joyería Plateria SA (SEMPSA JP)
Sudan	Refinery	Khartoum, Sudan	Government of Khartoum

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Sudan	Refinery	Khartoum, Sudan	Government of Khartoum
Suriname	Refinery	Wit' Santi	Kaloti Suriname Mint House (The Government, Kaloti Jewellery Group, and private investors)
Sweden	Smelter	Ronnskar	Boliden Mineral AB
Switzerland	Refinery	Mendrisio, Ticino	Argor-Heraeus S.A. (Heraeus Holding GmbH, 100%)
Switzerland	Refinery	Biel-Bienne, Bern	Cendres + Métaux S.A.
Switzerland	Refinery	Marin, Neuchâtel	Metalor Technologies International S.A. (Tanaka Holdings Co. Ltd., 100%)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Switzerland	Refinery	Castel San Pietro, Ticino	MKS PAMP SA
Switzerland	Refinery	Castel San Pietro, Ticino	Produits Artistiques Métaux Précieux S.A. (PAMP)(MKS S.A., 100%)
Switzerland	Refinery	La Chaux-de-Fonds, Neuchâtel	PX Précinox S.A.
Switzerland	Refinery	Balerna, Ticino	Valcambi S.A. (Global Gold Refineries Ltd.)
Taiwan	Refinery	Kaohsiung	Elite Industech Co. LTD.
Taiwan	Refinery	Dayuan, Taoyuan	Singway Technology Co., Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Taiwan	Refinery	Tainan City	Solar Applied Materials Technology Corp.
Taiwan	Refinery	Guanyin District, Taoyuan	Super Dragon Technology Co. Ltd.
Tajikistan	Refinery	Ayni District, Kanchoch	Tajik Aluminum Co. and China's Tibet Huayu Mining Co.
Tanzania	Refinery	Geita Township	GG Refinery Ltd.
Tanzania	Refinery	Mwanza	Mwanza Precious Metals Refinery Co. Ltd.
Thailand	Refinery	Dok Mai Prawet, Bangkok	Gold Field Refinery Co. Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Thailand	Refinery	Dokmai Subdistrict, Pravet District, Bangkok Province	Umicore Precious Metals Thailand Ltd. (Umicore SA)
Turkey	Refinery	Corum, Anatolia	Ahlatci Metal Rafineri A.S. (Ahlatci Holding)
Turkey	Refinery	Bahcelievler, Istanbul	Garanti Rafineri ve Maden Islemetleri A.Ş.
Turkey	Refinery	Küçükçekmece, İstanbul	Isgold Altin Rafinerisi A.Ş.
Turkey	Refinery	Kuyumcukent, Yenibosna, Istanbul	Istanbul Gold Refinery
Turkey	Refinery	Bahçelievler, Istanbul	Nadir Metal Rafineri San. ve Tic. A.Ş.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Turkey	Refinery	Esenyurt, Istanbul	Onsa Mücevherat İmalatı ve Dış Ticaret A.Ş. (Altınbaş Holding)
Uganda	Refinery	Kampala	Bullion Refinery Ltd.
Uganda	Refinery	Kampala	Carvataro Refinery Ltd.
Uganda	Refinery	Kampala	Simba Gold Refinery Ltd.
United Arab Emirates	Refinery	Al Quoz, Dubai	Al Etihad Gold Refinery DMCC
United Arab Emirates	Refinery	Sharjah, Sharjah	Dijllah Gold Refinery FZC

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
United Arab Emirates	Refinery	Jumeriah Lake Towers, Dubai	Emirates Gold DMCC
United Arab Emirates	Refinery	Fujairah Free Zone 2, Fujairah	Fujairah Gold FZC (Vedanta Resources Ltd., 100%)
United Arab Emirates	Refinery	SAIF Zone Sharjah	Gulf Gold Refinery Services (TLI Global FZE 100%)
United Arab Emirates	Refinery	Sharjah, Sharjah	International Precious Metal Refiners LLC
United Arab Emirates	Refinery	Jumeriah Lake Towers, Dubai	Kaloti Precious Metals
United Kingdom	Refinery	Beckton, East London	Baird & Co. Ltd.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
United Kingdom	Refinery	Buxton, Derbyshire	Capella Ltd.
United Kingdom	Refinery	West Bromwich	JBR Recovery Ltd.
United States	Refinery	Fairless Hills, Pennsylvania	Abington Reldan Metals, LLC
United States	Refinery	Warwick, Rhode Island	Advanced Chemical Co.
United States	Refinery	Miami, Florida	Asahi Refining Florida LLC (subsidiary of ARE Holdings, Inc.)
United States	Refinery	Salt Lake City, Utah	Asahi Refining USA, Inc. (subsidiary of ARE Holdings, Inc.)

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
United States	Refinery	Milwaukee, Wisconsin	AURA-II, Inc
United States	Refinery	Cranston, Rhode Island	Gannon & Scott, Inc.
United States	Refinery	Phoenix, Arizona	Gannon & Scott, Inc.
United States	Refinery	Philadelphia, PA	Garfield Refining LLC
United States	Refinery	Warwick, Rhode Island	Geib Refining Corp.
United States	Refinery	Hempstead, New York	General Refining Corp.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
United States	Refinery	Attleboro, Massachusetts	Glines & Rhodes, Inc.
United States	Refinery	Santa Fe Springs, CA	Heraeus Precious Metals North America LLC / Heraeus Inc.
United States	Refinery	Wartburg, Tennesee	Heraeus Precious Metals North America LLC / Heraeus Inc.
United States	Refinery and smelter	Magna, Utah	Kennecott Utah Copper LLC (a subsidiary of Rio Tinto plc)
United States	Refinery	New York, New York	Manhattan Gold & Silver
United States	Refinery	Buffalo, New York	Materion Corp.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
United States	Refinery	Greenville, North Carolina	Metallix Refining Inc.
United States	Refinery	North Attleboro, Massachusetts	Metalor USA Refining Corp.
United States	Refinery	Cranston, RI	Noble Metal Services
United States	Refinery	Warwick, Rhode Island	Pease & Curren Inc.
United States	Refinery	East Providence, Rhode Island	QML, Inc.
United States	Refinery	Scottsville, New York	Sabin Metal Corp.

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
United States	Refinery	Mt. Vernon, New York	Sigmund Cohn Corp.
United States	Refinery	Woodside, NY	So Accurate Group, Inc.
United States	Refinery	Alden, New York	United Precious Metal Refining, Inc.
Uzbekistan	Refinery	Almalyk, Tashkent Province	Almalyk Mining and Metallurgical Complex (AMMC)
Uzbekistan	Refinery	Navoi, Navoiy Province	Joint-Stock Company Navoi Mining and Metallurgical Company
Vietnam	Refinery	Lao Cai copper refining factory 2, Ban Qua, BatXat District, Lao Cai Province	Lao Cai Copper Smelting Enterprise [VINACOMIN - Minerals Holding Corp. (VIMICO), 100%]

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4—Identified global producers of gold bullion

Country	Plant Type	Location	Operator and Ownership
Vietnam	Refinery	Tang Loong Industrial Park, Bao Thang, Lao Cai Province	Lao Cai Copper Smelting Enterprise [VINACOMIN - Minerals Holding Corp. (VIMICO), 100%]
Zimbabwe	Refinery	Msasa, Harare	Fidelity Gold Refinery (Pvt) Ltd.

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1—Identified global consumers of tantalum concentrates

Country	Products ¹	Location	Operator and Ownership
Australia	Ta2O5	Greenbushes, Western Australia	Global Advanced Metals Greenbushes Pty Ltd. (Global Advanced Metals Pty Ltd.)
Austria	TaN,TaC/NbC	Althofen, Carinthia	Treibacher Industrie AG
Brazil	Ta2O5	São João Del Rei, Minas Gerais State	LSM Brazil S.A. [AMG Advanced Metallurgical Group N.V. (Netherlands)]
Brazil	FeNbTa	São Paulo State	Mineração Taboca S.A. [Minsur S.A. (Peru)]
Brazil	FeTa, FeTaNb	São João Del Rei, Minas Gerais State	Resind Indústria e Comércio Ltda.
China	Ta metal	Dagualing Village, Huangxing Town, Changsha County, Hunan Province	Changsha Nanfang Tantalum and Niobium Co. Ltd.

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1—Identified global consumers of tantalum concentrates

Country	Products ¹	Location	Operator and Ownership
China	Ta2O5,TaC, TaPwdr, TaMtl	Sihui, Zhaoqing, Guangdong	Duoluoshan Sapphire Rare Metal Co. Ltd.
China	K2TaF7, Ta2O5, TaPwdr, TaMtl	Yaxi Industrial Development Zone, Xinhui, Jiangmen, Guangdong	F&X Electro-Materials Ltd. (Uniton Industries Ltd.)
China	K2TaF7, TaPwdr, Ta2O5, TaMtl, TaAlloys	Zhuzhou, Hunan	FIR Metals & Resource Ltd.
China	Ta2O5, K2TaF7	Zhuhui District, Hengyang, Hunan	Hengyang King Xing Lifeng New Materials Co., Ltd.
China	Ta2O5, TaMtl, TaPwdr	Jiangning Economic Development Zone, Nanjing, Jiangsu	Jiangsu Metalink Special Alloys Corp.
China	K2TaF7, Ta2O5	Ganzhou Industrial Park, Fengxin County, Jiangxi	Jiangxi Dinghai Tantalum & Niobium Co., Ltd. (Jiangxi Dinghai Group)

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1—Identified global consumers of tantalum concentrates

Country	Products ¹	Location	Operator and Ownership
China	Ta2O5, K2TaF7, TaC, TaPwdr, TaMtl	Shishi Industrial Zone, Yifeng County Industrial Park, Fengcheng, Jiangxi	Jiangxi Kingtan Tantalum Co. Ltd.
China	K2TaF7, Ta2O5	Yichun Economic and Technological Development Zone, Yichun, China	Jiangxi Tuohong New Material Co., Ltd.
China	TaC, TaMtl	Chengdong Industrial Base 3, Xunyang District, Jiujiang City, Jiangxi Province	Jiujiang Janny New Material Co., Ltd.
China	Ta2O5, K2TaF7, TaC, TaMtl	Jiujiang, Jiangxi	Jiujiang Jinxin Nonferrous Metals Co., Ltd.
China	Ta2O5, TaC, TaMtl, TaPwdr, TaNbC, K2TaF7	East City Development Zone, Xin Gang Town, Jiujiang, Jiangxi	Jiujiang Tanbre Co., Ltd. (JJTC) (formerly Jiujiang Tanbre smelter) (Jiangxi Tungsten Group Ltd. Corp. [JWYX])
China	Ta2O5, K2TaF7, TaC, TaMtl	Jiujiang, Jiangxi	Jiujiang Zhongao Tantalum & Niobium Co., Ltd. (joint venture Jiangxi Jiujiang Yizhong Nonferrous Metals Co., Ltd., and others)

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1—Identified global consumers of tantalum concentrates

Country	Products ¹	Location	Operator and Ownership
China	Ta2O5, TaCl5, TaC, TaNbC, TaMtl, TaAlloys, TaPwdr, LiTaO3	Dawukou District, Shizuishan, Ningxia	Ningxia Orient Tantalum Industry Co., Ltd. (OTIC) [China Nonferrous Metal Mining (Group) Co., Ltd. (CNMC, 54.2%); CNMC NingXia Orient Group Co., Ltd. (45.8%)]
China	TaC, TaNbC, TaPwdr, Ta ingot	Xiangcheng, Suzhou, Jiangsu	Taike Technology (Suzhou) Co. Ltd.
China	K2TaF7, Ta2O5, TaC Pwder, Ta Ethoxide, TaMtl, TaPwdr	Yingde, Guangdong	Ximei Resources (Guangdong) Ltd. (Ximei Resources Holding Ltd.)
China	K2TaF7	Ren Village Industrial Park, Xinxing County, Yunfu City, Guangdong	Xinxing Haorong Electronic Material Co., Ltd.
China	K2TaF7, TaMtl, TaPwdr, Ta2O5, TaC	SME Pioneer Park, Yanling, Zhuzhou, Hunan	Yanling Jincheng Tantalum & Niobium Co., Ltd

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1—Identified global consumers of tantalum concentrates

Country	Products ¹	Location	Operator and Ownership
Estonia	Ta2O5, TaMtl, TaCl5	Sillamae, Ida-Virumaa	NPM Silmet OÜ (Neo Performance Materials, 100%)
Germany	K2TaF7, Ta2O5, TaPwdr	Goslar, Lower Saxony	TANIOBIS GmbH (JX Metals Group)
Germany	Ta, TaCl5	Laufenburg, Baden-Württemberg	TANIOBIS Smelting GmbH & Co. KG (JX Metals Group)
India	K2TaF7, Ta2O5	Taloja Industrial Area, District Raigad, Maharashtra	Metallurgical Products India Pvt Ltd. (MPIL)
Japan	TaPwdr	Aizuwakamatsu, Fukushima	Global Advanced Metals Japan K.K. (Global Advanced Metals Pty Ltd.)
Japan	TaC, TaSi2, TaN, TaPwdr	Akita, Akita Prefecture	Japan New Metals Co., Ltd. (Mitsubishi Materials Corp.)

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1—Identified global consumers of tantalum concentrates

Country	Products ¹	Location	Operator and Ownership
Japan	Ta2O5, TaC, TaNbC	Omuta, Fukuoka	Mitsui Mining and Smelting Co. Ltd.
Japan	Ta2O5	Harima, Kako, Hyogo	Taki Chemical Co., Ltd.
Japan	TaPwdr	Hitachiomiya, Ibaraki	TANIOBIS Japan Co., Ltd. (JX Mining Group)
Kazakhstan	TaAlloy, TaMtl, TaPwdr	Ust-Kamenogorsk, East Kazakhstan	Ulba Metallurgical Plant JSC (NAC Kazatomprom JSC)
Mexico	K2TaF7, TaPwdr	Matamoros, Tamaulipas	KEMET de Mexico, S.A. de C.V. [KEMET Corp. (Yageo Corp.)]
Russia	Ta2O5, TaCl5	Solikamsk, Permskiy Kray	OAO Solikamsk Magnesium Works (SMZ)

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1—Identified global consumers of tantalum concentrates

Country	Products ¹	Location	Operator and Ownership
Thailand	K2TaF7, TaPwdr, Ta2O5, TaCl5	Map Ta Phut, Rayong Province	TANIOBIS Co., Ltd. (JX Metals Group)
United States	TaMtl, TaAlloys, TaPwdr	Boyertown, Montgomery County, PA	Global Advanced Metals USA, Inc. (Global Advanced Metals Pty Ltd.)
United States	TaPwdr, TaMtls, TaN, TaC, Ta2O5	Newton, MA	Materion Corp.

¹K2TaF7, K-salt (potassium fluorotantalate); Ta, tantalum; Ta2O5, tantalum pentoxide; TaAl, tantalum-aluminum alloy; TaAlloys, tantalum alloys; TaC, tantalum carbide; TaCl5, tantalum chloride; Ta ethoxide, tantalum ethoxide; TaH5, tantalum hydride; TaMtl, tantalum metal; TaN, tantalum nitride; TaNbC, tantalum niobium carbide; TaPwdr, tantalum powder; TaRecyc, tantalum recycle; TaSe2, tantalum diselenide; TaSi2, tantalum silicide.

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Australia	Smelter	Greenbushes, Western Australia	Global Advanced Metals Pty Ltd.
Bolivia	Smelter	Vinto smelting complex, Vinto, Oruro Department	Empresa Metalúrgica Vinto S.A. (Compania Minera Colquira S.A.)
Bolivia	Smelter	Lucianita tin plant, Oruro Department	Empresa Minera Huanuni [Corporación Minera de Bolivia (COMIBOL)]
Bolivia	Smelter	Huajara Industrial Park, Oruro, Oruro Department	Operaciones Metalúrgicas S.A. (OMSA)
Brazil	Smelter	São José, Santa Catarina	CRM Fundicao De Metais E Comercio De Equipamentos Eletronicos Do Brasil Ltda
Brazil	Smelter	Ariquemes, Rondônia	Estanho de Rondônia S.A. [Companhia Siderúrgica Nacional (CSN)]

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Brazil	Smelter	Mogi das Cruzes, São Paulo	Fabrica Auricchio Industria e Comercio Ltda.
Brazil	Smelter	São João del Rei, Minas Gerais	Magnu's Minerais Metais e Ligas Ltda.
Brazil	Smelter	Ariquemes, Rondônia	Melt Metais e Ligas S.A.
Brazil	Smelter	Pinpora, Sao Paulo	Mineração Taboca S.A.
Brazil	Refinery	São João del Rei, Minas Gerais	Resind Indústria e Comércio Ltda.
Brazil	Refinery	Bebedouro, Sao Paulo	Soft Metais Ltda.

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Brazil	Smelter	Piracicaba, São Paulo	Super Ligas
Brazil	Refinery	White Solder, Rondônia	White Solder Metalurgia e Mineração Ltda.
China	Refinery	Qiaokou, Suxian, Chenzhou, Hunan	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd. (Yunnan Tin Industry Co., Ltd.)
China	Smelter	Chifeng, Nei Mongol	Chifeng Dajingzi Tin Industry Co., Ltd. [China Nonferrous Metal Mining (Group) Co., Ltd.]
China	Smelter	Pinggui, Hezhou, Guangxi	CNMC (Guangxi) PGMA Co. Ltd.
China	Refinery and Smelter	Gejiu, Yunnan	Gejiu Fengming Metallurgy Chemical Plant

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
China	refinery	Gejiu, Yunnan	Gejiu Jinye Renewable Technology Co. Ltd.
China	Smelter	Gejiu, Yunnan	Gejiu Kai Meng Industry and Trade Co. Ltd.
China	Smelter	Gejiu, Yunnan	Gejiu Nonferrous Metal Processing Co. Ltd.
China	Smelter	Guangdong Foshan Nanhai, Gejiu, Yunnan	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.
China	Smelter	Huogudu village, Zhadian town, Gejiu, Yunnan	Gejiu Zili Mining and Metallurgical Co. Ltd.
China	Smelter	Chaozhou, Guangdong	Guangdong Hanhe Non-Ferrous Metal Co., Ltd.

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
China	Smelter	Laibin, Guangxi	Guangxi Huaxi Nonferrous Metals Co., Ltd.
China	Smelter	Guanyang, Guangxi	Guanyang Guida Nonferrous Metal Smelting Plant
China	Smelter	Ganzhou, Jiangxi	HuiChang Hill Tin Industry Co., Ltd.
China	Smelter	Huichang Ganzhou	Huichang Jinshunda Tin Industry Co. Ltd.
China	Smelter	Ganzhou, Jiangxi	Jiangxi New Nanshan Technology Co. Ltd.
China	Smelter	Nankang, Ganzhou, Jiangxi	Jiangxi New Nanshan Technology Co. Ltd.

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
China	Refinery and Smelter	Maanshan, Anhui	Ma'anshan Weitai Tin Co., Ltd.
China	Smelter	Gejiu, Yunnan	Yunnan Chengfeng Nonferrous Metals Co. Ltd.
China	Smelter	Gejiu, Yunnan	Yunnan Tin Co. Ltd. (Yunnan Tin Industry Group Co. Ltd.)
China	Smelter	Gejiu, Yunnan Sheng	Yunnan Yunfan Non-ferrous Metals Co., Ltd.
India	Smelter	Dantewada, Chhattisgarh	Precious Minerals and Smelting Ltd. (Lunia Group)
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	CV Ayi Jaya

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Indonesia	Smelter	Pangkai Pinang City, Banga Belitung Province	CV Venus Inti Perkasa
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT Aries Kencana Sejahtera
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT Artha Cipta Langgeng
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT ATD Makmur Mandiri Jaya
Indonesia	Smelter	Lintang, Bangka Belitung Province	PT Babel Inti Perkasa [Indonesia Royal Resources Group]
Indonesia	Smelter	Badau, Bangka Belitung Province	PT Babel Surya Alam Lestari

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Indonesia	Smelter	Pangkalan Baru, Bangka Belitung Province	PT Bangka Prima Tin
Indonesia	Smelter	Pangkalpinang, Bangka Belitung Province	PT Bangka Serumpun
Indonesia	Smelter	Pangkalpinang, Bangka Belitung Province	PT Bangka Timah Utama
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT Bangka Tin Industry
Indonesia	Smelter	Tanjung Pandan, Bangka Belitung Province	PT Belitung Industri Sejahtera
Indonesia	Smelter	Pangkal Pinang, Bangka Belitung Province	PT Bukit Timah [Indonesia Royal Resources Group]

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Indonesia	Smelter	Batam, Kepulauan Riau Province	PT Cipta Persada Mulia
Indonesia	Smelter	Karimun, Riau Islands Province	PT Eunindo Usaha Mandiri
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT Inti Stania Prima
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT Kijang Jaya Mandiri
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT Masbro Alam Stania
Indonesia	Smelter	Mentawak, Bangka Belitung Province	PT Menara Cipta Mulia

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT Mitra Stania Prima
Indonesia	Smelter	Pangkalpinang, Bangka Belitung Province	PT Mitra Sukses Globalindo
Indonesia	Smelter	Pulau Bangka, Bangka Belitung Province	PT Panca Mega Persada
Indonesia	Smelter	Pangkalpinang, Bangka Belitung Province	PT Premium Tin Indonesia
Indonesia	Smelter	Pangkalpinang, Bangka Belitung Province	PT Prima Timah Utama
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT Putera Sarana Shakti (PT PSS)

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Indonesia	Refinery and Smelter	Tukak Sadai, Bangka Belitung Province	PT Rajawali Rimba Perkasa
Indonesia	Smelter	Pangkalpinang, Bangka Belitung Province	PT Rajehan Ariq
Indonesia	Smelter	Sungailiat, Bangka Belitung Province	PT Refined Bangka Tin
Indonesia	Smelter	Pangkalpinang, Bangka Belitung Province	PT Sariwiguna Binasentosa
Indonesia	Smelter	Pangkalpinang, Bangka Belitung Province	PT Stanindo Inti Perkasa [Karya Group]
Indonesia	Smelter	Sungai Samak, Bangka Belitung Province	PT Sukses Inti Makmur

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Indonesia	Smelter	Tempilang, Bangka Belitung Province	PT Timah Nusantara
Indonesia	Smelter	Kundur Island, Riau Islands Province	PT Timah Tbk Kundur
Indonesia	Smelter	Mentok, Bangka Belitung Province	PT Timah Tbk Mentok
Indonesia	Smelter	Pangkalpinang, Bangka Belitung Province	PT Tinindo Inter Nusa
Indonesia	Smelter	Bogor, Jawa Barat	PT Tirus Putra Mandiri
Indonesia	Smelter	Gantung, Bangka Belitung Province	PT Tommy Utama

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Japan	Smelter	Kosaka, Akita	Nonferrous Metals DOWA Metals & Mining Co., Ltd. [Dowa Holdings Co., Ltd.]
Korea, North	Smelter	Munchon, Kangwon	Munpyong (Korea Zinc Industrial Group)
Malaysia	Smelter	Butterworth, Penang	Malaysia Smelting Corp. Bhd.
Malaysia	Smelter	Pulau Indah, Port Klang	Malaysia Smelting Corp. Bhd.
Peru	Refinery and smelter	Pisco, Ica Region	Minsur S.A.
Poland	Refinery and Smelter	Chmielów, Podkarpackie	Fenix Metals Sp. z o.o.

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Portugal	Smelter	Covilhã, Barroca Grande	Beralt Tin & Wolfram (Portugal) S.A. (Almonty Industries Inc., 100%)
Russia	Smelter	Novosibirsk	OOO NOK (Novosibirsk Tin Plant)
Rwanda	Smelter	Kigali	LuNa Smelter Ltd. (Luma Holding Group Ltd.)
Saudi Arabia	Refinery	Riyadh, Riyadh Province	L'azurde Company For Jewelry
Spain	Refinery and Smelter	Berango, Bizkaia	Aurubis Berango S.L.U.
Spain	Smelter	Toledo	CRM Synergies S.L.

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2—Identified global consumers of tin concentrates (refineries and smelters)

Country	Plant Type	Location	Operator and Ownership
Thailand	Refinery and smelter	Phuket, Phuket Province	Thailand Smelting and Refining Co. Ltd. (AMC PLC)
United Kingdom	Smelter	Trevellas Coombe, Cornwall	Blue Hills Tin Streams
Vietnam	Smelter	Electro-Mechanical Facility, Tinh Tuc City, Cao Bang Province	Cao Bang Minerals & Metallurgy J.S.C.
Vietnam	Smelter	Phuc Xa Ward, Thai Nguyen City, Thai Nguyen Province	Thai Nguyen Mining and Metallurgy Co. Ltd.
Vietnam	Refinery	My Hao District, Hung Yen Province	VQB Mineral and Trading Group J.S.C.

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3—Identified global consumers of tungsten concentrates

Country	Plant Type	Location	Operator and Ownership
Austria	Ammonium paratungstate	St. Martin im Sulmtal, Styria	Wolfram Bergbau und Hütten AG (Sandvik AB, 100%)
Brazil	Ferrotungsten	Araçariguama, São Paulo	ACL Metais Eireli
China	Ammonium paratungstate	Ganzhou, Jiangxi	Ganzhou Grand Sea Tungsten Co., Ltd.
China	Ferrotungsten	Anhua County, Yiyang, Hunan	Anhua Tiangong Jinyuan Alloy Materials Co., Ltd.
China	Ammonium paratungstate	Chaling County, Zhuzhou, Hunan	Chaling County Dadi Tungsten Industry Co., Ltd.
China	Ammonium paratungstate	Luanchuan County, Luoyang, Henan	China Molybdenum Tungsten Co., Ltd. (CMOC Group Ltd.)

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3—Identified global consumers of tungsten concentrates

Country	Plant Type	Location	Operator and Ownership
China	Ammonium paratungstate	Chongyi County, Ganzhou, Jiangxi	Chongyi Zhangyuan Tungsten Co., Ltd.
China	Ammonium paratungstate	Hezhou, Guangxi	CNMX Guangxi PGMA Co., Ltd. (China Nonferrous Metal Mining Group Co., Ltd.)
China	Ammonium paratungstate	Xin Luo District, Yanshi Town, Fujian	Fujian Xinlu Tungsten Co., Ltd. (Xiamen Tungsten Co., Ltd.)
China	Ammonium paratungstate	Ganzhou, Jiangxi	Ganzhou Huaxing Tungsten Products Co., Ltd. [Jiangxi Tungsten Industry Group Co. Ltd. (JWYX) [joint venture between China Minmetals and Jiangxi Rare Earth and Rare Metals Tungsten Group Corp. (JXTC)]]
China	Ferrotungsten	Ganxian, Ganzhou, Jiangxi	Ganzhou Jiangwu Ferrotungsten Co., Ltd. [Jiangxi Tungsten Industry Group Co. Ltd. (JWYX)[joint venture between China Minmetals and Jiangxi Tungsten Industry Holding Group Co., Ltd. (JXTC)]

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3—Identified global consumers of tungsten concentrates

Country	Plant Type	Location	Operator and Ownership
China	Ammonium paratungstate	Guantang Industrial Zone, Chao'an County, Chaozhou, Guangdong	Guangdong Xianglu Tungsten Co., Ltd.
China	Ammonium paratungstate	Dongtai, Jiangsu	Huihuang Tungsten & Molybdenum Product Co., Ltd.
China	Ammonium paratungstate	Guanzhuang, Yuanling, Huaihua, Hunan	Hunan Chenzhou Mining Co., Ltd. (Hunan Gold Corp. Ltd.)
China	Ammonium paratungstate	Xintang Town, Hengdong County, Hengyang, Hunan	Hunan Jintai New Material Co., Ltd.
China	Ammonium paratungstate	Suxian District, Chenzhou, Hunan	Hunan Shizhuyuan Nonferrous Metals Co. Ltd., Chenzhou Tungsten Products Branch (formerly Chenzhou Diamond Tungsten Products Co, Ltd.)
China	Ammonium paratungstate	Ganzhou, Jiangxi	Jiangwu H.C. Starck Tungsten Products Co., Ltd. [Jiangxi Rare Metals Tungsten Holdings Group Co., Ltd. (JXTC) and H.C. Starck GmbH (Masan Group Corp.)]

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3—Identified global consumers of tungsten concentrates

Country	Plant Type	Location	Operator and Ownership
China	Ammonium paratungstate	New Century Industrial Park, Gao'an, Jiangxi	Jiangxi Minmetals Gao'an Non-ferrous Metals Co., Ltd.
China	Ammonium paratungstate	Tonggu, Yichun, Jiangxi	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd. [Jiangxi Tungsten Industry Holding Group Co., Ltd. (JXTC)]
China	Ammonium paratungstate	Huanglong Industrial Park, Huanglong Town, Dayu County, Ganzhou, Jiangxi	Jiangxi Xianglu Tungsten Co., Ltd. (Guangdong Xianglu Tungsten Co., Ltd.)
China	Ammonium paratungstate	Dingnan County, Ganzhou, Jiangxi	Jiangxi Xinsheng Tungsten Industry Co., Ltd. [Jiangxi Tungsten Industry Holding Group Co., Ltd. (JXTC)]
China	Ammonium paratungstate	Wudu Industrial Park, Xiushui County, Jiangxi	Jiangxi Xiushui Ganbei Tungsten Industry Co., Ltd. [China Tungsten High-tech Materials Co., Ltd. (China Minmetals Corp.)]
China	Ammonium paratungstate	Changlong Town, Chongyi County, Ganzhou, Jiangxi	Jiangxi Yaosheng Tungsten Co., Ltd.

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3—Identified global consumers of tungsten concentrates

Country	Plant Type	Location	Operator and Ownership
China	Ammonium paratungstate	Nanfeng Xiaozhai, Yunnan	Malipo Haiyu Tungsten Co., Ltd. [Xiamen Tungsten Industry Co., Ltd. (XTC)]
China	Ammonium paratungstate	Wendeng District, Weihai, Shandong	Wendeng Zhengxing Tungsten Industry Co., Ltd.
China	Ammonium paratungstate	Wuning County, Jiujiang City, Jiangxi	Wuning County Bingkun Tungsten Industry Co., Ltd.
China	Ammonium paratungstate	Haicang District, Xiamen, Fujian	Xiamen Jialu Metal Industry Co., Ltd. also known as Xiamen Tungsten (H.C) Co., Ltd. [Xiamen Tungsten Industry Co., Ltd. (XTC)]
China	Ammonium paratungstate	Haicang District, Xiamen, Fujian	Xiamen Tungsten Industry Co., Ltd. Haicang Branch [Xiamen Tungsten Co., Ltd. (XTC)]
China	Ammonium paratungstate	Sanxing Industrial Park, Rucheng County, Chenzhou, Hunan	Zhongxiang Tungsten Co., Ltd.

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3—Identified global consumers of tungsten concentrates

Country	Plant Type	Location	Operator and Ownership
India	Ammonium paratungstate	Sinnar, Nashik, Maharashtra State	SRP Tungsten Pvt. Ltd. (SRP Electronica Group)
Japan	Ammonium paratungstate	Akita, Akita	Japan New Metals Co. Ltd. (Mitsubishi Materials Corp., 100%)
Malaysia	Ammonium Paratungstate, Ferrotungsten	Kulim, Kedah	Malamet Smelting Bhd. Sdn. (Malamet Sdn. Bhd.)
Russia	Ammonium paratungstate	Nalchik, Kabardino-Balkariya Republic	OAO Gidrometallurg [also known as JSC Hydrometallurg (ZAO Wolfram)]
Russia	Ammonium paratungstate	Kirovgrad, Sverdlovskaya Oblast	OAO Kirovgrad Hard Alloys
Russia	Ferrotungsten	Roshal', Moscow Region	OOO Moliren (AS Nordmet)

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3—Identified global consumers of tungsten concentrates

Country	Plant Type	Location	Operator and Ownership
Russia	Ferrotungsten	Unecha, Bryanskaya Oblast	Unecha Refractory Metals Plant (ZAO Wolfram)
United States	Ammonium paratungstate	Towanda, Pennsylvania	Global Tungsten & Powders LLC. (Plansee SE)
United States	Ammonium paratungstate	Huntsville, Alabama	Kennametal Inc.
United States	Ammonium paratungstate	Depew, New York	Niagara Refining LLC (Sumitomo Electric Industries, Ltd.)
Vietnam	Ferrotungsten	Tan Tien Industrial Zone, Vinh Bao District, Hai Phong Province	Asia Tungsten Products Vietnam Ltd. [Asia Tungsten Products Co., Ltd. (Hong Kong)]
Vietnam	Ferrotungsten	Tan Tien Industrial Zone, Vinh Bao District, Hai Phong Province	Asia Tungsten Products Vietnam Ltd. [Asia Tungsten Products Co., Ltd. (Hong Kong)]

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3—Identified global consumers of tungsten concentrates

Country	Plant Type	Location	Operator and Ownership
Vietnam	Ammonium paratungstate	Dai Tu District, Thai Nguyen Province	Masan High-Tech Materials Corp. (Masan Group Corp.)
Vietnam	Ammonium paratungstate	Dai Tu District, Thai Nguyen Province	Masan High-Tech Materials Corp. (Masan Group Corp.)