# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

# FORM SD Specialized Disclosure Report

Ingersoll-Rand plc

	(Exac	et name of registrant as specifie	d in its ch	arter)	
	Ireland	001-34400	98-0062632 01-34400		
	(State or other jurisdiction of incorporation or organization)	(Commission File Numb	per)	(IRS Employer Identification No.)	
	170/175 Lakeview Airside Business I Swords, Co. Dub Ireland	Park		N/A	
	(Address of principal execu	tive offices)		(Zip Code)	
	Senior Vice Presid	Keith Sultana dent - Global Operations an Ingersoll-Rand ple 170/175 Lakeview E Airside Business Pa Swords, Co. Dublin Ireland +(353) (0) 1870740	e Or. rk n	ated Supply Chain	
	(Name and telephone num	ber, including area code, of the this report.)	person to	contact in connection with	
Check the appropr	riate box to indicate the rule pursuant to wh	ich this form is being filed, and	provide tl	ne period to which the information in this form appli	es:
X Rule 13p-1 u	nder the Securities Exchange Act (17 CFR	240.13p-1) for the reporting pe	eriod from	January 1 to December 31, 2016.	

#### **Section 1 - Conflict Minerals Disclosure**

#### **Item 1.01 Conflict Minerals Disclosure and Report**

#### **Conflict Minerals Disclosure**

Ingersoll-Rand plc (the "Company") has conducted a reasonable country of origin inquiry regarding the minerals specified by Rule 13p-1 of the Securities Exchange Act of 1934, as amended (the "conflict minerals") necessary to the functionality or production of products manufactured or contracted to manufacture by the Company for the fiscal year ended December 31, 2016. The Company exercised due diligence on the source and chain of custody of its conflict minerals using the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. A copy of the Company's Conflict Minerals Report is provided as Exhibit 1.01 to this Form SD and is publicly available at <a href="ingersollrand.com/supplier/conflictminerals">ingersollrand.com/supplier/conflictminerals</a>.

#### Item 1.02 Exhibit

The exhibit required by this specialized disclosure report is attached hereto as exhibit 1.01.

Section 2 - Exhibits

**Item 2.01 Exhibits** 

Exhibit Description

1.01 Conflict Minerals Report

# **SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the duly authorized undersigned.

INGERSOLL-RAND PUBLIC LIMITED COMPANY

(Registrant)

/s/ Keith Sultana May 31, 2017

Keith Sultana (Date)

Senior Vice President, Global Operations and Integrated Supply Chain

#### **Conflict Minerals Disclosure**

#### Introduction

Ingersoll-Rand plc (the "Company") has conducted a reasonable country of origin inquiry ("RCOI") regarding the minerals specified by Rule 13p-1 of the Securities Exchange Act of 1934, as amended (the "conflict minerals") necessary to the functionality or production of products manufactured by the Company for the fiscal year ended December 31, 2016. The Company exercised due diligence on the source and chain of custody of its conflict minerals using the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (the "OECD Framework").

#### **Company Overview**

The Company is a diversified, global company that provides products, services and solutions to enhance the quality, energy efficiency and comfort of air in homes and buildings, transport and protect food and perishables and increase industrial productivity and efficiency. Our business segments consist of Climate and Industrial, both with strong brands and leading positions within their respective markets.

### **Product Overview**

Our principal products by business segment include the following:

	Climate
Aftermarket and OEM parts and supplies	Hybrid and non-diesel transport refrigeration solutions
Air conditioners	Indoor air quality
Air exchangers	Industrial refrigeration
Air handlers	Installation contracting
Airside and terminal devices	Large commercial unitary
Auxiliary power units	Light commercial unitary
Building management systems	Motor replacements
Bus and rail HVAC systems	Package heating and cooling systems
Chillers	Performance contracting
Coils and condensers	Rail refrigeration systems
Container refrigeration systems and gensets	Refrigerant reclamation
Control systems	Repair and maintenance services
Cryogenic refrigeration systems	Rental services
Diesel-powered refrigeration systems	Self-powered truck refrigeration systems
Ductless systems	Service agreements
Energy management services	Temporary heating and cooling systems
Facility management services	Thermostats/controls
Furnaces	Trailer refrigeration systems
Geothermal systems	Transport heater products
Heat pumps	Unitary systems (light and large)
Home automation	Vehicle-powered truck refrigeration systems
Humidifiers	Water source heat pumps

Industrial				
Compressors (centrifugal, reciprocating, and rotary)	Fluid power components			
Air treatment and air separation systems	Installation contracting			
Aftermarket controls, parts, accessories and consumables	Power tools (air, cordless and electric)			
Airends	Precision fastening systems			
Blowers	Pumps (diaphragm and piston)			
Dryers	Rental services			
Engine starting systems	Rough terrain (AWD) vehicles			
Ergonomic material handling systems	Service agreements			
Filters	Service break/fix			
Fluid handling systems	Utility and consumer low-speed vehicles			
Golf vehicles	Visage® mobile golf information systems			
Hoists (air, electric and manual)	Winches (air, electric and hydraulic)			

These products are sold primarily under our name and other names including American Standard \*, ARO \*, Club Car \*, Nexia \*, Thermo King \* and Trane \*.

#### **Description of Reasonable Country of Origin Inquiry**

We conducted an RCOI regarding the conflict minerals by utilizing the conflict minerals reporting template ("CMRT") developed by the Electronic Industry Citizenship Coalition ("EICC") and Global e-Sustainability Initiative ("GeSI"). We also performed due diligence work on the source and chain of custody of our conflict minerals using the OECD Framework, an internationally recognized due diligence framework. We primarily rely on the conflict-free smelter program designed and managed by the Conflict-Free Sourcing Initiative ("CFSI") to conduct our risk assessment.

#### **Determination**

We were unable to determine that all of the conflict minerals contained in our products do not originate from the Covered Countries due to, among other things, the following:

- Many of our suppliers submitted responses that were declared on a company-wide basis ( i.e. , representing the smelters and refiners associated with all product offerings of the supplier that contained conflict minerals) and not specific to the materials supplied to the Company. Therefore, in combination with multiple layers in our supply chain, we believe that these declarations might include smelters and refiners that do not provide the conflict minerals that are in our products.
- A number of our suppliers identified smelters/refiners that do not participate in the Conflict-Free Smelter Program ("CFSP") or a similar program and other suppliers failed to identify any smelter/refiner in their responses to us. Furthermore, we were unable to obtain responses from all of our suppliers and other suppliers provided incomplete or inconsistent data.

As a result, we do not have sufficient information to conclusively determine the country of origin of all of the conflict minerals in our products and, if such conflict minerals did originate in the Covered Countries, whether such conflict minerals were from recycled or scrap sources or were from other conflict free sources. Accordingly, the Company conducted the due diligence measures described below.

# **Due Diligence**

In accordance with Rule 13p-1, the Company performed due diligence to determine the source and chain of custody necessary to determine the presence of conflict minerals in the Company's products. The Company designed its due diligence measures to conform in all material respects with the OECD Framework and related supplements for each of the conflict minerals.

The Company, as a purchaser, is many steps removed from the mining of the conflict minerals and does not purchase raw ore or unrefined conflict minerals. Identifying the presence and origin of conflict minerals cannot be determined with any certainty once the raw ores are smelted, refined and converted to ingots, bullion or other conflict mineral-containing derivatives. Although the smelters and refiners are consolidating points for raw ore and are in the best position in the supply chain to know the origin of the ores, the Company focused its efforts on its suppliers in an effort to build conflict minerals awareness and assess the transparency of its supply chain and make initial identification, where possible, of the smelters/refiners in its supply chain.

The discussion below provides the applicable OECD Framework recommendation (in **bold/italics**) followed by a summary of the Company's activities in line with the OECD Framework.

#### 1. Management Systems.

The Company adopted a Conflict Minerals Policy in 2013. The policy requires suppliers to perform due diligence and outlines the Company's expectation of suppliers. During 2014, the Company revised and strengthened the policy. During 2016, the Company continued to communicate the policy to suppliers and the public through its website, letters sent to suppliers and customers, telephone calls and web-based training available through a third-party web-based system.

#### Internal Management Systems.

The Company's conflict minerals compliance implementation for the fiscal year ended December 31, 2016 was managed by a cross-functional team lead by procurement and including representatives from procurement, legal, quality and finance. This team discussed conflict minerals compliance issues and reviewed the status of the diligence process. The Company also provided conflict minerals training to its global procurement team.

#### Control System and Supply Chain Transparency

The Company implemented a process to evaluate commodities and suppliers in the supply chain for potential conflict minerals risk and an internal process map for the conflict minerals process that is subject to periodic reviews. Supplier agreement templates require suppliers and licensees to provide information on their use and source of conflict minerals. Given the size and complexity of the Company's global supply chain, the Company focused on its largest suppliers, ranked by the amount the Company spends with each such supplier, and suppliers that had the highest probability of supplying the Company with materials or components containing conflict minerals (the "Targeted Suppliers"). For 2016, this group represented, greater than 89% of the Company's suppliers by spend. The Company requested supply chain information from Targeted Suppliers utilizing templates developed by the EICC and GeSI. During 2016, the Company used a third party web-based system to distribute the CMRT to Targeted Suppliers, to track responses and to follow up with unresponsive suppliers. The Company maintains records relating to its annual supplier survey.

#### Supplier Engagement

The Company's standard global terms and conditions include a conflict minerals clause. The Company's standard procurement contracts also contain a conflict minerals clause. In 2016, the Company continued implementation of a preferred supplier program. In order to be designated as a preferred supplier of the Company, a supplier must supply any required conflict minerals information to the Company and comply with other required criteria.

#### Grievance Mechanism

The Company has an e-mail address for receiving conflict minerals communications internally and an external e-mail mechanism through the Company's public website. The Company intends to treat grievances as red flags for purposes of the due diligence process.

# 2. Identify and assess risk in the supply chain.

The Company works with its commodity team and engineering team as appropriate to review the commodities necessary for the manufacture of its products to determine the associated level of risk of containing conflict minerals focusing its due diligence efforts on commodities at the highest risk.

Following the identification of the commodities, the Company requires Targeted Suppliers to complete a survey using the EICC-GeSI template at a company and parts level. The Company reviews survey responses for completeness and compiles aggregate survey responses. The Company follows up with suppliers when responses are incomplete or other questions are raised by the responses. The Company tracks response rates and red flags as part of its conflict minerals reporting process.

# 3. Design and implement a strategy to respond to identified risks.

The Company developed a strategy to systematically reduce the extent of exposure to certain risk and the likelihood of its occurrence. Steps taken include communicating a policy to Targeted Suppliers noting that suppliers must thoroughly document their efforts to determine the source of any conflict minerals or derivatives and be prepared to provide the Company with evidence of the origin of any conflict minerals contained in products supplied to the Company. The strategy uses a documented escalation process for suppliers who fail to respond, which may result in termination of the supplier's relationship with the Company and/or failure to be considered for future projects with the Company.

The Company has created a standard due diligence process, has engaged in a gap analysis regarding its conflict minerals process, and has monitored and tracked responses to its conflict minerals requests as well as its escalation efforts. Senior management is updated as needed. Additional fact finding, risk assessments and evaluations of changes in circumstances take place as part of the Company's annual review of processes and procedures.

4. Carry out independent third-party audit of supply chain due diligence at identified points in the supply chain. Companies at identified points in the supply chain should have their due diligence practices audited by independent third parties.

In 2014, the Company engaged an independent third party to provide a review of the Company's conflict minerals compliance program including review of its existing conflict minerals policy and due diligence process. The Company implemented enhancements to the program in 2014 and 2015 as a result of this review. In 2016, the Company became a member of the Conflict-Free Smelter Program and as part of its diligence related to 2015 supplier survey responses began to implement steps using information from the Conflict-Free Smelter Program to conduct a review of summary smelter information to determine if the smelter is certified as conflict free or presents a "red flag" as defined by the OECD Guidance.

### 5. Report on supply chain due diligence.

The Company has complied with its SEC filing requirement regarding its conflict minerals program and due diligence by the filing of this report. The Company has made this report available on its external website at <a href="mailto:ingersollrand.com/suppliers/conflictminerals">ingersollrand.com/suppliers/conflictminerals</a> and has included its conflict minerals policy and other resources at that web address. The Company continues to refine and improve its conflict minerals policy, questionnaire and processes, and to expand awareness regarding its conflict minerals policies.

# **Results of Due Diligence**

After performing the due diligence described above, we are unable to determine that all of the conflict minerals contained in the products described above did not originate from the Covered Countries. For the reasons stated in this report, we also do not have sufficient information to conclusively determine the country of origin of all of the conflict minerals in our products described below and, if such conflict minerals did originate in the Covered Countries, whether such conflict minerals were from recycled or scrap sources or were from other conflict free sources.

We have provided this information as of the date of this report. Subsequent events, such as the inability or unwillingness of any suppliers, smelters or refiners to provide us with complete information, may affect our future determinations under the Rule.

#### **Information on Smelters or Refiners**

The CMRT requested that the Targeted Suppliers provide the Company with information on the smelters or refiners that the Targeted Suppliers and its suppliers use to supply conflict minerals to the Company. Because the Company does not typically have a direct relationship with the facilities used to process conflict minerals, we must rely on information provided by the Targeted Suppliers. Some responses from the Targeted Suppliers indicated that they were unable to provide smelter or refiner information at this time. Other Targeted Suppliers provided information on all smelters or refiners used by the Targeted Supplier but could not provide information linking specific smelters or refiners used to process conflict minerals with products provided to the Company. Some Targeted Suppliers provided names that the suppliers described as "smelters" but such names could not be linked to smelters on the CSFI list, and may not, in fact, be smelters. Based on the information provided by the Targeted Suppliers, the Company has identified 312 smelters from the CSFI list, of which 246 have been validated as conflict-free under the CFS program or a similar program for gold refiners. These smelters are included in the list attached as Annex 1 to this report.

### **Steps to Improve Due Diligence**

The Company continues to identify opportunities to improve its due diligence and mitigate risk relating to conflict minerals. Below are some of the steps that the Company is considering taking:

- Continuation of supplier engagement;
- Continuation of company membership in CSFI;
- Continuation of our supplier engagement and training and encouraging suppliers to use training resources available through industry associations and the CFSI; and
- Encouraging supplier and other company membership and participation in CSFI.

#### **Cautionary Statement about Forward-Looking Statements**

Certain statements in this report, other than purely historical information, are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "forecast," "outlook," "intend," "strategy," "plan," "may," "should," "will," "could," "would," "will be," "will continue," "will likely result," or the negative thereof or variations thereon or similar terminology generally intended to identify forward-looking statements.

Forward-looking statements are based on currently available information and our current assumptions, expectations and projections about future events. While we believe that our assumptions, expectations and projections are reasonable in view of the currently available information, you are cautioned not to place undue reliance on our forward-looking statements. You are advised to review any further disclosures we make on related subjects in materials we file with or furnish to the SEC. Forward-looking statements speak only as of the date they are made and are not guarantees of future performance. They are subject to future events, risks and uncertainties - many of which are beyond our control - as well as potentially inaccurate assumptions, that could cause actual results to differ materially from our expectations and projections. We do not undertake to update any forward-looking statements.

# Annex 1

Gold	Abington Reldan Metals, LLC	UNITED STATES
Gold	Advanced Chemical Company	UNITED STATES
Gold	Aida Chemical Industries Co., Ltd.	JAPAN
Gold	Al Etihad Gold Refinery DMCC	UNITED ARAB EMIRATES
Gold	Allgemeine Gold-und Silberscheideanstalt A.G.	GERMANY
Gold	Almalyk Mining and Metallurgical Complex (AMMC)	UZBEKISTAN
Gold	AngloGold Ashanti Córrego do Sítio Mineração	BRAZIL
Gold	Argor-Heraeus S.A.	SWITZERLAND
Gold	Asahi Pretec Corp.	JAPAN
Gold	Asahi Refining Canada Ltd.	CANADA
Gold	Asahi Refining USA Inc.	UNITED STATES
Gold	Asaka Riken Co., Ltd.	JAPAN
Gold	Atasay Kuyumculuk Sanayi Ve Ticaret A.S.	TURKEY
Gold	AU Traders and Refiners	SOUTH AFRICA
Gold	AURA-II	UNITED STATES
Gold	Aurubis AG	GERMANY
Gold	Bangalore Refinery	INDIA
Gold	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	PHILIPPINES
Gold	Boliden AB	SWEDEN
Gold	C. Hafner GmbH + Co. KG	GERMANY
Gold	Caridad	MEXICO
Gold	CCR Refinery - Glencore Canada Corporation	CANADA
Gold	Cendres + Métaux S.A.	SWITZERLAND
Gold	Chimet S.p.A.	ITALY
Gold	Chugai Mining	JAPAN
Gold	Daejin Indus Co., Ltd.	KOREA, REPUBLIC OF
Gold	Daye Non-Ferrous Metals Mining Ltd.	CHINA
Gold	DODUCO GmbH	GERMANY
Gold	Dowa	JAPAN
Gold	DSC (Do Sung Corporation)	KOREA, REPUBLIC OF
Gold	Eco-System Recycling Co., Ltd.	JAPAN
Gold	Elemetal Refining, LLC	UNITED STATES

UNITED ARAB EMIRATES

Gold

Emirates Gold DMCC

Fidelity Printers and Refiners Ltd.	ZIMBABWE
Gansu Seemine Material Hi-Tech Co., Ltd.	CHINA
Geib Refining Corporation	UNITED STATES
Great Wall Precious Metals Co., Ltd. of CBPM	CHINA
Guangdong Jinding Gold Limited	CHINA
Gujarat Gold Centre	INDIA
Guoda Safina High-Tech Environmental Refinery Co., Ltd.	CHINA
Hangzhou Fuchunjiang Smelting Co., Ltd.	CHINA
Heimerle + Meule GmbH	GERMANY
Heraeus Ltd. Hong Kong	CHINA
Heraeus Precious Metals GmbH & Co. KG	GERMANY
Hunan Chenzhou Mining Co., Ltd.	CHINA
Hwasung CJ Co., Ltd.	KOREA, REPUBLIC OF
Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.	CHINA
Ishifuku Metal Industry Co., Ltd.	JAPAN
Istanbul Gold Refinery	TURKEY
Japan Mint	JAPAN
Jiangxi Copper Co., Ltd.	CHINA
JSC Ekaterinburg Non-Ferrous Metal Processing Plant	RUSSIAN FEDERATION
JSC Uralelectromed	RUSSIAN FEDERATION
JX Nippon Mining & Metals Co., Ltd.	JAPAN
Kaloti Precious Metals	UNITED ARAB EMIRATES
Kazakhmys Smelting LLC	KAZAKHSTAN
Kazzinc	KAZAKHSTAN
Kennecott Utah Copper LLC	UNITED STATES
KGHM Polska Miedź Spółka Akcyjna	POLAND
Kojima Chemicals Co., Ltd.	JAPAN
Korea Zinc Co., Ltd.	KOREA, REPUBLIC OF
Kyrgyzaltyn JSC	KYRGYZSTAN
L'azurde Company For Jewelry	SAUDI ARABIA
-	CHINA
Lingbao Jinyuan Tonghui Refinery Co., Ltd.	CHINA
	Gansu Seemine Material Hi-Tech Co., Ltd. Geib Refining Corporation Great Wall Precious Metals Co., Ltd. of CBPM Guangdong Jinding Gold Limited Gujarat Gold Centre Guoda Safina High-Tech Environmental Refinery Co., Ltd. Hangzhou Fuchunjiang Smelting Co., Ltd. Heimerle + Meule GmbH Heraeus Ltd. Hong Kong Heraeus Precious Metals GmbH & Co. KG Hunan Chenzhou Mining Co., Ltd. Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd. Ishifuku Metal Industry Co., Ltd. Istanbul Gold Refinery Japan Mint Jiangxi Copper Co., Ltd. JSC Ekaterinburg Non-Ferrous Metal Processing Plant JSC Uralelectromed JX Nippon Mining & Metals Co., Ltd. Kaloti Precious Metals Kazakhmys Smelting LLC Kazzinc Kennecott Utah Copper LLC KGHM Polska Miedź Spółka Akcyjna Kojima Chemicals Co., Ltd. Kyrgyzaltyn JSC L'azurde Company For Jewelry Lingbao Gold Co., Ltd.

Gold	LS-NIKKO Copper Inc.	KOREA, REPUBLIC OF
Gold	Luoyang Zijin Yinhui Gold Refinery Co., Ltd.	CHINA
Gold	Materion	UNITED STATES
Gold	Matsuda Sangyo Co., Ltd.	JAPAN
Gold	Metalor Technologies (Hong Kong) Ltd.	CHINA
Gold	Metalor Technologies (Singapore) Pte., Ltd.	SINGAPORE
Gold	Metalor Technologies (Suzhou) Ltd.	CHINA
Gold	Metalor Technologies S.A.	SWITZERLAND
Gold	Metalor USA Refining Corporation	UNITED STATES
Gold	Metalúrgica Met-Mex Peñoles S.A. De C.V.	MEXICO
Gold	Mitsubishi Materials Corporation	JAPAN
Gold	Mitsui Mining and Smelting Co., Ltd.	JAPAN
Gold	MMTC-PAMP India Pvt., Ltd.	INDIA
Gold	Modeltech Sdn Bhd	MALAYSIA
Gold	Morris and Watson	NEW ZEALAND
Gold	Moscow Special Alloys Processing Plant	RUSSIAN FEDERATION
Gold	Nadir Metal Rafineri San. Ve Tic. A.Ş.	TURKEY
Gold	Navoi Mining and Metallurgical Combinat	UZBEKISTAN
Gold	Nihon Material Co., Ltd.	JAPAN
Gold	Ögussa Österreichische Gold- und Silber-Scheideanstalt GmbH	AUSTRIA
Gold	Ohura Precious Metal Industry Co., Ltd.	JAPAN
	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC	
Gold	Krastsvetmet)	RUSSIAN FEDERATION
Gold	OJSC Novosibirsk Refinery	RUSSIAN FEDERATION
Gold	PAMP S.A.	SWITZERLAND
Gold	Penglai Penggang Gold Industry Co., Ltd.	CHINA
Gold	Prioksky Plant of Non-Ferrous Metals	RUSSIAN FEDERATION
Gold	PT Aneka Tambang (Persero) Tbk	INDONESIA
Gold	PX Précinox S.A.	SWITZERLAND
Gold	Rand Refinery (Pty) Ltd.	SOUTH AFRICA
Gold	Remondis Argentia B.V.	NETHERLANDS

Gold	Republic Metals Corporation	UNITED STATES
Gold	Royal Canadian Mint	CANADA
Gold	SAAMP	FRANCE
Gold	Sabin Metal Corp.	UNITED STATES
Gold	SAFINA A.S.	CZECH REPUBLIC
Gold	Sai Refinery	INDIA
Gold	Samduck Precious Metals	KOREA, REPUBLIC OF
Gold	SAMWON Metals Corp.	KOREA, REPUBLIC OF
Gold	SAXONIA Edelmetalle GmbH	GERMANY
Gold	Schone Edelmetaal B.V.	NETHERLANDS
Gold	SEMPSA Joyería Platería S.A.	SPAIN
Gold	Shandong Tiancheng Biological Gold Industrial Co., Ltd.	CHINA
Gold	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	CHINA
Gold	Sichuan Tianze Precious Metals Co., Ltd.	CHINA
Gold	Singway Technology Co., Ltd.	TAIWAN
Gold	So Accurate Group, Inc.	UNITED STATES
Gold	SOE Shyolkovsky Factory of Secondary Precious Metals	RUSSIAN FEDERATION
Gold	Solar Applied Materials Technology Corp.	TAIWAN
Gold	Sudan Gold Refinery	SUDAN
Gold	Sumitomo Metal Mining Co., Ltd.	JAPAN
Gold	T.C.A S.p.A	ITALY
Gold	Tanaka Kikinzoku Kogyo K.K.	JAPAN
Gold	The Refinery of Shandong Gold Mining Co., Ltd.	CHINA
Gold	Tokuriki Honten Co., Ltd.	JAPAN
Gold	Tongling Nonferrous Metals Group Co., Ltd.	CHINA
Gold	Tony Goetz NV	BELGIUM
Gold	TOO Tau-Ken-Altyn	KAZAKHSTAN
Gold	Torecom	KOREA, REPUBLIC OF
Gold	Umicore Brasil Ltda.	BRAZIL
Gold	Umicore Precious Metals Thailand	THAILAND
Gold	Umicore S.A. Business Unit Precious Metals Refining	BELGIUM
Gold	United Precious Metal Refining, Inc.	UNITED STATES

Gold	Universal Precious Metals Refining Zambia	ZAMBIA
Gold	Valcambi S A	SWITZERLAND
Gold	, w.	AUSTRALIA
	Western Australian Mint trading as The Perth Mint	
Gold	WIELAND Edelmetalle GmbH	GERMANY
Gold	Yamamoto Precious Metal Co., Ltd.	JAPAN
Gold	Yokohama Metal Co., Ltd.	JAPAN
Gold	Yunnan Copper Industry Co., Ltd.	CHINA
Gold	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	CHINA
Gold	Zijin Mining Group Co., Ltd. Gold Refinery	CHINA
Tantalum	Changsha South Tantalum Niobium Co., Ltd.	CHINA
Tantalum	Conghua Tantalum and Niobium Smeltry	CHINA
Tantalum	D Block Metals, LLC	UNITED STATES
Tantalum	Duoluoshan	CHINA
Tantalum	Exotech Inc.	UNITED STATES
Tantalum	F&X Electro-Materials Ltd.	CHINA
Tantalum	FIR Metals & Resource Ltd.	CHINA
Tantalum	Global Advanced Metals Aizu	JAPAN
Tantalum	Global Advanced Metals Boyertown	UNITED STATES
Tantalum	Guangdong Zhiyuan New Material Co., Ltd.	CHINA
Tantalum	H.C. Starck Co., Ltd.	THAILAND
Tantalum	H.C. Starck GmbH Goslar	GERMANY
Tantalum	H.C. Starck GmbH Laufenburg	GERMANY
Tantalum	H.C. Starck Hermsdorf GmbH	GERMANY
Tantalum	H.C. Starck Inc.	UNITED STATES
Tantalum	H.C. Starck Ltd.	JAPAN
Tantalum	H.C. Starck Smelting GmbH & Co. KG	GERMANY
Tantalum	Hengyang King Xing Lifeng New Materials Co., Ltd.	CHINA
Tantalum	Hi-Temp Specialty Metals, Inc.	UNITED STATES
Tantalum	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	Jiangxi Tuohong New Raw Material	CHINA

TantalumJiuJiang JinXin Nonferrous Metals Co., Ltd.CHINATantalumJiujiang Tanbre Co., Ltd.CHINATantalumJiujiang Zhongao Tantalum & Niobium Co., Ltd.CHINATantalumKEMET Blue MetalsMEXICO

Tantalum KEMET Blue Powder UNITED STATES

TantalumKing-Tan Tantalum Industry Ltd.CHINATantalumLSM Brasil S.A.BRAZILTantalumMetallurgical Products India Pvt., Ltd.INDIA

TantalumMetallurgical Products India Pvt., Ltd.INDIATantalumMineração Taboca S.A.BRAZILTantalumMitsui Mining & SmeltingJAPANTantalumMolycorp Silmet A.S.ESTONIATantalumNingxia Orient Tantalum Industry Co., Ltd.CHINA

Tantalum Plansee SE Liezen AUSTRIA
Tantalum Plansee SE Reutte AUSTRIA
Tantalum Power Resources Ltd. MACEDONIA

Tantalum QuantumClean UNITED STATES

TantalumResind Indústria e Comércio Ltda.BRAZILTantalumRFH Tantalum Smeltry Co., Ltd.CHINA

Tantalum Solikamsk Magnesium Works OAO RUSSIAN FEDERATION

TantalumTaki ChemicalsJAPANTantalumTelex MetalsUNITED STATESTantalumTranzact, Inc.UNITED STATES

Tantalum Ulba Metallurgical Plant JSC KAZAKHSTAN

TantalumXinXing HaoRong Electronic Material Co., Ltd.CHINATantalumYichun Jin Yang Rare Metal Co., Ltd.CHINATantalumZhuzhou Cemented Carbide Group Co., Ltd.CHINA

Tin Alpha UNITED STATES

TinAn Thai Minerals Co., Ltd.VIET NAMTinAn Vinh Joint Stock Mineral Processing CompanyVIET NAM

TinChenzhou Yunxiang Mining and Metallurgy Co., Ltd.CHINATinChina Tin Group Co., Ltd.CHINATinCNMC (Guangxi) PGMA Co., Ltd.CHINA

Tin	Cooperativa Metalurgica de Rondônia Ltda.	BRAZIL
Tin	CV Ayi Jaya	INDONESIA
Tin	CV Dua Sekawan	INDONESIA
Tin	CV Gita Pesona	INDONESIA
Tin	CV Serumpun Sebalai	INDONESIA
Tin	CV Tiga Sekawan	INDONESIA
Tin	CV United Smelting	INDONESIA
Tin	CV Venus Inti Perkasa	INDONESIA
Tin	Dowa	JAPAN
	Electro-Mechanical Facility of the Cao Bang Minerals & Metallurgy Joint Stock	
Tin	Company	VIET NAM
Tin	Elmet S.L.U.	SPAIN
Tin	EM Vinto	BOLIVIA
Tin	Estanho de Rondônia S.A.	BRAZIL
Tin	Fenix Metals	POLAND
Tin	Gejiu Fengming Metallurgy Chemical Plant	CHINA
Tin	Gejiu Jinye Mineral Company	CHINA
Tin	Gejiu Kai Meng Industry and Trade LLC	CHINA
Tin	Gejiu Non-Ferrous Metal Processing Co., Ltd.	CHINA
Tin	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.	CHINA
Tin	Gejiu Zili Mining And Metallurgy Co., Ltd.	CHINA
Tin	Guanyang Guida Nonferrous Metal Smelting Plant	CHINA
Tin	HuiChang Hill Tin Industry Co., Ltd.	CHINA
Tin	Huichang Jinshunda Tin Co., Ltd.	CHINA
Tin	Jiangxi Ketai Advanced Material Co., Ltd.	CHINA
Tin	Magnu's Minerais Metais e Ligas Ltda.	BRAZIL
Tin	Malaysia Smelting Corporation (MSC)	MALAYSIA
Tin	Melt Metais e Ligas S.A.	BRAZIL
Tin	Metallic Resources, Inc.	UNITED STATES
Tin	Metallo-Chimique N.V.	BELGIUM
Tin	Mineração Taboca S.A.	BRAZIL
Tin	Minsur	PERU
Tin	Mitsubishi Materials Corporation	JAPAN
Tin	Modeltech Sdn Bhd	MALAYSIA

Tin	Nankang Nanshan Tin Manufactory Co., Ltd.	CHINA
Tin	Nghe Tinh Non-Ferrous Metals Joint Stock Company	VIET NAM
Tin	O.M. Manufacturing (Thailand) Co., Ltd.	THAILAND
Tin	O.M. Manufacturing Philippines, Inc.	PHILIPPINES
Tin	Operaciones Metalurgical S.A.	BOLIVIA
Tin	Phoenix Metal Ltd.	RWANDA
Tin	PT Aries Kencana Sejahtera	INDONESIA
Tin	PT Artha Cipta Langgeng	INDONESIA
Tin	PT ATD Makmur Mandiri Jaya	INDONESIA
Tin	PT Babel Inti Perkasa	INDONESIA
Tin	PT Bangka Prima Tin	INDONESIA
Tin	PT Bangka Tin Industry	INDONESIA
Tin	PT Belitung Industri Sejahtera	INDONESIA
Tin	PT Bukit Timah	INDONESIA
Tin	PT Cipta Persada Mulia	INDONESIA
Tin	PT DS Jaya Abadi	INDONESIA
Tin	PT Eunindo Usaha Mandiri	INDONESIA
Tin	PT Inti Stania Prima	INDONESIA
Tin	PT Justindo	INDONESIA
Tin	PT Karimun Mining	INDONESIA
Tin	PT Kijang Jaya Mandiri	INDONESIA
Tin	PT Lautan Harmonis Sejahtera	INDONESIA
Tin	PT Mitra Stania Prima	INDONESIA
Tin	PT O.M. Indonesia	INDONESIA
Tin	PT Panca Mega Persada	INDONESIA
Tin	PT Prima Timah Utama	INDONESIA
Tin	PT Refined Bangka Tin	INDONESIA
Tin	PT Sariwiguna Binasentosa	INDONESIA
Tin	PT Stanindo Inti Perkasa	INDONESIA
Tin	PT Sukses Inti Makmur	INDONESIA
Tin	PT Sumber Jaya Indah	INDONESIA
Tin	PT Timah (Persero) Tbk Kundur	INDONESIA
Tin	PT Timah (Persero) Tbk Mentok	INDONESIA
Tin	PT Tinindo Inter Nusa	INDONESIA
Tin	PT Tommy Utama	INDONESIA
Tin	PT Wahana Perkit Jaya	INDONESIA
Tin	Resind Indústria e Comércio Ltda.	BRAZIL
Tin	Rui Da Hung	TAIWAN

Tin	Soft Metais Ltda.	BRAZIL
Tin	Thaisarco	THAILAND
Tin	Tuyen Quang Non-Ferrous Metals Joint Stock Company	VIET NAM
Tin	VQB Mineral and Trading Group JSC	VIET NAM
Tin	White Solder Metalurgia e Mineração Ltda.	BRAZIL
Tin	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	CHINA
Tin	Yunnan Tin Company Limited	CHINA
Tungsten	A.L.M.T. TUNGSTEN Corp.	JAPAN
Tungsten	ACL Metais Eireli	BRAZIL
Tungsten	Asia Tungsten Products Vietnam Ltd.	VIET NAM
Tungsten	Chenzhou Diamond Tungsten Products Co., Ltd.	CHINA
Tungsten	Chongyi Zhangyuan Tungsten Co., Ltd.	CHINA
Tungsten	Dayu Weiliang Tungsten Co., Ltd.	CHINA
Tungsten	Fujian Jinxin Tungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Huaxing Tungsten Products Co., Ltd.	CHINA
Tungsten	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Seadragon W & Mo Co., Ltd.	CHINA
Tungsten	Ganzhou Yatai Tungsten Co., Ltd.	CHINA
Tungsten	Global Tungsten & Powders Corp.	UNITED STATES
Tungsten	Guangdong Xianglu Tungsten Co., Ltd.	CHINA
Tungsten	H.C. Starck GmbH	GERMANY
Tungsten	H.C. Starck Smelting GmbH & Co.KG	GERMANY

**CHINA** 

**CHINA** 

**CHINA** 

**JAPAN** 

**CHINA** 

RUSSIAN FEDERATION

Tungsten

Tungsten

Tungsten

Tungsten

Tungsten

Tungsten

Hunan Chenzhou Mining Co., Ltd.

Hydrometallurg, JSC

Japan New Metals Co., Ltd.

Hunan Chuangda Vanadium Tungsten Co., Ltd. Wuji

Hunan Chunchang Nonferrous Metals Co., Ltd.

Jiangwu H.C. Starck Tungsten Products Co., Ltd.

Tungsten	Jiangxi Dayu Longxintai Tungsten Co., Ltd.	CHINA
Tungsten	Jiangxi Gan Bei Tungsten Co., Ltd.	CHINA
Tungsten	Jiangxi Minmetals Gao'an Non-ferrous Metals Co., Ltd.	CHINA
Tungsten	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.	CHINA
Tungsten	Jiangxi Xinsheng Tungsten Industry Co., Ltd.	CHINA
Tungsten	Jiangxi Xiushui Xianggan Nonferrous Metals Co., Ltd.	CHINA
Tungsten	Jiangxi Yaosheng Tungsten Co., Ltd.	CHINA
Tungsten	Kennametal Fallon	UNITED STATES
Tungsten	Kennametal Huntsville	UNITED STATES
Tungsten	Malipo Haiyu Tungsten Co., Ltd.	CHINA
Tungsten	Moliren Ltd	RUSSIAN FEDERATION
Tungsten	Niagara Refining LLC	UNITED STATES
Tungsten	Nui Phao H.C. Starck Tungsten Chemicals Manufacturing LLC	VIET NAM
Tungsten	Philippine Chuangxin Industrial Co., Inc.	PHILIPPINES
Tungsten	South-East Nonferrous Metal Company Limited of Hengyang City	CHINA
Tungsten	Tejing (Vietnam) Tungsten Co., Ltd.	VIET NAM
Tungsten	Unecha Refractory metals plant	RUSSIAN FEDERATION
Tungsten	Vietnam Youngsun Tungsten Industry Co., Ltd.	VIET NAM
Tungsten	Wolfram Bergbau und Hütten AG	AUSTRIA
Tungsten	Woltech Korea Co., Ltd.	KOREA, REPUBLIC OF
Tungsten	Xiamen Tungsten (H.C.) Co., Ltd.	CHINA
Tungsten	Xiamen Tungsten Co., Ltd.	CHINA

CHINA

**CHINA** 

Xinfeng Huarui Tungsten & Molybdenum New Material Co., Ltd.

Xinhai Rendan Shaoguan Tungsten Co., Ltd.

Tungsten

Tungsten