



Sino-Platinum Metals

SINCE 1938

SINO-PLATINUM METALS CO., LTD.

Kunming . Singapore . Shanghai . Yongxing . Yimen

贵金属集团



Company History

National Central Institute
was established in Kunming



Sino-Platinum Metals was
incorporated



Completed the integration
of the industrial chain



Celebrated 80th Anniversary
of the Institute



1938

1962

1999

2003

2012

2016

2018



Renamed Kunming Institute
of Precious Metals



Sino-Platinum Metals was
listed in Shanghai
(Stock code 600459)



Sino-Precious Metals Holding
was incorporated



Precious Metals
International
(Singapore) Pte Ltd was
incorporated

Group Structure



Sino-Platinum Metals
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**Sino-Platinum Metals
Co., Ltd.**

Managed by SPM without
share ownership

**Kunming Institute of
Precious Metals**

**Precious Metals
International
(Singapore) Pte. Ltd.**

**Sino-Platinum
Resources Yimen Co.,
Ltd.**

**Sino-Platinum
Metals Shanghai Co., Ltd.**

◆ **Other subsidiaries:**

Sino-Platinum International Trading Co., Ltd.

Kunming Precious Materials & Technology Co., Ltd.

Yong Xing Sino-Platinum Resources Co., Ltd.

Kunming Sino-Platinum Catalyst Co., Ltd.

Sino-Platinum Zhongxi (Shanghai) New Material Technology Co., Ltd.

Sino-Platinum Metals Chemical (Yunnan) Co., Ltd.



Precious Metals Material Products

➤ Automobile Catalyst

- ✓ Three-way catalysts for gasoline engines
- ✓ Diesel catalysts (Diesel oxidation catalyst, Selective catalytic reduction, Catalytic Diesel Particulate Filter and Particulate Oxidation Catalyst)
- ✓ Motor catalysts





Precious Metals Material Products

➤ Precious Metals Compounds

✓ Industrial catalysts (Palladium and Platinum compounds)

Products' name	Molecular Formula	Precious Metals	Colors
Palladium Chloride	PdCl_2	≥59.5%	Brown red
Palladium Nitrate	$\text{Pd}(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O}$	100g/l	Brown
Platinum Nitrate	$\text{Pt}(\text{NO}_3)_2$	20g/l	Light yellow
Chloroplatinic Acid	$\text{H}_2\text{PtCl}_6 \cdot 6\text{H}_2\text{O}$	≥37.0%	Orange
Rhodium Nitrate	$\text{Rh}(\text{NO}_3)_3$	100g/l	Yellow
Rhodium chloride hydrate	$\text{RhCl}_3 \cdot n\text{H}_2\text{O}$	≥38.0%	Dark red
Ruthenium chloride hydrate	$\text{RuCl}_3 \cdot n\text{H}_2\text{O}$	≥37.0%	Brownish black
Chloroiridic Acid	$\text{H}_2\text{IrCl}_6 \cdot 6\text{H}_2\text{O}$	≥35.0%	Brown

✓ Other precious metals compounds used in chlor-alkali industry

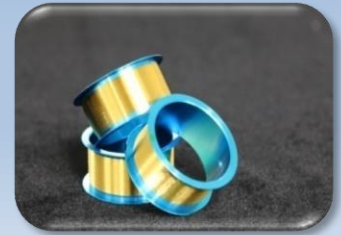
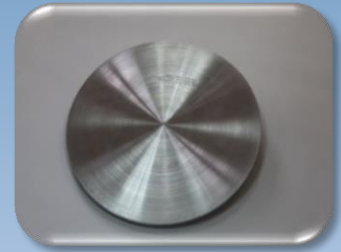
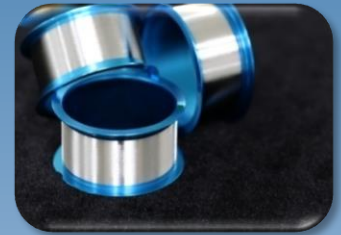
✓ Homogeneous and heterogeneous catalysts used in medical industry





Precious Metals Material Products

- **Alloy Material of Precious Metals**
- ✓ **Precious metals and alloy composite strip products**
 - Micromotor Commutator Materials
 - Making and Breaking Contact Materials
 - Micromotor Brush Materials
 - Composite Soldering Materials of Precious Metals
- ✓ **Precious metals thermocouple**
- ✓ **Precious metals alloy catalytic gauzes**
- ✓ **Precious metals alloy materials**
 - Precision resistance of alloy materials
 - Elastic Materials
 - Alloy material for resistance strain gauge
 - Flexible Circuit Conductor
 - Electric brush and conducting ring material
- ✓ **Precious metals brazing materials for vacuum devices**



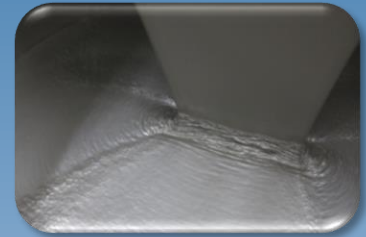


Precious Metals Material Products

➤ Precious Metals Pastes for Electronic Components

- ✓ Conductive adhesive
- ✓ Platinum pastes for electrode sensors
- ✓ Pastes for thick film circuits
- ✓ Pastes for chip devices
- ✓ Polymer silver pastes
- ✓ Silver conductive pastes for membrane switch
- ✓ Pastes for solar cell

➤ Precious metals powders (Gold, Silver, Platinum, Palladium and Ruthenium Dioxide)



Precious Metals Scraps and Spent Catalysts Recycling and Refining



Sino-Platinum Metals
SINCE 1938

We offer exclusive recycling and refining services with a processing capacity of 5,000mt scraps and spent catalysts, that is equivalent to 12mt PGMs, 5mt Gold, and 800mt Silver each year

