



KRASTSVETMET

KRASTSVETMET IS ONE OF THE
WORLD'S LEADING REFINERS
OF PLATINUM GROUP METALS,
GOLD AND SILVER, PROCESSING
ALL KNOWN TYPES OF RAW
MATERIALS



The company is 100%
owned by the Krasnoyarsk
Territory, a constituent
of the Russian Federation



Yenisey

KRASNOYARSK



History

Krastsvetmet's history dates back to the year of 1943, when Norilsk sludge was first refined into platinum and palladium in Krasnoyarsk. That historical day is now considered the official birthday of the Krasnoyarsk Refining Factory, now called Krastsvetmet.

In the very beginning Krastsvetmet was established as a branch of Norilsk Nickel. The first sludges were delivered to the plant in the end of 1942. Nowadays Norilsk Nickel still remains the main partner of Krastsvetmet.

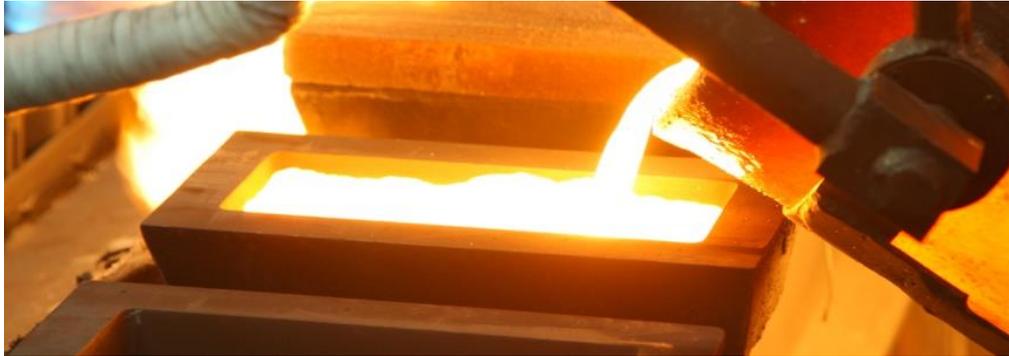
In early 50s Russia was in great need of creating electronic industry. On February 29, 1956 a new period in the plant's history began: the Soviet Ministry of Non-ferrous Metallurgy passed a resolution to start manufacture of silicon and germanium at Krastsvetmet. As its importance for the state was extremely high, this manufacture was given the highest priority.

So construction of the plant went on. In 1960 Krastsvetmet started producing polycrystalline silicon, and in 1963 – single-crystalline silicon. The technology of single-crystalline germanium production was developed in 1959–1962.

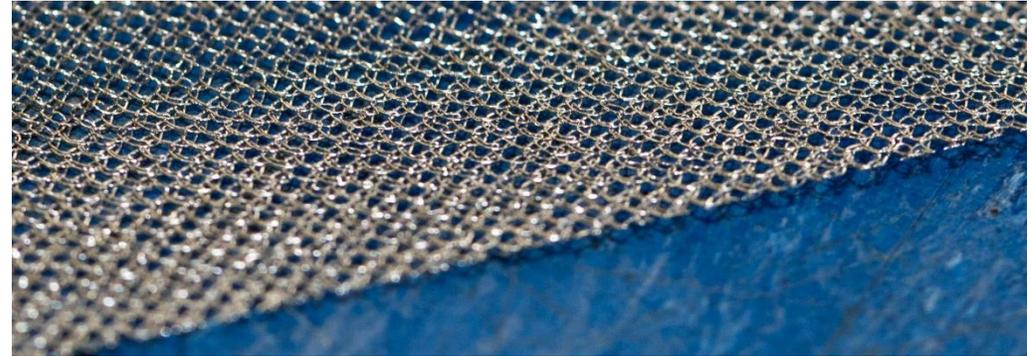
The most important event of the 90s was launching of jewelry manufacture, which became a new direction of Krastsvetmet's business. In the new 21st century manufacture of chemical compounds and catalyst systems was put into operation.

On March 24, 2016 Krastsvetmet has presented R&D Park.

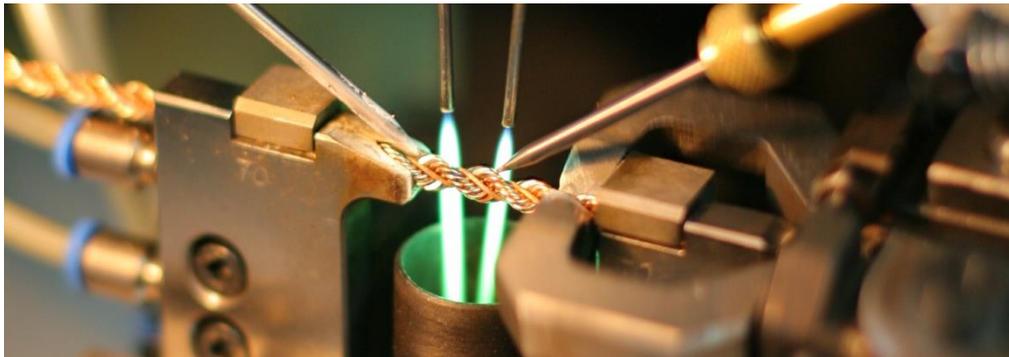
Divisional Organizational Structure



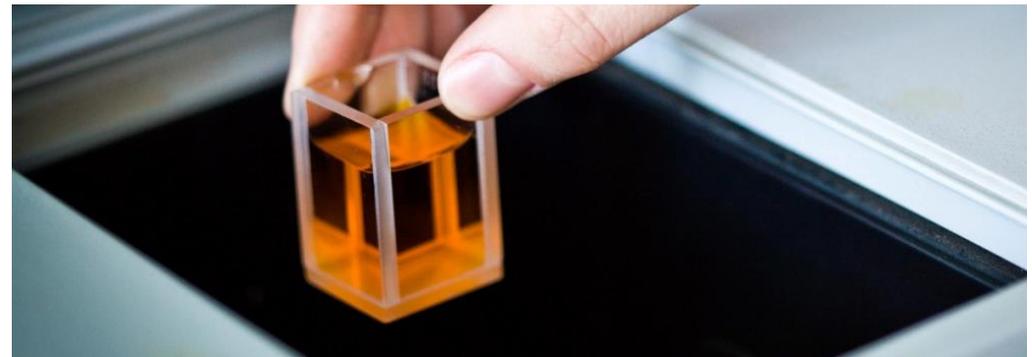
Refinery Division



Industrial Appliances Division

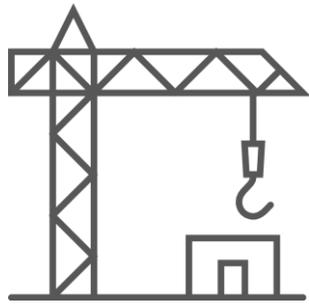


Jewelry Division

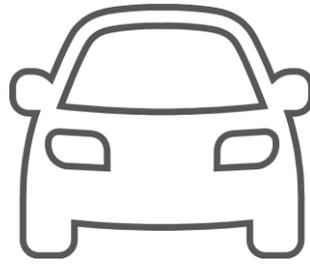


R&D

The implementation of precious metals and their compounds



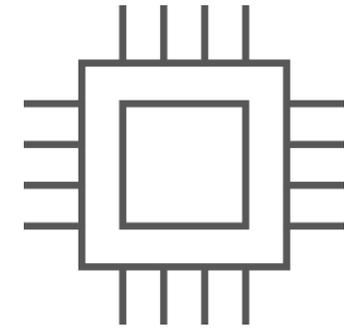
Residential
Development



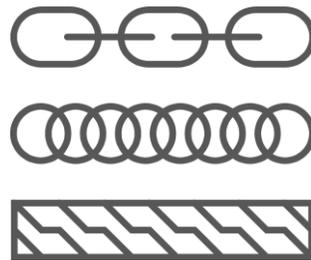
Motor Car
Construction



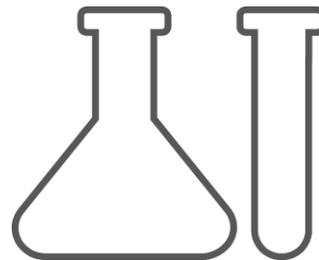
Petroleum Refining



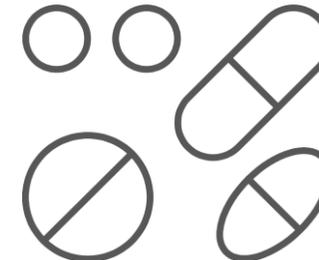
Electronics



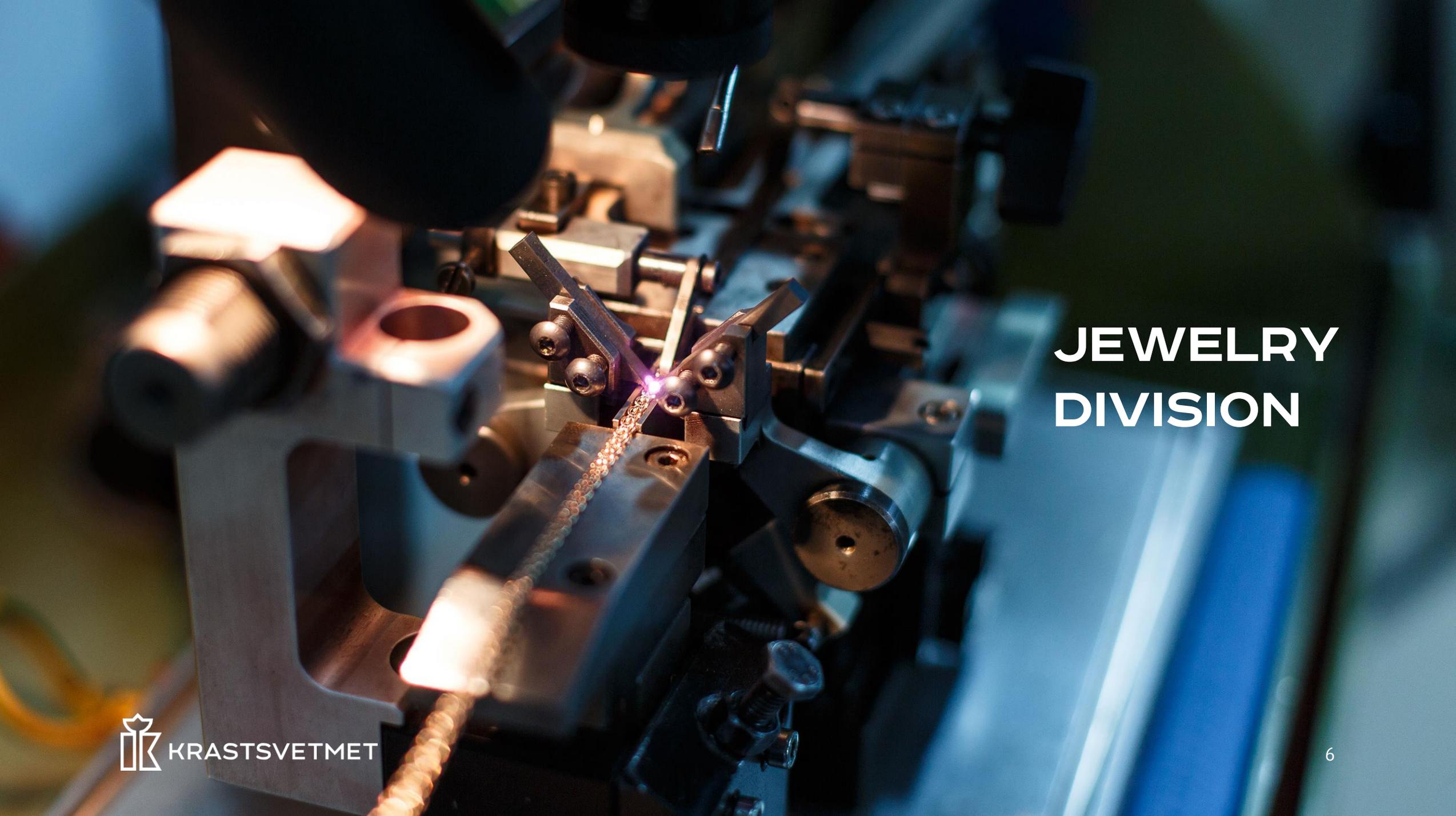
Jewelry



Chemical
Industry



Pharmaceuticals



JEWELRY DIVISION

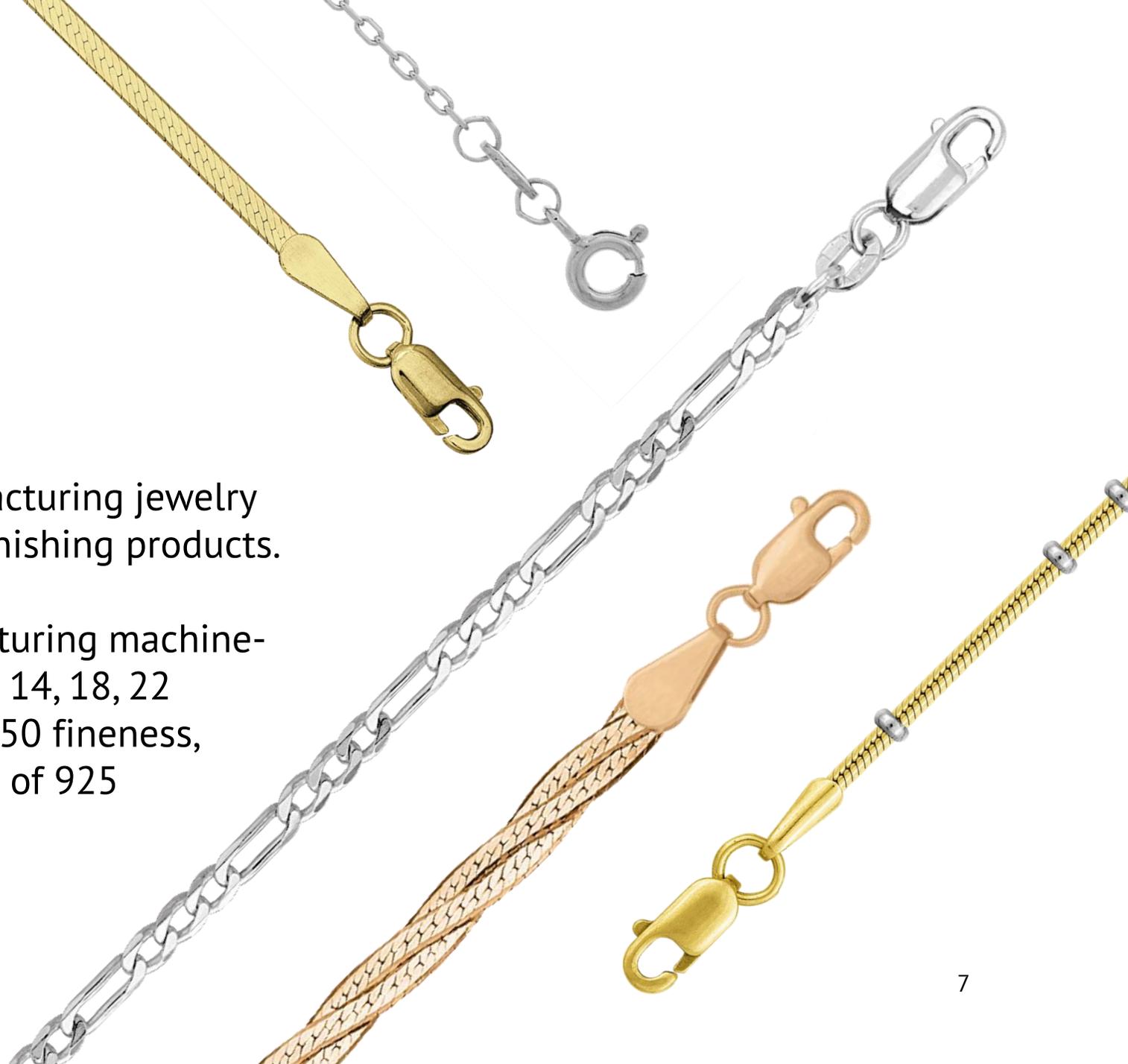
Jewelry Division

Machine-woven chains
market share in Russia

35%

Full production cycle – from manufacturing jewelry alloys to the diamond cutting and finishing products.

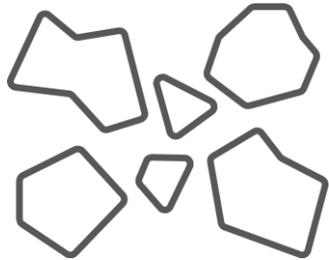
Krastsvetmet specializes in manufacturing machine-woven chains and bracelets made of 14, 18, 22 and 24k gold, platinum of 585 and 950 fineness, palladium of 850 fineness and silver of 925 fineness





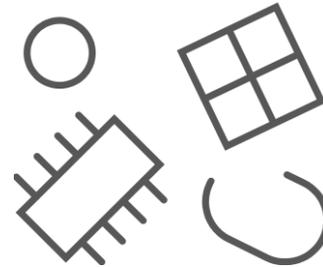
REFINERY DIVISION

Types of Precious Metal Bearing Materials Krastsvetmet Processes



Primary materials:

- alluvial, cathode, native gold
- Dore alloy (gold-silver and silver-gold)
- silver-gold precipitate
- PGM concentrates
- alluvial platinum
- zinc concentrate



Secondary materials:

- jewellery scrap
- electronic scrap
- technical scrap
- spent autocatalysts
- spent petroleum and petrochemical catalysts

Refinery Division

Krastsvetmet market share in Russia

97%

Platinum
Group
Metals

62%

Gold

60%

Silver

Fine precious metals:

- gold bars, bullions, granules
- silver bars, bullions, granules
- platinum bars and powder
- palladium bars and powder
- rhodium, iridium, ruthenium, osmium powder
- precious metal compounds



Refinery Division. Precious Metals Compounds

Applications of the precious metal compounds produced by Krastsvetmet include:

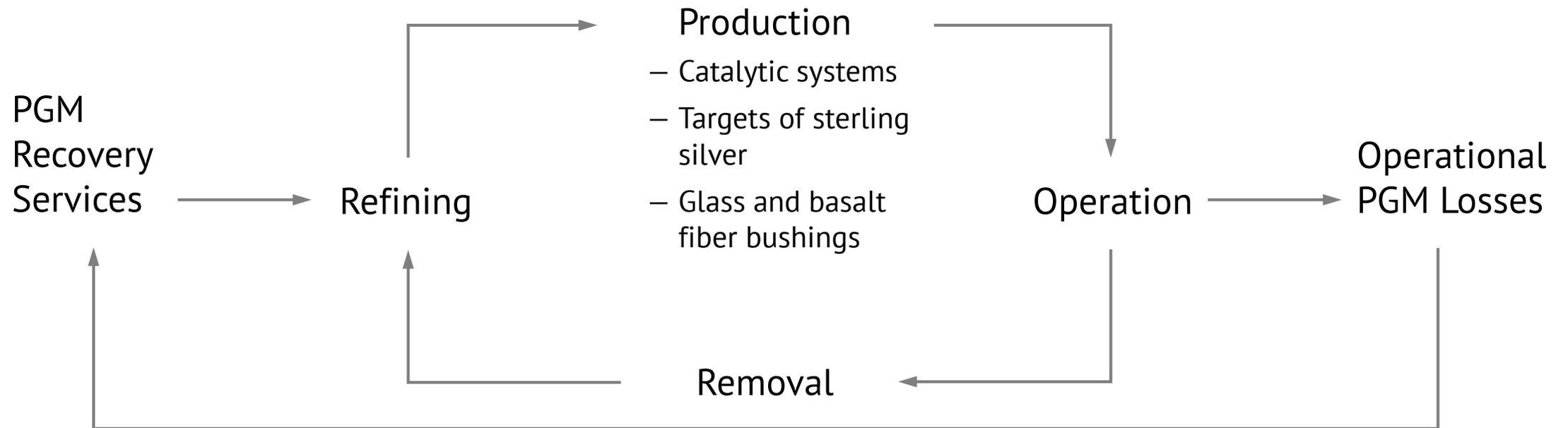
- automotive exhaust converter production
- catalysts for chemical and petrochemical industries
- chemical compound synthesis
- electroplating
- resistor manufacture
- anti-tumor medicine production



INDUSTRIAL APPLIANCES DIVISION

Industrial Appliances Division. Smart Close Loop Solutions

Krastsvetmet proposes complex services for the customer including Industrial Appliances manufacturing, scrap refining and lost PGMs recovery from equipment including subsequent cleaning sludge refining



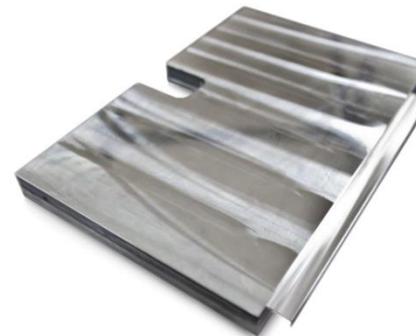
Industrial Appliances Division



Catalyst systems



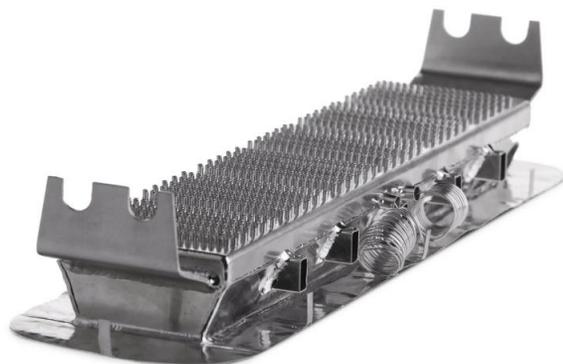
Thermo-electrode
and thermocouple wire



Targets of sterling silver



Compounds for the production
of anticancer substances
and Generic API's



Glass and basalt fiber bushings



Certified reference materials
and mixtures of precious metals



Laboratory equipment



R&D

R&D

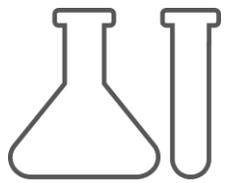
Krastsvetmet Research and Development Department provides a comprehensive range of services that includes:

- Development of new technologies of precious metals extraction from all types of raw materials
- Development of wastes recycling technologies
- Development of new technologies of precious metals refinery and concentration
- Experimental batches of new kinds of precious metals production

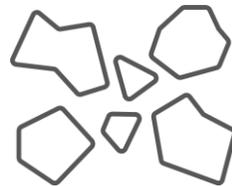


Analytical Support

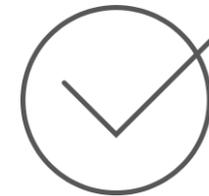
The laboratory is certified with an International accreditation testimonials issued by the Authority for the accreditation of laboratories AAC “Analytics” and Federal Agency for Technical Regulation and Metrology



Analytical control of raw materials, middlings, finished products and refining wastes



Analysis of rocks, ores and their products



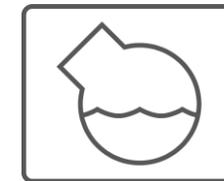
Inspection tests of reagents and materials



Development of quantitative chemical analysis methods, GOST for analysis methods



Providing analytical services for external customers within the scope of accreditation



Development and production of certified mixtures

R&D Park

Russia's first open innovations infrastructure for development and transfer of technologies in the field of precious metals

Krastsvetmet provides comprehensive support for the R&D Park's residents, including funding the projects and participation in major Russian and international tenders



Certificates

The Integrated Management System of Krastsvetmet is certified in accordance with ISO 9001:2008, OHSAS 18001:2007 and ISO 14000:2004 International Standards.

Krastsvetmet's precious metal bullion comply with the world standards and are included in the Good Delivery lists at international venues in London, Dubai, New York, Tokyo and Shanghai.

