ALROSA GROUP
INNOVATION CENTER
BOUREVESTNIK
RESEARCH ✦ DESIGN ✦ PRODUCTION

ISO 9001:2015
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OHSAS 18001:2007

JOINT STOCK COMPANY
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LIST OF PROJECTS IN THE DIAMOND MINING INDUSTRY

Bourevestnik JSC is the largest enterprise in the CIS for research, development, and production of X-ray equipment for industrial and scientific purposes. The company's origins can be traced to 1959, the year that marked the establishment of the Specialized Design Bureau of X-ray Equipment, which was under the jurisdiction of the Bourevestnik plant. The Bourevestnik enterprise itself had a significant history, having produced the first domestic X-ray apparatus in 1928.

For more than half a century, Bourevestnik has been creating devices for the needs of various industries and areas of scientific and technical activities, such as mining and mining and processing industry, nuclear power, oil refining, metallurgy, mechanical engineering, electronic industry, nano-industry and environmental monitoring, constantly improving its technologies taking into account the progressive requirements of the market.

To date, approximately 2,000 sorters have been produced, with more than 800 currently in operation. This number includes 200 separators that are in operation in foreign countries.

Since 2005, Bourevestnik has maintained a subsidiary relationship with ALROSA, a corporation that leads the global diamond mining industry with a workforce of more than 1,100 individuals.

Presently, our organization is engaged in the production of a range of sorters intended for application within the diamond mining industry. These sorters are engineered to address the comprehensive array of requirements associated with diamond mining operations: the primary enrichment of -50 mm size fractions, replacement of DMS, final processing of concentrates, hand sorting, and study of luminescence characteristics of diamonds.

Bourevestnik JSC specializes in the production of X-ray luminescent and X-ray transmission sorters, designed for use with both dry and wet materials.

X-ray luminescence sorter LS-20-09L

X-ray transmission sorter RGS-2

Analyzer UOK-2

I. Projects in Russia

1.1 Mirny Mining and Processing Division, ALROSA

Deposit type: - kimberlite pipe, average diamond content – 3,39-8,46 crt/t
- alluvial, average diamond content – 0,41 crt/t

Mirny Mining and Processing Division was founded in 1957 and is ALROSA's oldest enterprise. The Mining and Processing Division's share in the total diamond production of ALROSA Group in 2017 amounted to 18%.
The combine employs more than 3,000 people.
Diamond production - 7.2 mln carats (2017)

Year of supply	Number of sorters, units
2006-2021	99 (including those mounted on dredges)

1.2 Udachninsky Mining and Processing Division, ALROSA

Deposit type – kimberlite pipe, average diamond content – 0,25-1,32 crt/t
- alluvial, average diamond content – 0,51 crt/t

Development of the Udachnaya pipe began in 1967 as part of the Aikhalalmaz mining and processing plant. In 1979, the Udachny Mining and Processing Plant was founded. It is the town-forming enterprise of the town of Udachny, which is located 15 km from the Arctic Circle. 1.2 Udachninsky mine employs over 3900 people. Diamond production - 3.8 mln carats (2017)

Year of supply	Кол-во РЛС, шт
2001-2021	93

1.3 Aikhal Mining and Processing Division, ALROSA

Deposit type – kimberlite pipe, average diamond content – 0,38-4,06 crt/t

The plant was launched in 1986. The Aikhal Mining and Processing Division (MPD) mines diamonds at the following sites: Yubileyny and Komsomolsky open pits, Aikhal mine. The Plant's share in the total diamond production of ALROSA Group in 2017 amounted to 30%.
More than 4,300 people work at the plant.
Diamond production - 13.0 mln carats (2017)

Year of supply	Кол-во РЛС, шт
2006-2021	156

1.4 Nyurba Mining and Processing Division, ALROSA

Deposit type – kimberlite pipe, average diamond content – 4,67-5,64 crt/t
- alluvial, average diamond content – 4,24 crt/t

Nyurba Mining and Processing Division is one of the youngest enterprises of ALROSA Group. It carries out operations in the Nakyn ore field, in particular, at the following sites: Nyurbinsky and Botuobinsky open pits, as well as placer deposits of the same name. More than 1,500 people work at the combine.

Diamond production - 7.7 mln carats (2017)

Year of supply	Кол-во РЛС, шт
2001-2021	53

SEVERALMAZ

1.5 PJSC Severalmaz (ALROSA Group)

Deposit type – kimberlite pipe, average diamond content – 1,1-1,32 crt/t

Lomonosov deposit. The Lomonosov deposit is the largest primary diamond deposit in the European part of the Russia. It is located near the settlement of Pomorie, Primorsky District, Arkhangelsk Region, and is named in honor of Mikhail Vasilyevich Lomonosov. The deposit includes six kimberlite pipes.

Year of supply	
2021	17

1.6 Almazy Anabara JSC (ALROSA Group)

Deposit type – alluvial, average diamond content – 1,05 crt/t

Almazy Anabara JSC is among the leading enterprises of the Republic of Sakha (Yakutia). The company's deposits are located in the northwestern part of the Republic of Sakha (Yakutia), on the territory of several uluses. Mining is carried out at 7 placers: Morgogor, Istok, Kholomolokh, Ebelyakh, Gusinoye, Ruchey 41 and Kurung-Yuryakh. The enterprise employs about 1,800 people.

Diamond production - 3.4 million carats per year. (2016)

Year of supply	Кол-во РЛС, шт
2005-2021	146

1.7 OJSC Nizhne-Lenskoe (ALROSA Group)

Deposit type – alluvial, average diamond content – 0,58 crt/t

The Billyakh placer deposit is located in the southern part of the Anabar ulus of the Republic of Sakha (Yakutia), in the basin of the middle reaches of the Billyakh River (a tributary of the Anabar River) and 320 km from the Arctic Ocean coast. Placer mining at the deposit began in 1999. The Molodo deposit is located in the north of Yakutia in the Bulunsky ulus. The volume of diamond production in 2017 was 43.84 thousand carats.

Year of supply	Кол-во РЛС, шт
2006-2021	11

1.8 AGD Diamonds JSC

Deposit type – kimberlite pipe, average diamond content – 1,25 crt/t

The Grib deposit is a diamond deposit in the Mezensky district of the Arkhangelsk region. The Grib deposit is a diamond deposit in the Mezensky District of the Arkhangelsk Region and includes one kimberlite pipe. The deposit is named in honor of Vladimir Pavlovich Grib, former chief geologist of Arkhangelsk Geological and Mining Enterprise.

Ore production - ~4.5 million tons/year.

Year of supply	Кол-во РЛС, шт
2021	31

II. Outside of Russia

2.1 SOCIEDADE MINEIRA DE CATOCA Ltd., Angola, Lunda Sul Province

Deposit type – kimberlite pipe, average diamond content – 0,64 crt/t

Reserves - 143 million carats. Diamond production (2013) - 6.6 million carats. The first production facilities were commissioned in 1997. At present, two processing plants with a total capacity of more than 10 million tons of ore per year are in operation. The Catoca kimberlite pipe development program envisages its continued open pit mining to a depth of 600 m until 2034.

Year of supply	Кол-во РЛС, шт
2000-2021	91

2.2 Petra Diamonds Ltd, о-в Джерси, месторождения в Африке

Deposit type – kimberlite pipe, capacity – 290 mln crt.

One of the largest companies - production of 3.8 million carats in 2018, more than 5.5 thousand employees. Owns 3 mines in South Africa - Finsch, Koffiefontein and Cullinan, and 1 in Tanzania - Williamson.

At the Cullinan deposit, a state-of-the-art enrichment plant with a capacity of 6 million tons per year, equipped with equipment manufactured by Bourevestnik, was commissioned in 2017.

Year of supply	Кол-во РЛС, шт
2012-2021	36

2.3 Saskatchewan Research Council, Канада

Canada's leading research and development company, with over 350 employees, provides technology development and improvement services, raw material research to the mining industry.

Year of supply	Кол-во РЛС, шт
2015	1*

* used in the laboratory to study various diamond bearing ores

2.4 Sociedade Mineira de Camatchia-Camagico, Ангола, провинция Лунда Сул

Deposit type – kimberlite pipe, average diamond content – less 0,1 crt/t

Development began in 1997, processing volume is about 3 million tons per year. In 2005-2012, 1.25 mln cts was produced.

Year of supply	Кол-во РЛС, шт
2004	9

Steyn Diamante

2.5 Steyn Diamante CC, ЮАР, месторождение Schutsekama

Deposit type – alluvial и переработка Хвостов.

Development of the Schutsekama deposit started in 2015. The monthly production capacity of the plant is from 700 to 850 thousand tons of ore. The largest extracted diamond weighing about 160 cts.

Year of supply	Кол-во РЛС, шт
2010-2021	8

2.6 ZIMBABWE CONSOLIDATED DIAMOND COMPANY, Zimbabwe, Chimanimani deposit

Deposit type – kimberlite pipe, capacity – 5 mln crt.

Diamond deposits at this site in an agricultural area were officially discovered in 2008. Trial mining began in 2010 and full-scale production started in late 2012.

Year of supply	Кол-во РЛС, шт
2011-2012	5

2.7 Letšeng Diamonds (Pty) Ltd, Lesotho, Letšeng deposit, Main and Satellite pipes

Deposit type – kimberlite pipe, average diamond content – 1,9 crt/t.

A mine with low diamond grades of less than 2 krt/ton, but with many large diamonds - The Lesotho Legend - 910 krt (2018), Letšeng Star - 550 krt (2011), Leseli la Letšeng - 478 krt (2008), Letšeng Legacy - 493 krt (2007), Lesotho Promise - 603 krt (2006).

More than 6 million tons of ore processed in 2017.

Year of supply	Кол-во РЛС, шт
2011-2013	3

2.8 Trans Hex Group Limited, ЮАР, Namaqualand, Baken*, Bloeddrif*, Shallow water in South Africa and Somiluana in Angola.

* Mines closed in 2017

Deposit type – alluvial, capacity – 4 млн карат.

The company owns partially or wholly 4 deposits, with a total of 320 thousand carats mined in 2017.

Year of supply	Кол-во РЛС, шт
2010-2014	4