MINING PROJECTS

Skalisty Mine

Location
Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

Project overview
Increasing ore production to 2.4 mtpa by 2023 by stripping rich and cupriferous ores at the Talnakhskoye and Oktyabrskoye deposits.

Highlights
Ore reserves: 57 mt
Average metal content: Ni – 3.1%, Cu – 3.6%, PGM – 9.7 g/t

Skalisty mine forms part of Nornickel’s Polar Division and produces ore from the Talnakhskoye and Oktyabrskoye deposits. In 2018, the mine extracted 2.0 mt of rich ore.

2018
- CAPEX – RUB 13.9 bn (USD 218 mln)
- Ore production reached 2 mtpa
- Sinking of ventilation shaft–10 completed (total of 2.1 km)
- 206 m sinking of skip-cage shaft–1 (total of 1.9 km out of 2.1 km)

2019
- Completion of ventilation shaft–10 construction
- Completion of skip-cage shaft–1 sinking

2023
- Reaching design capacity
Taimyrsky Mine forms part of Nornickel’s Polar Division and produces ore from the Oktyabrskoye Deposit. In 2018, the mine extracted ca. 3.8 mt of rich ore.

**Location**
Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

**Project overview**
Increasing ore production to 4.1 mtpa by 2021 by stripping rich copper-nickel ores at the Oktyabrskoye Deposit.

**Highlights**
- Ore reserves: 139 mt
- Average metal content: Ni – 1.2%, Cu – 1.9%, PGM – 4.5 g/t

- Production capacity commissioning: 130 kt of rich ore in 2019
- Production capacity commissioning: 720 kt of rich ore in 2021
- Reaching design capacity

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According to JORC standards.
Oktyabrsky Mine forms part of Nornickel's Polar Division and produces ore from the Oktyabrskoye Deposit. In 2018, the mine extracted 5.2 mt of ore.

### Oktyabrsky Mine

#### Location
Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

#### Project overview
Maintaining ore production at 5.2 mtpa until 2025 by stripping rich, disseminated and cupriferous ores at the Oktyabrskoye Deposit.

#### Highlights

- **Ore reserves:** 219 mt
- **Average metal content:**
  - Ni – 0.7%
  - Cu – 2.1%
  - PGM – 5.9 g/t
- CAPEX – RUB 2.6 bn (USD 40 mln)
- 4 km of underground workings completed
- Shared drainage of Taimyrsky and Oktyabrsky mines commissioned
- Production capacity commissioning: 150 kt of rich ore and 700 kt of cupriferous disseminated ore
- Production capacity commissioning: 300 kt of cupriferous ore

#### 2018
- CAPEX – RUB 2.6 bn (USD 40 mln)
- 4 km of underground workings completed
- Shared drainage of Taimyrsky and Oktyabrsky mines commissioned

#### 2019
- Production capacity commissioning: 150 kt of rich ore and 700 kt of cupriferous disseminated ore

#### 2020–2025
- Production capacity commissioning: 300 kt of cupriferous ore
Komsomolsky Mine forms part of Nornickel’s Polar Division and produces ore from the Talnakhskoye and Oktyabrskoye deposits. In 2018, the mine extracted 3.8 mt of cupriferous ore.

**Location**
Norilsk Industrial District, Krasnoyarsk Territory (Polar Division).

**Project overview**
Increasing ore production to 4 mtpa by 2021 by stripping rich, cupriferous and disseminated ores at the Talnakhskoye and Oktyabrskoye deposits.

<table>
<thead>
<tr>
<th>Year</th>
<th>Highlights</th>
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<tbody>
<tr>
<td>2018</td>
<td>- CAPEX – RUB 2.8 bn (USD 44 mln)&lt;br&gt;- 4 km of underground workings completed</td>
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<tr>
<td>2019</td>
<td>- Production capacity commissioning: 200 kt of cupriferous ore and 226 kt of disseminated ore</td>
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<tr>
<td>2020</td>
<td>- Production capacity commissioning: 175 kt of rich ore</td>
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<tr>
<td>2021</td>
<td>- Production capacity commissioning: 225 kt of rich ore and 185 kt of disseminated ore&lt;br&gt;- Reaching design capacity</td>
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According to JORC standards.

**Ore reserves:** 185 mt

**Average metal content:**
- Ni – 0.6%<br>- Cu – 2.6%<br>- PGM – 4.8 g/t

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