



Steelmaking & Processing

Facility

EVRAZ ZSMK (Russia)



Production facilities | EVRAZ ZSMK has five coke oven batteries and three blast furnaces in operation. For steelmaking, it has two oxygen converter mills, which consist of five basic oxygen furnaces, and two electric arc furnaces. EVRAZ ZSMK operates one eight-strand continuous casting machine, which produces square billets, a two-strand continuous slab casting machine, and one four-strand continuous casting machine, which makes semi-finished products for the rail mill. Rolling facilities include a blooming mill, one medium-section 450 mill, two small-section 250 mills, one rail and structural steel mill, one sectional mill and two ball-rolling mills.

The EVRAZ ZSMK steel mill has its own coal washing plant for coking coal. It can also produce customised coking coal blends if necessary.

Ownership: 100%
Employees: 20,104 people

Capacity

Construction products:
3.6 mt per year
Rails: 0.95 mt per year

Output by key products, kt

Pig Iron (saleable)	150	U-channels	249
Slabs	1,412	Beams	28
Billets	1,516	Rails	667
Rebar	1,636	Railway products	2
Angles	355	Balls	94

EVRAZ DMZ (Ukraine)



Production facilities | EVRAZ DMZ' production facilities include coke and chemicals plants, two blast furnaces, steelmaking facilities (three oxygen converters) and two rolling mills.

Ownership: 96,94%
Employees: 5,147 people

Capacity

Construction products: 0.6 mt per year

Output by key products, kt

Pig iron (saleable)	74.0	Mining uprights	10.4
U channels	313.0	Billets	473.0
Angles	16.9	Round billets	4.8
Rails	13.0	Rounds	17.3
Rims	6.7		

EVRAZ Bagleykoks (Ukraine)



Production facilities | EVRAZ Bagleykoks has three coke batteries.

Ownership: 94.96%
Employees: 1,307 people

Capacity

Coke (in dry weight) : 0.71 mt per year

Output by key products, kt

Coke (in dry weight)	565
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Key developments →

Facility

EVRAZ NTMK
(Russia)

Production facilities | EVRAZ NTMK has coke and chemical production facilities, two blast furnaces, steelmaking facilities (one oxygen converter shop consisting of four LD converters), four continuous casters, seven rolling mills and a power and heat generation plant.



Ownership: 100%
Employees: 14,921 people

Capacity

Construction products: 1 mt per year
Wheels: 0.15 mt per year

Output by key products, kt

Pig iron (saleable)	338	Beams	680
Slabs	1,333	Rails	138
Billets	774	Wheels	73
Angles	74	Other railway products	119
U-channels	244	Balls	159

EVRAZ Caspian Steel
(Kazakhstan)

Production facilities | EVRAZ Caspian Steel has a light-section rolling mill.



Ownership: 65%
Employees: 202 people

Capacity

Rebar: 0.45 mt per year

Output by key products, kt

Rebar	275
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EVRAZ Palini e Bertoli
(Italy)

Production facilities | EVRAZ Palini e Bertoli's production facilities consist of a four-high mill for steel plates and a two-high mill, built in 2005 to accelerate operations and complement the four-high mill's rolling process.




Ownership: 100%
Employees: 106 people

Capacity


Plate: 0.45 mt per year

Output by key products, kt

Plate	0
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**EVRAZ METALL INPROM WINS
NATIONAL INDUSTRY AWARDS FOR 2015**


EVRAZ Metall Inprom has confirmed its status as Russia's most reliable metals trader for the third time in a row. It won numerous awards at the "Russian Metal Market" conference, organised by the Russian Union of Metal Suppliers and the Metal Supply and Sales magazine, on November 9. Its offices in Krasnodar, Perm and St Petersburg won nominations in the "Best Metal Service Centres in Russia" competition, while those in Taganrog, Bryansk, Yekaterinburg, Krasnoyarsk and Vladivostok scored highly in the "Best Metal Dealer in Russia" category.


**EVRAZ ZSMK'S REBAR IS USED
IN MAJOR INFRASTRUCTURE PROJECTS IN RUSSIA**


EVRAZ has been supplying its At800 rebar for projects to make airfield slabs for airports in Eastern and Western Siberia and for the project to rebuild slabs of auxiliary traces at the Severny cosmodrome. At800 is thermally strengthened rolled steel that is spiral or crescent-shaped, and it is used to build reinforced or complex structures that constantly carry dynamic loads. The high-tensile metal helps to reinforce concrete structures, extending their useful life. At800 is in high demand on the market, and EVRAZ ZSMK produces more than 100 thousand tonnes a year.

KEY DEVELOPMENTS

EVRAZ ZSMK

The facility reached the target of being able to process 100% of slag, saving on consumption of scrap and iron ore products.

Railway products

- Rails were certified to international standards (60E1/E2, 54E1, Re115).
- EVRAZ ZSMK entered the markets of Brazil and Malaysia.
- Wheels were exported to the US and UK.

Construction products

- H-beams were sold to the UAE, UK and US.
- EVRAZ ZSMK entered rebar markets in Hong Kong and Eastern Europe.

EVRAZ NTMK

- EVRAZ NTMK boosted its output of high-value micro-alloyed pipe-grade slabs by 78 thousand tonnes in 2015.

EVRAZ DMZ

- Export sales of rolled products increased by 43.1%, from 144 thousand tonnes to 206 thousand tonnes.
- Pig iron production totalled 1 million tonnes, its highest since 2009.
- The use of raw flux in furnace stock was discontinued to reduce coke consumption (use of sinter).

EVRAZ Caspian Steel

In 2015, production reached design capacity of 450 thousand tonnes of rebar per year, while the facility expanded its product range to all types of rebar (10-40 mm diameter).

EVRAZ Bagleykoks

In 2015 EVRAZ Bagleykoks reached 80% capacity.

NPD REVIEW

EVRAZ ZSMK

New product development:

- Rebars and sections for domestic market:
 - Rebars of class A600 (12-22 mm, 32-40 m)
 - Rebars of class AT1000 (14, 16 mm)
 - New sizes of sections (channel bar 12U, angles 70*70, 110*110)
- Rebars for international market:
 - Rebars certified to ASTM A616 (NAFTA)
 - Rebars certified to CS2:2012 (Singapore)
- Rails for high-speed and heavy haul R65 DT350 SS (domestic market)

EVRAZ NTMK

New product development:

- Wheels for Europe and Turkey: (BA002, BA004, BA005, BA314, A-43 and 409)
- Bandages from H-grade steel;
- Solid-rolled wheel centers for locomotives.

EVRAZ DMZ

New product development:

- Rims 254-020-010
- Rims and rim locks 400G
- Three new types of rims for goods vehicles

EVRAZ Bagleykoks

In the absence of a market for coking nut, 0-40 mm coke was certified and shipped to the beneficiation plant.

OUTLOOK

EVRAZ intends to keep the production level stable year on year with up to 100% capacity utilisation at all steelmaking assets in Russia and Ukraine. EVRAZ intends to continue shift from semi-finished products to high-margin rolled and rail products. New high-margin products are going to be launched: such as nine types of wheels, 18 types of rolled construction and rail products.

KEY PROJECTS

RECONSTRUCTION OF CONTINUOUS CASTING MACHINE (EVRAZ ZSMK):

- Increase production capacity,
- reduce billet cost

Status

Completed. Production was launched on October 2015

CAPEX

US\$44 million

IRR

33%

BALL MILL CONSTRUCTION (EVRAZ NTMK):

Construction of new ball mill at EVRAZ NTMK rail site to support EVRAZ strategic position in this market

Status

Underway

CAPEX

US\$22 million

IRR

27%

4 MW TURBO GENERATOR (EVRAZ DMZ):

Generate 14.4 thousand MW per year

Status

Equipment has been evaluated and a general designer chosen

CAPEX

US\$1.6 million

IRR

70%

