WE’RE EVRAZ

WE MAKE RAILS AND WHEELS
Since 1992, EVRAZ has been a growing force in the global metals industry. Today, we’re one of the world’s largest vertically integrated steel and mining companies. We mine our own iron ore, and produce almost 17 million tonnes of crude steel per year. That makes us one of the biggest steel producers in Russia. We’re a leader in North American plate, rail and large diameter pipe markets. We’re also among the world’s largest vanadium producers. We employ more than 110,000 people worldwide. And in 2011, revenue stood at US$16.4 billion.

We've come a long way. But we still have big ambitions.

We believe in building long-term business relationships, rooted in trust and exceptional service. We believe in making the world stronger, safer and cleaner. WE’RE EVRAZ.
As the world’s number one rails producer, we’ve already manufactured a vast number of railway products for countries around the world.

EVRAZ NTMK (Russia, Urals) is a major producer of railway products and EVRAZ ZSMK (Russia, Siberia) is the oldest and largest rail manufacturer in Russia and the Commonwealth of Independent States (CIS).

We are also one of the major wheel producers, and the only supplier of railcar products in Russia.

EVRAZ Pueblo in Colorado has been helping build America’s railroads since 1881, and today supplies about half of all the rail in North America. EVRAZ Portland and EVRAZ Claymont are major suppliers of steel plate for railcars, as is EVRAZ Vitkovice in Europe.

In 2011–2012, we invested around US$600 million to install state-of-the-art processes and equipment that will enable us to produce the most dependable rail products with the lowest life-cycle cost into the future. Our total annual production capacity will soon reach two million tonnes of rails.

RAILS AND WHEELS ARE AT THE HEART OF EVRAZ.
EVRAZ locations

USA
- EVRAZ Portland
  - Railcar plate
- EVRAZ Pueblo
  - Rails
- EVRAZ Claymont
  - Railcar plate

CZECH REPUBLIC
- EVRAZ Vitkovice Steel
  - Railcar plate

UKRAINE
- EVRAZ DMZ
  - Rails
- EVRAZ NTMK
  - Wheels & tyres
  - Rails
  - Rail fastenings
  - Sections for railcars
- EVRAZ ZSMK
  - Rails

KEY:
Rails & rail-related products
Wheels & wheel-related products
Other rail-related products
EVRAZ locations

RAILS
WHEELS
We account for 12% of all rail sales globally – and 90% in Russia. We can draw on over 130 years’ experience in making railway products, and have invested hundreds of millions of dollars in creating truly leading-edge production facilities.

We’re always looking to the future, and finding new ways to serve our customers. We are continually improving our facilities and products, to meet the growing and changing demands of our customers. For example, in Russia we are installing the technology to manufacture deep head hardened rails in lengths of up to 100 metres so we can provide safer, smoother journeys for millions.

RAILS THAT CAN TAKE YOU ANYWHERE. EVEN INTO THE FUTURE.

KEY STATISTICS

90% market share in Russia
45% market share in the USA
12% of world rail production

PREMIUM RAIL PRODUCTION PROCESS

WORLDWIDE INNOVATION

Our plant EVRAZ ZSMK, in Novokuznetsk (capacity 950,000 tonnes) produced the first rails in 1932. Today, the plant draws on this unique experience to deliver a range of advanced products, including heavy-haul, low-temperature and high-speed rails. In North America, EVRAZ Pueblo is the only producer of air-quenched, high-strength premium rail. Annual capacity is 450,000 tonnes and we have committed investments to expand capacity to 520,000 tonnes in 2013.

We are also installing a state-of-the-art rail research and testing facility that will enhance our capability to develop next generation rail products that achieve superior safety, wear resistance, strength and lifecycle cost. We are also in the process of updating the sustainable facilities at our EVRAZ NTMK mill in Nizhny Tagil, Russia. This will boost production capacity there to 550,000 tonnes.

90% market share
45% market share
12% of world rail production

RAILS WHEELS
RAIL TYPE
• Standard strength
• Intermediate hardness
• Intermediate hardness high strength
• Deep hardened
• Deep head hardened
• Micro-alloy deep head hardened
• High carbon pearlite
• Low temperature resistant applications

WEIGHT
• Standard
• Intermediate hardness
• Intermediate hardness high strength
• Deep hardened
• Deep head hardened
• Micro-alloy deep head hardened
• High carbon pearlite
• Low temperature resistant applications

RAIL STANDARDS
EN 13674-1:2011
54 E1, 60 E1
69E1, 54E2, 54E4, 60E2*

AREMA
115 RE, 149 RE, 132 RE, 133 RE, 136 RE, 141 RE

GOST R 51685-2000
R50, R65, R65K

GOST 9960-85
Switch rails ОR43, ОR50, ОR65

GOST 9797-85
Guard rails RК50, RK65, guard rail angle SP 850

GOST R 53866-2010
Crane rails КR70, КR80, КR100, КR120, КR140

TU
Industrial rails R23, R34, R43
Grooved rails RТZB-58, Т62

*Production of 49E1, 54E2, 54E4, 60E2 will start in 2013

MIXED TRAFFIC
It is not easy to optimise track performance for a varied mix of fast passenger trains and slower, high axle weight freight services, and in a range of topographies and climates. But the right rails extend the life of the product and reduce maintenance costs – and this is what we produce for our customers.

PUBLIC AND URBAN TRANSPORT
As cities grow, the demand for high-quality public transport is rising dramatically. Urban systems bring their own challenges, with sharp curves and steep gradients, as well as short braking and acceleration distances. Being the experts in this specialised area, we supply rails for metro and grooved rails for streetcars.

OUR ENTERPRISES MAKE MORE THAN JUST RAILS AND WHEELS.
As well as rails and wheels, we also apply our expertise and innovation to producing a wide range of related products. We develop Z-sections, car posts, channel bars and angle sections for railcars. We’re the only supplier in Russia of these parts, and one of the largest in the CIS. We also remain the key supplier of rail fasteners for Russian Railways (RZD), including baseplates, fishing, connection crews and connection clips.

RAILS
EVERY TYPE OF RAIL FOR EVERY TYPE OF NEED.

HEAVY-HAUL
We make hardened rails for unrivalled endurance under heavy loads and extreme wear stresses. These include rails used by trains with axle loads of 25–32 tonnes, and annual traffic density of up to 250 million tonnes-km.

HIGH-SPEED
Train speeds of up to 250 kilometres per hour are increasingly common around the globe. We are upgrading our facilities to supply rails that combine excellent reliability, geometrical precision, strict flatness tolerance and unrivalled quality, for high-speed lines worldwide.

PUBLIC AND URBAN TRANSPORT
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WEIGHT
We supply a wide range of rails in sizes from 33 to 113 kilograms per metre (kg/m), and in a variety of steel grades. With some of the world’s most advanced technology at our disposal, we can produce rails to all existing standards, including those with very strict dimensional tolerances and in lengths of up to 100 metres for high-speed tracks.

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Exceptional rails deserve exceptional wheels. And that’s what we produce at our wheel workshop, located in the EVRAZ NTMK plant, Russia. The wheel workshop has been completely upgraded over recent years, becoming a state-of-the-art facility with a production capacity of 460,000 wheels and 90,000 tonnes of tyres and rings per year. The new equipment we’re installing in 2012 will improve production capacity to 580,000 wheels.

In our new production technology we use continuous cast billet from high-quality steel made at EVRAZ NTMK.

The billet is heated in an automated LOI rotary furnace which allows control of the heating temperature on every single billet. Then the billet is processed on the SMS EUMUCO forging and rolling mill and the black wheel goes through an integrated heat treatment facility supplied by ANDRITZ MAERTZ. After machining on wheel lathes (supplied by HÜLLER HILLE and HEGENScheidt) the wheels go through the inspection line which is equipped with non-destructive testing equipment (ultrasonic, magnaflux inspection, etc.) and fully complies with European (EN) standards and the Association of American Railroads wheel production standards.

WE’RE ONE OF THE LARGEST WHEELS PRODUCERS IN THE WORLD.

KEY STATISTICS

- 4th largest producer in the world
- 10% of world rail wheels production
- 35% of rail wheels in Russia
A WIDE VARIETY OF WHEELS AND TYRES.

RAILCAR WHEELS
The CIS is the second biggest world market for freight and passenger railcars with more than 1.2 million wagons. EVRAZ is a key supplier of wheels to world renowned railcar manufacturer UralVagonZavod, who produced more than 20,000 freight railcars in 2011.

LOCOMOTIVE WHEELS
EVRAZ NTMK is currently pioneering production of 1,250mm-diameter wheels for the new class of passenger locomotives produced in Russia. This type of wheel is commonly used by the main locomotive producers worldwide. EVRAZ is the only supplier in Russia of tyres for the locomotive wheels.

UNDERGROUND RAILWAY WHEELS
Overall, approximately 96,400 urban vehicles are installed worldwide. The share of metro vehicles amounts to 70% approximately. EVRAZ supplies wheels to one of the world’s most heavily used rapid transit systems – Moscow Metro.

WHEELS CHARACTERISTICS
Diameter: 700–1,250 mm
Weight: up to 1,000 kg
Hardness: up to 360 HB

WHEELS STANDARDS
• GOST
• EN 13262
• AAR M 107

TYRES CHARACTERISTICS
Dimensions: from 650x134x70 mm to 1690x143x83 mm
Hardness: up to 360 HB

TYRES STANDARDS
• GOST

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WE DEAL IN MANY DIFFERENT TYPES OF PRODUCT. BUT MOST IMPORTANT OF ALL, WE DEAL IN TRUST.

Rail and wheels are fundamental infrastructure products, depended on by thousands of businesses and millions of passengers around the world. Trading in these products means trading in trust. Our customers stay with us because they know we’re 100% committed to ensuring the highest standards of quality and safety in every product. Throughout the manufacturing process, we safeguard quality by using the optimum starting material, advanced production technologies, and rigorous quality control.

The comprehensive upgrades to our rail and wheel production equipment are creating one of the most advanced facilities at industry best-in-class levels. Our customers know they can depend on us to keep every promise. They know we will always do whatever it takes to deliver. That’s why the business relationships we build are as strong and lasting as our steel.

WE’D LOVE TO TALK TO YOU ABOUT HOW A PARTNERSHIP WITH EVRAZ COULD HELP YOU. PLEASE GET IN TOUCH ANY TIME – OUR DETAILS ARE ON THE BACK COVER.