AN INTEGRATED, FLEXIBLE APPROACH

In 2019, despite adverse steel market conditions in the second half, Metinvest increased its output of crude steel, iron ore concentrate and coking coal concentrate. The completion of major investment projects and greater maintenance work allowed the Group to improve its steel product mix.

RESPONDING TO CHALLENGES

Metinvest's vertically integrated business model and operational flexibility were among the factors that helped it to overcome adverse external conditions and strengthen its asset base in 2019. In contrast to many other steelmakers, the Group's vast reserves of iron ore allowed it to adapt to the shift in margins from steel to iron ore and the change in market demand from pellets to iron ore concentrate.

Metinvest's efforts to diversify its sources of coking coal in Ukraine through its interest in the Pokrovske coal business and seaborne supplies from its US mines and other third-party producers, coupled with the Group's ability to tap into its coal stockpiles, also blunted the operational impact of certain restrictions imposed on exports of this key raw material to Ukraine. This proactive approach to sourcing helped to ensure uninterrupted hot metal output despite the difficulties experienced during the reporting period.

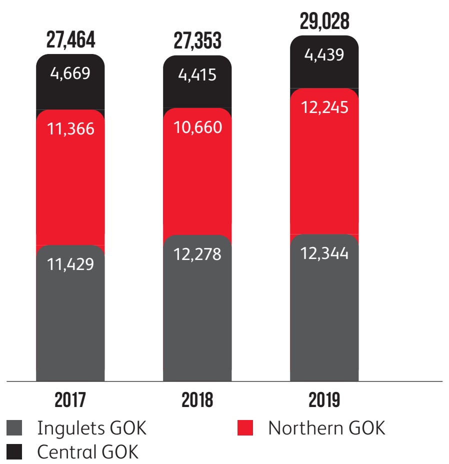
MINING SEGMENT

IRON ORE

Metinvest is one of the top 10 iron ore producers in the world and the second largest[1] in Eastern Europe, in terms of both annual output volumes and reserves. Last year, in the interests of transparency in reporting to its stakeholders and future planning, the Group completed an updated assessment of iron ore resources and reserves as at 31 December 2018, in accordance with the JORC Code (see case study on page 31). As at this date, Metinvest reported Ore Reserves of 2,296 million tonnes grading 34.2% Fe_T and 25.3% Fe_M and Mineral Resources of 10,163 million tonnes grading 35.2% Fe_T and 26.2% Fe_M.

Iron ore concentrate production

29,028KT
+6%



The Group's iron ore extraction and processing assets are Ingulets GOK, Northern GOK and Central GOK. They produce concentrate with an Fe content that ranges from 64.8% to 68.7%, from 64.7% to 67.6% and from 67.5% to 70.5%, respectively.

In addition, Northern GOK and Central GOK have pelletising plants with a total production capacity of 11 million tonnes of pellets a year. These plants produce pellets with an Fe content from 62.5% to 65.0% and from 64.4% to 67.5%, respectively. Following an upgrade of its beneficiation facilities which was completed in April 2020, Central GOK has achieved production of concentrate with 70.5% Fe content and pellets with 67.5% Fe content used in DRI technology.

Moreover, in July 2014, Metinvest acquired 45.9% of Southern GOK, which produces concentrate with an Fe content from 65.1% to 68.2% and sinter with an Fe content from 55.3% to 61.5% and is classified as a joint venture.

The Group's iron ore facilities are all located in the city of Kryvyi Rih, which is around 540-630 kilometres away from its Mariupol steelmakers. This relative proximity helps to ensure the long-term security of iron ore supplies for them.

The Mining segment maintains a quality management system at the iron ore enterprises. It is certified by Bureau Veritas and Ukrainian state authorities as meeting the standards required for producers of merchant iron ore concentrate and pellets. The system is also certified in accordance with the ISO 9001:2015 international standard.

Metinvest currently mines iron ore from open pits at various enterprises (one at Ingulets GOK, two at Northern GOK and three at Central GOK) and one underground operation at Central GOK, drilling, blasting and removing overburden to external dumps. After shipment to onsite crushing, beneficiation and flotation facilities, as well as pelletising plants, the raw material is processed further.

Wastewater from the production process, known as "tails", is sent to the tailings storage facility at each enterprise (see case study on page 26). Each of the Group's four facilities has capacity sufficient for many years of operations. Strict controls are in place to monitor them.

In 2019, Metinvest extracted 68,593 thousand tonnes of iron ore, up 4% year-on-year. At the same time, its overall concentrate output grew by 6% year-on-year to 29,028 thousand tonnes, mainly due to a 15% increase at Northern GOK resulting from higher ore extraction, the continuing upgrade of its mining and ore transportation fleet, efficient utilisation of existing equipment and improved performance at beneficiation plants.

The Group's iron ore self-sufficiency in 2019, calculated as actual iron ore concentrate production divided by actual consumption of iron ore products to produce hot metal, was 313%. Consequently, Metinvest used 35% of total concentrate internally and allocated 65% for third-party sales (40% and 60%, respectively, in 2018).

In 2019, demand from Metinvest's customers for iron ore products was affected by the significantly reduced profitability of steelmakers as prices were low for steel and high for raw materials. In response to these trends, many customers opted for cheaper iron ore concentrate with lower Fe content, rather than pellets. In addition, sales of iron ore concentrate offered greater margins for the Group than pellets in the fourth quarter of 2019, as pellet premiums decreased. In response to these dynamics, Metinvest adjusted its iron ore product mix.

From the iron ore concentrate, the Group produced 10,152 thousand tonnes of pellets[2] in 2019, down 6% year-on-year, keeping the remaining 16,825 thousand tonnes as concentrate. At the same time, the share of high-grade pellets (more than 65% Fe content) in its output was 21% (compared with 28% in 2018), while the share of high-grade concentrate (more than 67% Fe content) was 38% (compared with 45% in 2018).

In 2019, 3,201 thousand tonnes of pellets were produced to be used directly in the Group's hot metal production, while 5,514 thousand tonnes of iron ore concentrate were produced in order to be utilised together with certain volumes of purchased iron ore concentrate and sinter ore to produce 10,939 thousand tonnes of sinter at Ilyich Steel, which is then used in hot metal production at both Mariupol steelmakers.

During the year, the Group's output of merchant iron ore products climbed by 20% year-on-year to 18,262 thousand tonnes. This came as merchant iron ore concentrate production rose by 46% year-on-year to 11,311 thousand tonnes amid lower intragroup consumption, higher total concentrate output and higher margins than pellets in the fourth quarter. At the same time, the output of merchant pellets dropped by 7% over the period to 6,951 thousand tonnes.

As for Southern GOK, the joint venture produced 12,260 thousand tonnes of overall iron ore concentrate in 2019, largely unchanged year-on-year. Production of merchant concentrate increased by 6% year-on-year to 11,497 thousand tonnes, while output of sinter fell by 46% year-on-year to 946 thousand tonnes.

COKING COAL

Metinvest's coking coal asset is United Coal, a high-quality producer in the central Appalachian region of the US with total coal reserves base of approximately 149 million tonnes as at 31 December 2019[3] and coking coal concentrate production capacity of around 3 million tonnes a year.

In 2019, United Coal extracted 8,332 thousand tonnes of raw coal, using both underground and surface mining techniques, up 19% year-on-year. Meanwhile, its production of coking coal concentrate equalled 2,961[4] thousand tonnes, 10% higher than in 2018, driven by higher productivity and improved mining and geological conditions at the Affinity mine, as well as greater production from new mining sections.

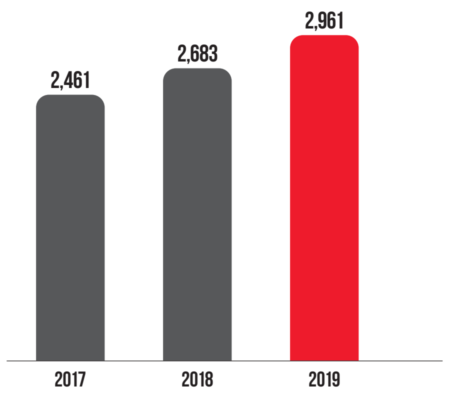
United Coal's coking coal primarily goes to the Group's coke production facilities in Ukraine. During the reporting period, Metinvest's coking coal self-sufficiency was 46%, calculated as actual coking coal concentrate production divided by actual consumption of coking coal concentrate to produce coke required for production of hot metal and PCI coal to produce hot metal.

>> CONTINUED ON PAGE 27

* Production figures for 2017 were updated to exclude production at the assets where control was lost in March 2017.
1 Metinvest's estimate based on companies' public production information for 2019.
2 Including production for intragroup consumption.
3 As evaluated by Marshall Miller, according to the US Geological Survey Circular 891.
4 Total coal concentrate production presents coal production in the equivalent of coal concentrate and does not include the processing of purchased coal.

Coking coal concentrate production

2,961KT
+10%



ENSURING THE LONG-TERM SECURITY OF TAILINGS

In 2019, following the tragic collapse of a tailings dam in Brazil, the long-term integrity of such facilities worldwide came under scrutiny. In response, Metinvest engaged independent consultants to survey its tailings storage areas and related dams.

ENHANCED VIGILANCE

The January 2019 event had a seismic impact on the global iron ore market. Beyond the effect on global supply and pricing, the disaster forced the mining industry to urgently review procedures and inspect tailings dams across the planet. Part of this process included ensuring that miners had sufficient safe capacity for their waste production so as not to overwhelm existing facilities.

As Metinvest's number one priority is to ensure the safety of its employees and communities, the Health, Safety and Environmental Committee of the Supervisory Board tasked the management to have an independent survey of its tailings storage facilities conducted. To this end, the Group engaged reputable international experts, SRK Consulting (UK) Limited, to perform a dam safety operational review (DSOR) audit in accordance with the relevant Mine Association of Canada (MAC) guidelines and Canadian Dam Association (CDA) dam safety guidelines (2013), which are currently considered to represent international best practices. The audit's target was to assess dam stability, which included an analysis of the design and operational parameters of all tailings storage facilities.

"Tails" are a waste stream generated by ore enrichment plants as part of their normal functioning and consist of ground rock and effluent that is stored as tailings in special ponds or dumps. At Metinvest, the flow between the plants and tailings is a closed loop of purified water to limit contamination of ground and river water. The Group has tailings storage facilities at each of its three iron ore assets. These are upstream raised facilities located on terrain with ravines in areas with relatively little seismic activity and less prone to heavy rainstorms.

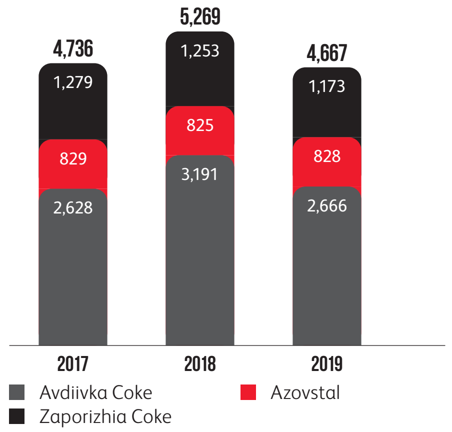
All of the Group's dumps have capacity sufficient for many years of operations. To retain the licences necessary to conduct its business, Metinvest fully meets Ukrainian regulatory requirements. The Group maintains strict controls to monitor the storage facilities and minimise potential risks. Group employees check their dams twice a day; a special commission visits them twice a year; and the state authorities analyse the condition of them once a year.

According to the report obtained from SRK, the Group is in compliance with local regulations. Metinvest will continue to track available technological solutions that make it possible to enhance the security of the tailings storage facilities in line with international best practices and to ensure they remain safe for both communities and the environment for generations to come.

The Group carries out regular scheduled maintenance of tailings storage facilities and recycled water supply at its three iron ore assets. During 2019, projects to manage related waste streams from Metinvest's iron ore assets included a waste thickening project at Northern GOK, for which a feasibility study was completed last year. In 2020, it is planned to proceed with basic engineering development. The project aims to decrease maintenance and operating costs by reducing the volume of transportation of pulp by thickening it.

Coke production

4,667KT
-11%



KEY PARAMETERS OF TAILINGS STORAGE FACILITIES AS AT 31 DECEMBER 2019

PARAMETERS	NORTHERN GOK	INGULETS GOK		CENTRAL GOK
		PHASE 1	PHASE 2	
Date of initial operation	1963	1965	2007	1961
Raising type	Upstream	Upstream	Upstream	Upstream
Tailings storage impoundment volume, mcm	584	501	77	168
Volume of annual tailings storage impoundment, mcm/year	12.6	12.6		6.7
Area, hectare	857	319	203	1,708
Absolute filling mark of dam crest, metres	161	148	133	113

Additional coking coal volumes required for coke production are sourced externally. In order to minimise the risk of supply disruptions, Metinvest has diversified its coking coal supplier base, including suppliers from such countries as the US, Canada, Australia and Indonesia. In addition, in 2018, the Group acquired a 24.77% stake in the Pokrovske coal business, Ukraine's largest coking coal operation, with which it has signed a long-term supply agreement.

The value of these efforts was proven in June 2019, when certain restrictions on metallurgical coal supplies to Ukraine were introduced. In response, Metinvest increased coking coal production at its US mines, secured additional seaborne volumes and ramped up purchases from the Pokrovske coal business, thereby avoiding major disruptions to hot metal production operations.

METALLURGICAL SEGMENT

COKE AND CHEMICALS

In 2019, Metinvest's coking assets consisted of Avdiivka Coke, Zaporizhia Coke and the facilities at Azovstal, all of which are located in Ukraine. Their total present production capacity is around 7 million tonnes of wet wharf coke a year.

In 2019, these assets produced 4,667 thousand tonnes of dry blast furnace coke, down 11% year-on-year. The decline in output was attributable to a shortage of coking coal related to certain export restrictions imposed by another country, unstable equipment operation at Avdiivka Coke, as well as lower intra-group consumption in the fourth quarter of the year.

During the reporting period, the Group's coke self-sufficiency was 139%, calculated as actual coke production divided by actual consumption of coke to produce hot metal.

In order to secure long-term coke supplies, Metinvest acquired a 23.71% stake in Southern Coke, a Ukrainian metallurgical coke producer, and 49.37% in Dnipro Coke. After the reporting period, in March 2020, Metinvest acquired another 23.64% of Dnipro Coke, as a result of which the company became a subsidiary of Metinvest as its total interest in the entity reached approximately 73%. The current annual wet wharf coke production capacity of Southern Coke is around 900 thousand tonnes and that of Dnipro Coke is roughly 600 thousand tonnes.

>> CONTINUED ON PAGE 30

OPERATING RESULTS CONTINUED

INTEGRATED PRODUCTION PROCESS

Metinvest's vertically integrated structure allows it to control the entire steelmaking process, from mining iron ore and coking coal to shipping finished goods by rail, road or sea.

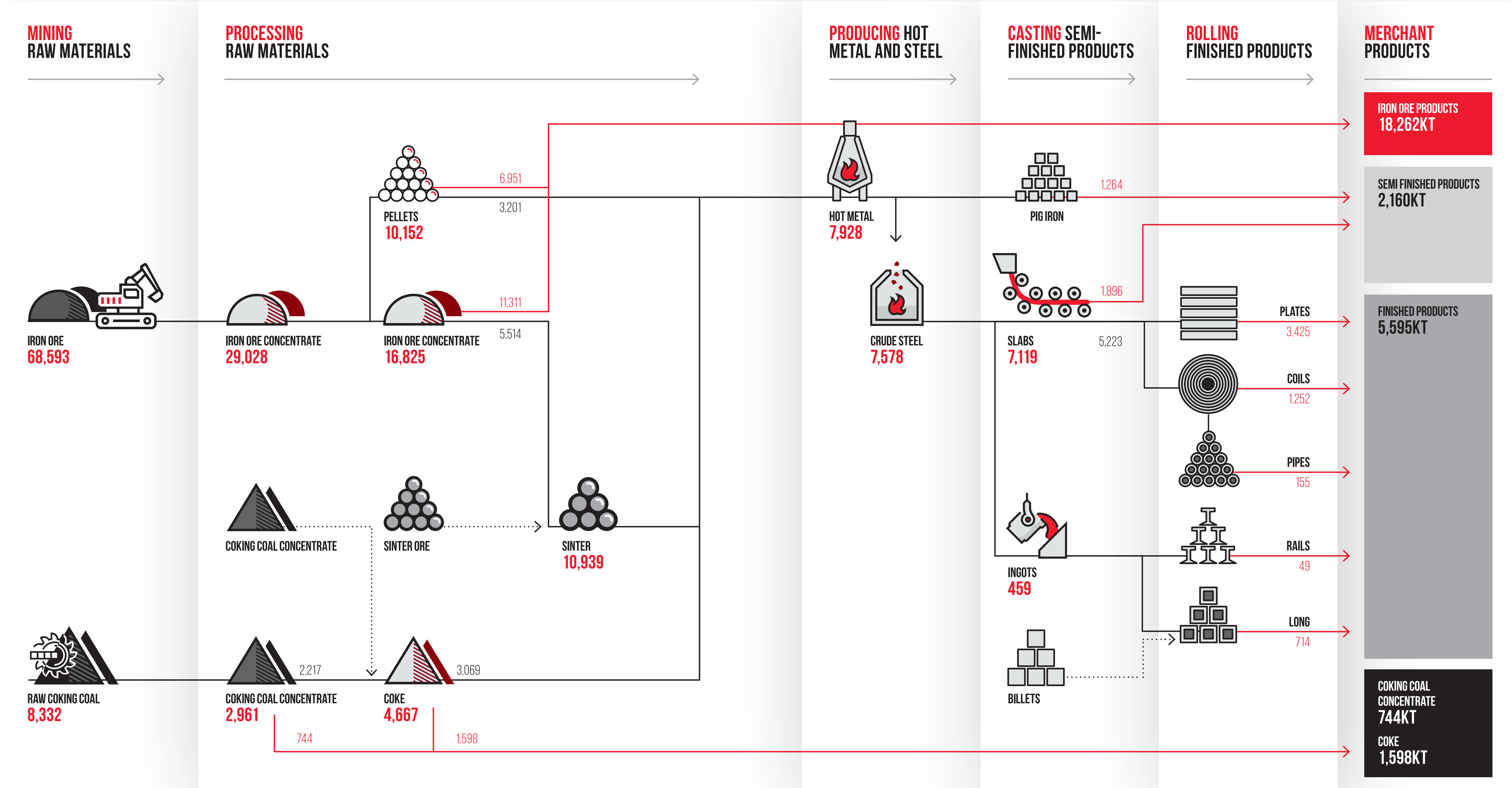
Legend

Total production (KT) 1,234

Merchant products (KT) 1,234

Production for internal use (KT) 1,234

Third-party supply



OPERATING RESULTS CONTINUED

In addition, the Group's subsidiary Inkor Chemicals makes chemical products in Ukraine. In 2019, this asset produced approximately 20 thousand tonnes of naphthalene and 2.5 thousand tonnes of phenols and cresols.

STEEL
The Group is the 42nd largest steelmaker in the world and the fourth in Eastern Europe[5].

Metinvest's steelmaking assets are Azovstal and Ilyich Steel, both integrated producers located in Mariupol, Ukraine, near the Sea of Azov. The Group recently increased its overall steel production capacity by 15% to 9.6 million tonnes per year after commissioning continuous casting machine no. 4 at Ilyich Steel.

In addition, Metinvest has a 49.9% stake in Zaporizhstal, which has annual production capacity of around 4 million tonnes of crude steel and is classified as a joint venture. The partners have been creating considerable synergies: Zaporizhstal is also one of the Group's top purchasers of iron ore, meaning that additional margin can be captured through Metinvest's share of its steelmaking capacity, while Zaporizhstal's product mix is complementary to Metinvest's. The enterprise is located in Zaporizhia, in southeastern Ukraine, home to Metinvest's Zaporizhia Coke. It stands on the banks of the Dnipro River, a strategic transportation route and close to the Group's iron ore facilities in Kryvyi Rih.

The Group also has four rolling mills in Europe – Ferriera Valsider and Metinvest Trametal in Italy, Promet Steel in Bulgaria and Spartan in the UK. The flat producers in Italy and the UK re-roll slabs from Ukrainian steel mills into plates and coils closer to local customers, while the Bulgarian long producer re-rolls third-party square billets into rebar, wire rod and other long products. Metinvest's total re-rolling capacity in Europe is around 2 million tonnes a year.

In addition, in 2018, the Group acquired Unisteel, which operates a coil galvanising line located in Kryvyi Rih, Ukraine. It can produce up to 100 thousand tonnes of such coils a year.

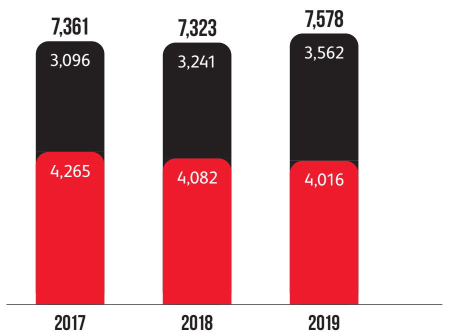
In 2019, Metinvest's hot metal output totalled 7,928 thousand tonnes, down 3% year-on-year. The decline was attributable to the shutdown of blast furnaces nos. 5 and 6 at Azovstal in June, which was partly compensated by the launch of the highly efficient blast furnace no. 3 following a major modernisation and upgrade. In addition, the Group used the unfavourable market environment in the fourth quarter of the year as an opportunity to carry out essential maintenance of several blast furnaces at the Mariupol site to prepare itself to ramp up volumes should markets recover.

Meanwhile, Metinvest's crude steel production rose by 3% year-on-year to 7,578 thousand tonnes in 2019 due to a 10% year-on-year increase at Ilyich Steel following the launch of the new equipment.

From the total volume of crude steel produced, Azovstal and Ilyich Steel casted 7,119 thousand tonnes of slabs, of which 5,223 thousand tonnes were produced for utilisation by their own rolling mills and supply to Metinvest's European re-rollers to produce flat products. In addition, Azovstal produced 459 thousand tonnes of steel ingots, which were used for further production of long products and rails.

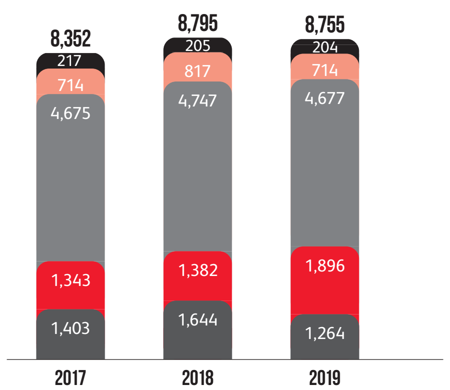
Crude steel production

7,578KT
+3%



Merchant pig iron and steel product output

8,755KT
0%



During the reporting period, the Group's output of merchant pig iron and steel products remained flat year-on-year at 8,755 thousand tonnes. At the same time, the share of steel products reached 86%, up 5 percentage points year-on-year, driven by a 37% growth in slab output primarily due to the redirection of hot metal for making steel and downstream products after the commissioning of the new continuous caster at Ilyich Steel. Meanwhile, output of flat products fell by 1% year-on-year, mainly due to the shutdown of the hot strip mill 1700 for a scheduled major overhaul and upgrade from 27 August to 5 November 2019. Output of long products declined by 13% year-on-year amid lower demand.

In response to greater requirements from the market and customers, Metinvest launched 45 new steel products at Azovstal and Ilyich Steel in the reporting period. Most were additional types of hot-rolled plates, cold-rolled coils, galvanised coils and slabs.

In 2019, the Zaporizhstal joint venture produced 4,004 thousand tonnes of crude steel. Finished steel goods – which include coils, plates, joist web, strip and tin – accounted for 85% of the product mix and merchant pig iron for the remaining 15%.

OUTLOOK FOR 2020
The outbreak of the coronavirus in early 2020 has brought additional uncertainty to the global steel and iron ore markets, as well as heightened concerns about global recession, which has significantly reduced short- and medium-term visibility. Metinvest's management remains ready to take the decisive steps to adapt to changes in market dynamics and its vertical integration will continue to provide an important degree of flexibility.

Along with an overriding focus on the health and safety of its employees and efforts to reduce its environmental impact, the Group will continue to develop solutions to improve the efficient management of its mining and metallurgical assets to drive down operating costs, which is vitally important for any metals and mining company to improve its resilience to economic cycles.

Metinvest will also complete testing works on the hot strip mill 1700 at Ilyich Steel and the upgraded beneficiation plant at Central GOK to ensure its customers receive high-quality hot-rolled coils and iron ore products, respectively.

5 World Steel Association ranking for 2019, based on tonnage produced and geographical location of assets.

ESTIMATING ORE RESERVES IN ACCORDANCE WITH JORC CODE

Last year, Metinvest arranged a reassessment of its mineral resources and ore reserves in accordance with the JORC Code. The aim was to provide stakeholders with the most accurate data, as well as help the Group's long-term planning.

AN INDUSTRY STANDARD
The JORC Code is the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. It is an internationally recognised reporting standard for minerals exploration results, mineral resources and ore reserves that is adopted worldwide for market-related public reporting and financial investments. The code was first published in 1989 and has been regularly updated since, with the last one being done in 2012.

Last year, Metinvest appointed a reputable international independent expert, SRK Consulting (UK) Limited, to prepare Mineral Resources and Ore Reserves statements for its Ukrainian iron ore mining assets Central GOK, Northern GOK and Ingulets GOK in accordance with the JORC Code. The assessment process takes into account several external factors, including the latest legislation governing subsoil resource use, health and safety policies, environmental considerations and other important factors impacting the development of these resources.

According to the results of the assessment, as at 31 December 2018 Metinvest's Mineral Resources totalled 10,163 million tonnes grading 35.2% Fe_T (total iron) and 26.2% Fe_M (magnetic iron) and Ore Reserves totalled 2,296 million tonnes grading 34.2% Fe_T and 25.3% Fe_M.

This represents a 62% and 96% growth in the Group's estimated Mineral Resources and Ore Reserves, respectively, in comparison with the previous assessment conducted as at 1 January 2010, adjusted by management for depletion during the 2010-18 period and other revaluations according to Ukrainian standards. The updated statements reflect the Group's continued successful focus on exploration activities and completion of technical studies to secure the Group's long-term production profile and support the sustainable supply of iron ore for internal and external sales.

Overall, the Group has invested US$2,481 million since 2011 in its three iron ore assets to maintain operations, explore ore deposits, upgrade production facilities to improve output quality, and to manage environmental impacts. As of the date of the assessment and based on current production volumes, Metinvest has sufficient iron Ore Reserves to continue to maintain operations for more than 25 years. Importantly, this assessment helped Metinvest to reconfirm its status as one of the largest iron ore producers in the world, not only based on annual production volumes but also based on iron ore reserves.

MINERAL RESOURCES

10,163MT

ORE RESERVES

2,296MT