



ArcelorMittal Ostrava  
For a better life in the region



ArcelorMittal



Sustainability Report 2017

ArcelorMittal Ostrava

largest metallurgical complex in the Czech Republic

We employ

4,414 people at ArcelorMittal Ostrava

Along with our subsidiaries

we employ 5,252 people

Our manufacturing capacity

is 3,600,000 tons of steel

## ArcelorMittal Ostrava a.s.

Is the largest metallurgical complex in the Czech Republic. Every year we produce more than 2 million tons of steel used primarily in construction and machinery. It is the largest manufacturer of road safety barriers in Czechia. In addition to the domestic market, it delivers its products to more than 40 countries throughout the world. Its most important export countries include Poland, Germany, Italy, Slovakia, and Saudi Arabia. Due to above-standard greening technologies, we produce our products with the minimum possible environmental footprint.

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Dear ladies and gentlemen,

This year we have entered the fifteenth year since our privatization. It brings with it a significant change, namely the change in ownership of the steelworks. In conjunction with the acquisition of Europe's largest steelworks in Italy, the ArcelorMittal Group was obligated to provide a remedy package consisting of the sale of several manufacturing businesses.

This was due to concerns by the European Commission that the market share incurred could have a negative impact on economic competition.

For our steelworks, however, not much will change. Manufacturing will continue at full capacity and without the loss of personnel. The new owner will continue to operate and develop the steelworks so that is an active competitor in the steel market and to remain a pillar of the economy in the region. It will of course proceed conscientiously with the activities for the support of our city and region, so that our steelworks may continue to be a strong social partner and a good neighbor.

In the past year we have once again supported numerous activities for the benefit of the public in our area. With the help of our own employees we have supported through donations or volunteering more than eighty organizations that represent those who need our help. In the fifteen years since privatization, the steelworks has supported cultural, educational, and social projects in our region to the tune of over CZK 600 million.

We are conscious of the impact our manufacturing has on the environment and we continue to work to mitigate that impact to the greatest possible extent. Compared to our situation fifteen years ago, we have reduced particulate emissions by over 75% through the installation of the best technologies and we range far below the limits established by the EU. In order to achieve this we invested CZK 6.7 billion of our own funds in greening technologies, along with CZK 1.5 billion of EU funds. In this way we have more than kept the promise we made to this region.



Since privatization we have invested CZK 11.8 billion in modernization of equipment and improvements to workplace safety. Last year we recorded a decrease in production due to planned repairs and investments in modernization requiring extended testing, accompanied by an operating loss. This year, however, our production will once again be at full capacity.

Our great challenge last year was, and will continue to be in upcoming years, the automation and digitization of our operations. It is automation that will lead us to increased competitiveness, allowing us to systematically react to the challenges of our changing world. We therefore consider investments in automation to be investments in the future of our plant.

Dear readers, if you want to know what goes on in the plant, read on to the next pages of this report and follow us on social networks. We appreciate your interest.

Ashok Patil  
CEO and Chairman of the Board of Directors



ArcelorMittal Group is the world's leading steel and mining company, with a presence in 60 countries and an industrial footprint in 18 countries.

#### Information about the sale of the Ostrava steelworks

In association with the acquisition of the largest steelworks in Italy, Ilva, the ArcelorMittal Group had to submit a remedy package consisting of the sale of manufacturing plants in Ostrava, as well as in Romania, Italy, Luxembourg, Belgium, and Macedonia. This was due to concerns by the European Commission that the market share incurred could have a negative impact on economic competition in Europe. At the beginning of May 2018, the Commission approved the remedy package for the intended acquisition.

The Ostrava steelworks will be sold as a functioning manufacturing company, without reduction of capacity or personnel. It will continue to be operated at full capacity and sustainability under the new owner. The European Commission will assess selected potential buyers from the perspective of whether they are capable of continuing to operate and develop the steelworks such that it may be a lasting and active competitor. The sale process will be completed by the end of 2018.

## Product portfolio

### Long products



### Wire rod



### Reinforcing steel



### Steel mine supports



### Safety barriers



### Flat products (hot rolled)



### Spiral weld pipes and seamless tubes



### Castings



### Engineering products



### Threaded bars



### Round cast billets



### Spring steel



### Reinforcing steel in coils



### Reinforcing steel for cryogenic temperatures



## 2017 by the numbers

**We produced**  
1,826,183 tons of liquid steel.  
1,632,238 tons of hot metal.

**We processed**  
612,770 tons of scrap.

**We sold**  
555 km of safety barriers.

**We supported the city and the region with**  
CZK 23,778,380.

**The monthly earnings of our employees average**  
CZK 36,646.

In the past year our company produced **1,063,632 t** long products (heavy-section mill, medium- and fine-section mill, wire-rod mill and engineering products) and **429 945 t** flat products (hot-strip mill).

## Sustainable development

Sustainability is part of our lives. We seek to strike the proper balance between the environment, society, and the economy.

We've accepted 10 sustainable development outcomes, through which we can contribute to a better future, not

only in how we make steel or make use of natural resources, but also in how we support our employees and the surrounding community. These outcomes have contributed significantly to defining goals, strategic plans, and improvements that are reviewed and updated annually.

We perform all of our activities responsibly according to the fundamental values of the company – sustainability, quality, and leadership – taking into account the health, safety, and well-being of all employees, suppliers, and the

communities in which we have a presence. A list of the activities we perform as part of these sustainability outcomes is described in detail in separate chapters focusing on the individual indicators.

## 10 outcomes of sustainable development

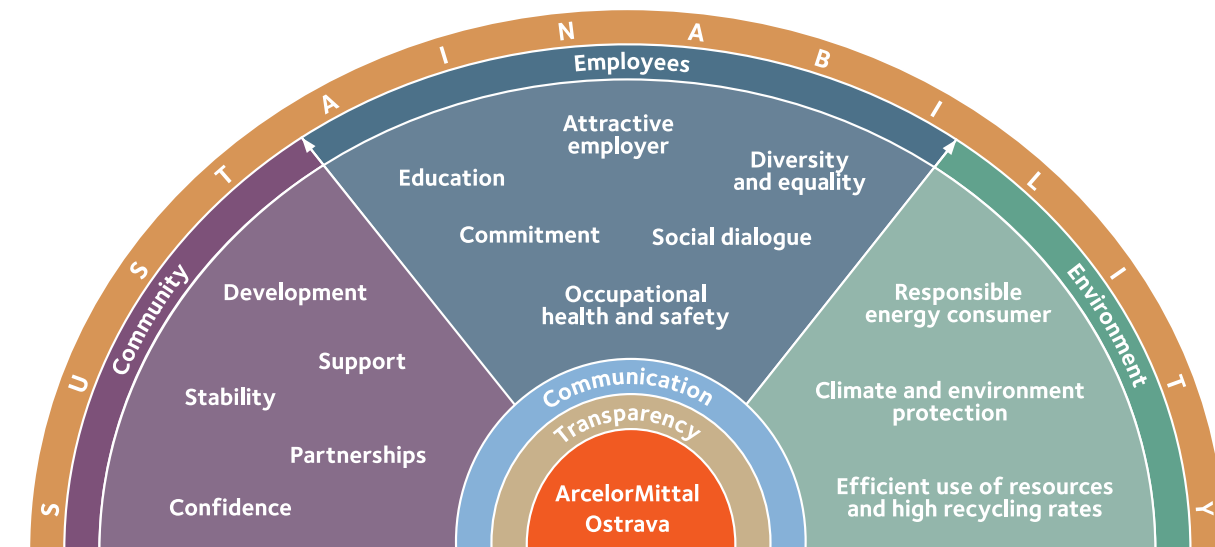
1. Safe, healthy, quality working lives for **our people**
2. **Products** that accelerate more sustainable lifestyles
3. Products that create sustainable **infrastructure**
4. Efficient use of **resources** and high recycling rates
5. Trusted user of **air, land and water**
6. Responsible **energy** user that helps create a lowercarbon future
7. **Supply chains** that our customers trust
8. Active and welcomed member of the **community**
9. Pipeline of talented **scientists and engineers** for the future
10. Our contribution to society measured, shared and valued, all supported by **transparent management**

The key activity areas important to us as part of these outcomes are graphically represented in the image.

## SUSTAINABLE DEVELOPMENT GOALS

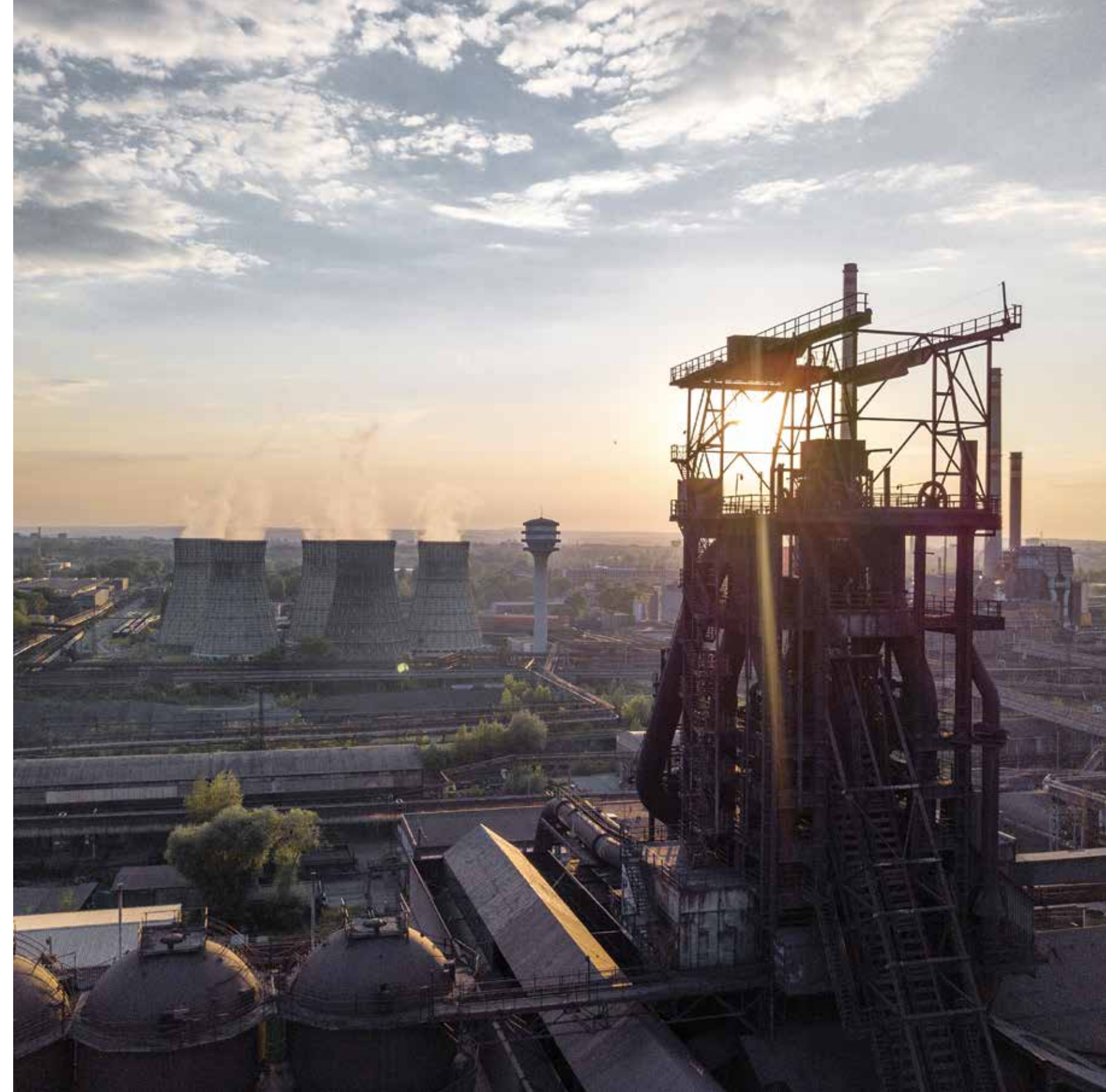


The 10 outcomes of sustainable development closely correspond with the achievement of the UN Sustainable Development Goals 2015–2030, which are important for us and we wish to contribute to achieving them.



## Our stakeholders primarily include:

Stakeholder	Topics	Form of communication	Frequency of communication	Responsible
<b>Employees</b>	Labor relations	Collective bargaining	Annual	Personnel department
	Working conditions	Employee representatives on the Supervisory Board	4x a year	TOP management
	Remuneration and collective agreement	Internal meetings	continuous	Management
	Employee education and development	Magazine 1 Intranet	monthly continuous	Internal communications Internal communications
<b>Customers</b>	Information on products and sales conditions	Communication with the customer Trade fairs	continuous	Sales and marketing, Procurement
	Future plans and strategy of the company			
	Sustainable management			
<b>State authorities</b>	Legislation	Exchange of experience, cooperation on legislative changes	regular and according to need	Management
	Economic policy			
	Current regional and national topics			
<b>Investors, shareholders, analysts</b>	Company financial development	Financial and annual reports	continuous	Office of the Board of Directors
	Strategy			
	Sustainable development topics			
<b>Municipalities</b>	Local development	Meetings with municipal representatives	regularly	Management
	Cultural, sporting, and social engagement of the company			
	Future investment			
	Permits			
<b>Media</b>	Development of new activities	Press releases and conferences	regularly	Press spokesperson
	Special events			
<b>Non-profit organizations</b>	Current social affairs	Meetings with NGO representatives	regularly	Management
	Sustainability			
<b>Schools and universities</b>	Practical experience in the interest of education	Meetings with representatives of educational institutions	continuous	Human resources
	Recruiting graduates	Recognition of research projects		
	Dual education	Labor exchanges		





01

Safe, healthy, quality  
working lives for  
our people

The safety and health of our employees and all persons we encounter in our work activities is our most important goal.

Working in the business of steel production requires unceasing caution and vigilance toward all hazardous situations to prevent accidents from happening to our employees as well as our suppliers. For this reason we carry out a range of activities that identify threats, increase our awareness, and protect us from adopting a casual approach to safety.

## Safety

We have made reducing the number of serious and fatal workplace accidents our priority. For this reason we place an extraordinary emphasis on prevention and we regularly train all our employees in safety regulations.

We use the following tools to achieve this goal:

- **Five-minute safety sessions** (during which we inform employees about essential facts related to the safety of the required work. These include workplace risks, following processes safely, using personal protective equipment, methods of communicating among employees, and more).
- **Safety audits at the individual worksites** (top leadership performed 576 layered audits and middle management completed 11,073 audits of shop floors and worksites. During these audits 7,805 safety measures were assigned, of which 97% have already been fulfilled).
- Regular communication of the **Golden Rules of Safety**.
- **The H&S Committee** (the top management of the company and union representatives visit the plants and address occupational hygiene and safety issues, recommending corrective measures according to the “Journey to Zero” project). Last year they met eight times.
- **Meetings of the CEO** and employees, as well as employees of our subsidiaries, on questions of occupational safety.
- **Informing about serious workplace injuries and events** that occurred in other companies within the ArcelorMittal Group. The purpose of this activity is to check whether similar risks are occurring in our facilities as well, and preparing safety measures that can mitigate these risks.
- **Practical and online trainings**, examining injuries along with employees.

HEALTH & SAFETY

**The Golden Rules**

ArcelorMittal

1. I will come to work in a “fit and able” condition.
2. I will use fall protection or prevention whenever and wherever required according to our standards.
3. I will follow the lockout/isolation procedure when working on equipment.
4. I will follow the confined space entry procedure before entering as well as during the full duration of the task.
5. I will respect all the rules of load handling at all times and never stand under a suspended load.
6. I will respect all the traffic rules.
7. I will respect rail priority and stay out of close clearance areas without proper precautions being taken.
8. I will respect the rules for entering and/or working in hazardous gas areas.
9. I will not disable safety devices.
10. I will respect all the H&S basic rules, standards and signals and I will wear the required PPE.

Stop. Think. Act safely.

## Journey to Zero

We are continuing to carry out the Journey to Zero project, whose purpose is to become the safest steel producer. As a result we maintain a high level of safety standards that are even stricter than Czech legislation. They apply, for example, isolating and locking equipment, confined areas, work at heights, cranes and lifting equipment, rail transport, and the management of external companies.

We meet with representatives of our fifty most important suppliers as part of the H&S management of the employees of external vendors working in the company complex. Here we familiarize them with the causes and protective measures of the individual accidents and with our current H&S innovations. All external employees must take a safety test covering the basic H&S rules prior to entering our company. Afterward, they take a training covering H&S risks at the specific worksites, while a “last-minute risk analysis” is performed before the start of each shift.



We continue to execute the Journey to Zero project, whose goal is to become the safest steelmaker in the world.





## Take care! training

Since 2016 we have been carrying out the unique Take care! training project intended for manual laborers. We focus on a practical level of accident prevention in everyday work. The cause of most accidents is usually human error, and for this reason we focus a great deal of attention on H&S and we endeavor to change the work habits of our employees. Each participant in the program undergoes a cycle of five days of practical workshops intended to help change their approach to perceiving safety from "I have to" to "I want to".

In 2017 a total of 1,484 manual employees attended Take care! training. By 2018 a total of 3,375 manual employees of ArcelorMittal Ostrava will have received the training.

*"The goal of all our activities and organized programs is to change the attitude of employees toward safety. This change represents their active engagement in prevention. To focus not only on their own safety, but also the safety of other colleagues."*

**Jiří Michálek**  
Director of Health  
and Safety



## Health

All employees undergo regular workplace medical examinations paid for by the employer and scheduled during working hours. These serve to determine the health condition and assess work capacity in the given working conditions.

Good health has a decisive importance for quality of life. A healthy lifestyle in the sense of improving eating habits, increasing physical conditioning, or quitting smoking can prevent a range of illnesses. It is important for us not only to create a safe working environment for all employees but also to promote their health and comfort. For this reason we motivate our employees using targeted programs and activities to encourage them to adopt the principles of healthy lifestyle in their free time as well.

Our employees can take advantage of the services of our sports centers, which offer not only rehabilitation but also programs for recreational and fitness activity as well. They can choose from massages or programs focusing on themotor and respiratory systems.

Health stays at selected spas and vitamin packages in winter have also become popular. To support health and a healthy lifestyle, our company introduced free salads in 2017. Salads accompanying every hot meal are provided to all employees. This innovation met with a positive response throughout the company.

## Health and Safety Day

The tenth annual Health and Safety Day was attended by 3,088 employees. This event regularly incorporates activities focused on occupational health and safety. This time employees had the opportunity to attend lectures on first aid including hands-on practice and to complete training sessions on how to handle serious events. Many employees tried out new personal protective equipment - helmets, goggles, work clothes, and more. Throughout the day we monitored speeding in the company complex, conducted shop-floor audits with a focus on compliance with non-smoking areas, checked cycling gear, and performed vision exams for employees. Before the event and throughout Health and Safety Day an H&S preventive campaign ran in all information channels.

For employees older than 50 years of age we offered the Mature Age program, allowing them to have blood drawn for tests of PSA, blood glucose, and cholesterol free of charge. A total of 367 employees got involved. 100 of our employees also participated in Program 50+, a rehabilitation program focused on improving their medical condition.

*"I was able to participate in Program 50+. Once I took care of the necessary formalities I received an initial medical exam to determine my current state of health, and was then offered procedures to improve my medical condition. I want to thank everyone who contributed to providing this program focused on improving the health of employees 50 and older. For me this program certainly achieved its purpose, and for this reason I recommend not resting on your laurels and providing similar programs for other colleagues to the extent possible."*

**Program 50+ participant**



## Health Awareness Week

In September we organized Health Awareness Week. Over the course of five days, 5,679 employees participated in the event. The motto of the week was: Health is everything.

Employees could take part in the Healthy Lungs event, which focused on preventing lung cancer. They also had the opportunity to have measurements taken of their BMI. Practical training was offered in extinguishing fires. Practical first aid exercises took place at the medium-section rolling mill. During the entire event, a special healthy menu was available in the company canteens.

Sport plays an essential role in healthy lifestyle. We therefore organized sporting tournaments in football and bowling. Employees could also enjoy sporting events as part of the tenth annual Steelmaker Olympics. Several thousand employees participate in Health and Safety Week every year, a testimony to the fact that they are interested in maintaining their physical fitness and leading a healthy lifestyle. Sporting events and preventive programs continue to enjoy a high level of popularity. In September we celebrated two years as a smoke-free workplace.



### Employee development

Satisfied, motivated, and effective employees are the foundation of the long-term success of our company. To ensure that this is the case, we prepare a wide range of professional, language, computer, managerial, and other courses and trainings in our learning center to facilitate our employees' professional development. We encourage our employees to develop their talents and skills, allowing them to further grow in their careers.

### Talent program

Employees with excellent results in their annual performance review may enroll in the Talent Program. This special training program is intended for personnel in

line worker positions, salaried employees, and managers. It includes seminars and workshops focused on developing communication skills, collaboration in teams, and knowledge of financial issues.

The Talent Program includes the Leadership Academy, a targeted two-year program for talented people with the potential to advance to management positions. The Program focuses primarily on deepening and developing key leadership competencies in people management. Graduates of the Leadership Academy refine such skills as effective team management, the art of motivating direct reports, the art of communicating and presenting, and financial literacy and insight. In 2017 a total of 126 employees participated in the Talent Program. Of these 21 were manual workers, 90 were salaried employees, and 15 were participants in the Leadership Academy.

### Gender Club

The steel industry, with its large furnaces, steel plants, and rolling mills at first glance would not seem like a place that would appeal to women. At ArcelorMittal we think otherwise. We are committed to encouraging more women to build their careers with us. After all, steel is a material important for life, one we encounter everywhere in our daily lives. Why should its applications and further directions not be decided by women? Whether in positions in research and development or as mechanical engineers or team leaders.

At present we are looking for new talent with a technical orientation. We do not seek to fill a percentage representation of women in our company as part of gender balance, but rather that anyone with talent, regardless of gender, may develop their abilities. We want the best people, and that's why we offer them a fair and equal opportunity for growth.

One of the tools for gender balance and inspiration is our Gender Club. This is an informal networking meeting of male and female employees that motivates its attendees to further development. We regularly invite guests to the club – successful personalities from a variety of fields. With their life stories they present an approach to career growth and work-life balance..

We want the best people, and that's why we offer a fair and equal opportunity for growth.



## Talent Club

Selected employees entered in our company Talent Program gather in Talent Club to discuss interesting and inspiring guests. A central theme of such meetings, of course, is How to discover and apply their talents. Other topics are based on the professional careers of the invited guests. Last year our talented people met with the cyclist, six-time winner of the paralympics, and world champion Jiří Ježek, for example, and the current top Czech pianist Ivo Kahánek.

## Education Week

The motto of the fifth annual Education Week, which took place in June, was Come, get involved, and inspire. Here employees could draw inspiration from various professionals or become an inspiration for others. Of greatest interest was a lecture on healthy eating with a demonstration of healthy cooking by chef Ondřej Slanina, known for the culinary television show Kluci v akci. A great deal of interest was also attracted by the lecture on Innovations from the World of Robotics, which was accompanied by video demonstrations of the use of robots in health care, space explorations, and the military. In addition to lectures, employees participated in various courses, such as using simple exercises to train their memory, learning to work effectively with computer programs and mobile apps for studying foreign languages, and much more. 270 people participated in this diverse program.

## Engine driver requalification

In 2017 the Education department prepared requalification courses for applicants who wished to become engine drivers. The result of the recruitment campaign, which addressed existing employees and external applicants as well, was three requalification courses where we trained 27 new engine drivers. All of the engine drivers had to complete psychological tests, a theoretical component in the ArcelorMittal training center, workshop practice at locomotive maintenance in Česká Třebová, rolling exercises at the Doprava plant, and final exams before the Rail Authority.

## Union relations

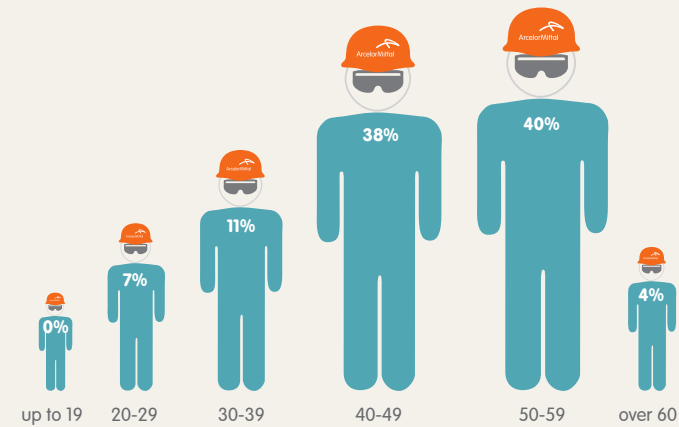
In the past year, a total of 10 trade union organizations were involved in our company, in which 65% of our employees were organized. In 2017 a new collective agreement was executed that applies to the years 2017 - 2019. The execution of the new collective agreement led to the significant streamlining of this document, removal of citations from the Labor Code, and the creation of a supplemental document containing selected provisions of the Labor Code that has been made available to all employees.

Regular meetings take place between company leadership and all trade union organization dealing with the problems of permanent employees, as well as questions of the employment rate, investments, occupational safety, and the future of the company. "There are lots of things we can discuss and implement, but also a lot of things we point out that should change. The priority of the unions is employment of personnel, dignified working, social, and wage conditions, and last but not least, the sustaining and development of steel production in our region and the Czech Republic," says Roman Bečica, chairman of ZO OS KOVO Mittal Steel Ostrava - Steelworks.

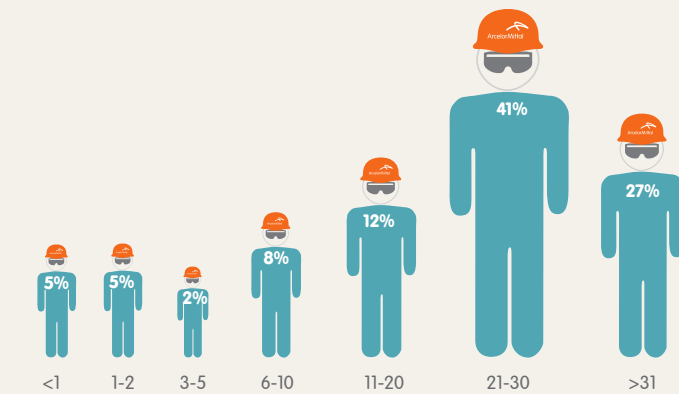
The motto of the fifth annual Education Week was  
Come, get involved, and inspire.



## Age structure and duration of employment in 2017



employee age



duration of employment

## Key performance indicators

Safe, healthy, quality working lives for our people	2017
Fatal Injury Rate	1
Lost Time Injury Frequency Rate per 1 million hours worked	1,38
% of total absences	5,63
Number of occupational diseases	15

Number of hours of employee training	183 759
By category	
Management	6 390
Salaried employees	35 782
Laborers	141 587

Number of trained employees	30 423
By gender:	
women	3 005
men	27 418
By category	
Management	1 077
Salaried employees	6 389
Laborers	22 957
Employee safety training	9 926
Average number of training hours per employee per year	35
% of employees covered by collective agreement	99

## Employee benefits

Last year we continued to provide our employees with a range of financial and non-financial benefits to which they are entitled under the current Collective Labor Agreement. These benefits include a contribution to support recreational activities for our employees' children, contributions for childbirth, contributions toward their supplementary pension insurance and life insurance schemes, meal allowances, health stays for employees and support of a healthy lifestyle in the form of allowances for sporting activities.

We also provide employees with financial assistance in difficult life situations. We also provide them with interest-free loans toward home ownership. We also contribute to health stays for our employees' children and prepare summer competitions such as the Children's Olympics and creative Christmas Workshops. Both events are highly popular with children and employees alike.

In 2017 we donated to a recreational trip for almost 600 children.

388 employees took advantage of our allowances for sporting activities.





02

Products that accelerate  
more sustainable  
lifestyles

03

Products that  
create sustainable  
infrastructure

It is said that everything around us is made of steel or using steel tools.

We improve the quality of our lives with steel.

It remains one of the most important materials, and for this reason it can build an environmentally conscious infrastructure due to its strength, flexibility, and recyclability.

## New steel for the automotive industry

We have developed and produce steel mainly used in the automobile industry. At the medium-section rolling mill we produce flat bars for leaf springs used in suspension systems. They are made of low-alloy chrome-vanadium steel, remarkable for its toughness, strength and resilience to cyclic loading, which makes it ideal for highly stressed machine components such as leaf springs.

Leaf springs are most commonly used in the automotive industry and in freight transport. Our customers include leading Tier 1 suppliers.

The manufacture of flat bars for the automotive industry means yet another step towards increasing the share of high-value-added products, which in turn improves our competitiveness. This new product, developed in Ostrava, is proof that we place great emphasis on research and development.

## Hot rolled bolts and threaded bars

The production of steel as reinforcement for concrete has a long tradition in Czech industry. Its development reflects the ever-changing conditions for its application, and particularly requirements for construction site safety. Hot-rolled thread bars are one of the modern building elements used in construction. Their development was given significant attention on the part of the Ostrava steelworks. The manufacturing technology requires very careful and precise settings of the rolling mill, such that the screwing capability of the rod can be guaranteed all along its length, ensuring its subsequent use. To achieve the final strength characteristics of the threaded rods, a modern managed cooling technology is used with the proper chemical composition of the steel. Threaded rods are used in construction or as a reinforcing element in geotechnology.



ArcelorMittal Ostrava has been making safety barriers since 1968, producing almost 45,000 kilometers of safety barriers during this time. Most roads and highways in the Czech Republic are equipped with safety barriers made in Ostrava.

## Road barriers with self-healing coating

Last year we delivered 500 tons of safety barriers with Magnelis® self-healing coating for two newly reconstructed sections of the D1 highway. This exceptional coating, which was developed by the ArcelorMittal research and development center, represents a new form of anti-corrosive steel protection.

Unlike regular zinc coating, Magnelis® has a protective layer of coating up to four times thinner. A layer 25 micrometers thick offers sufficient protection against corrosion. At the same time, however, it protects the steel barrier for up to twice as long – up to 40 years. This is enabled by the unique chemical composition, which in addition to zinc includes aluminum and magnesium. Thanks to the high durability and adhesion of the coating, the steel can be shaped using different methods of forming including bending, drawing and profiling.

*“Apart from its durability, the most important added value of the Magnelis® coating is its self-healing capability. It perfectly protects the areas that are most easily attacked by corrosion such as cuts, welds and scratches.”*

**Tomáš Telúch**  
Production Director for  
Final Production



When the protective layer is damaged, Magnelis® can repair itself and extend the life of the entire steel safety barrier system. Magnesium forms a protective film over the damaged area. To protect it against the weather and corrosion.

We will provide another several hundred tons of safety barriers with Magnelis® coating in 2018 for both sections of the highway.

## Industry 4.0

Industry 4.0 is a term for the current trend in digitization and the accompanying automation of manufacturing, as well as the changes on the labor market that come with it.

The benefit of Industry 4.0 is increased quality of human life by increasing work productivity and the elimination of monotonous and physically demanding professions. Automation, system integration, and higher efficiency using more refined logistics also offer hope for reducing negative human impacts associated with industry.

## Automated manufacturing

In 2018 our Industry 4.0 initiative will enter its next phase. The pertinence and importance of this topic for our steelworks is expressed by the formulation of our own term for Industry 4.0, which is Steel 4.0.

Steel 4.0 reflects both a general approach to automation and digitization, as well as the specifics of automating heavy industry and steel production. The main pillars of the Steel 4.0 initiative remain process automation, information systems focused on direct manufacturing, and digitization.

By way of illustration we can list some of the projects completed in 2017:

## Automation streamlined and simplified the shipping of steel

In November we deployed a new weighing system that is part of the process of optimizing semi-trailer transportation. This automated system offers savings of time and costs, and allows us to better coordinate and monitor the movements of trucks within the Ostrava steelworks complex.

The new system also offers better monitoring of jobs and the movement of trucks in the complex, greater reliability, and a general increase in the speed of shipping material. The fact that the system is completely automated has made the issuing of the necessary input and output documents far simpler than before. Moreover, it always provides up-to-date information about the status

of trucks and uses a high-quality identification system to check all necessary data one hundred percent.

Both the steelworks and the delivery personnel appreciate the simplified process. Even though the system of automating documents and weighing truck transportation was only recently launched, the feedback from the delivery personnel has been very positive.

*"Automation at our company will not mean a loss of jobs. Quite the contrary. It offers improved employee safety and a reduction of routine and physically demanding activities. It will also partially help us address the lack of qualified employees on the job market."*



**Veronika Muroňová**

Director of Human Resources

## Attendance system

An information system for recording employees and its location in the plants. Cooperation between the gate system (Alimex) and the attendance system (Fides).





### Recording and reporting scrap

A new system offers online information about scrap deliveries, suppliers, and material. Quality management is conducted automatically, it contributes to better quality monitoring and generates automatic reports.

### Steel Plant – Implementation of the Kettlor model

The Kettlor model is machine equipment for quantitative assessment of argon mixtures in ladle metallurgy. Measuring vibrations in the ladle because of a track of argon bubbles escaping to the surface using speed measurements. A special mathematical algorithm interprets the measured signal.

### Repair of laminar cooling

The goal of the project was to improve the existing cooling technology and achieve higher strip quality. 3 new pyrometers were provided and incorporated into the existing control system. The measured values will be added to the L2 cooling model.

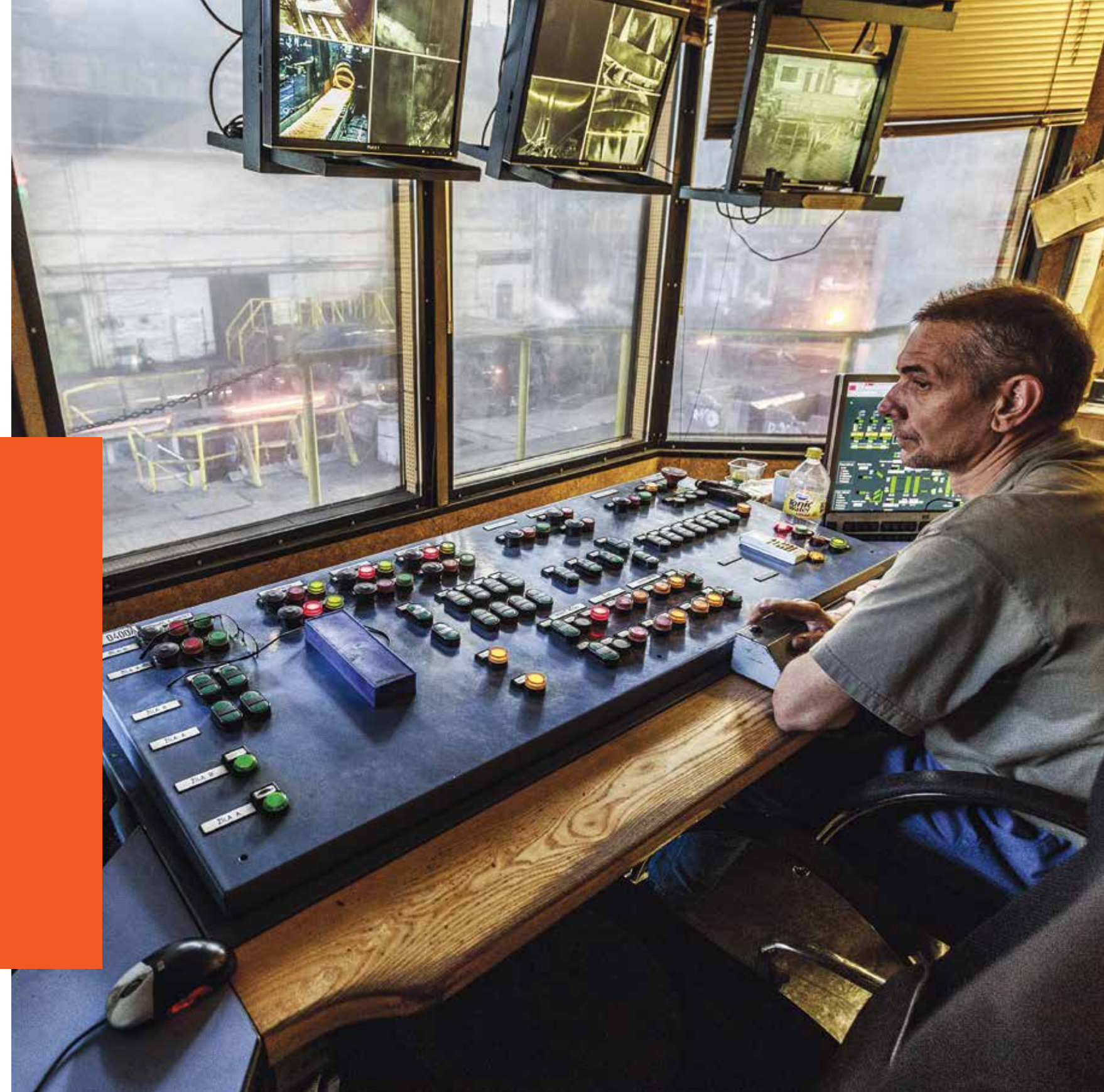
### Medium- and fine-section mill – offline monitoring of threaded bars

A new prototype measuring device that allows for automatic measurement instead of manual measurement. The model is placed manually into the measuring device, whereas the measuring device will be fully automated. It provides information for calibrating the rolling order.

### Wire rod mill – automation of quenching system in furnaces

Until now the rod that quenched the billets – intermediate products for the manufacturing of rolled wire – was operated manually from the cabin. The new system works using cameras and specially developed software. The software finds the position of the billet in the furnace and leads the quenching rod to the correct spot. The billets are thus quenched approximately every minute and the interval between them never exceeds five seconds, parameters that would be difficult for an operator to achieve. This innovation has accelerated, streamlined, and improved the quality of the manufacturing process.

“An undeniable benefit of this innovation is the increased performance of the wire rod mill by reducing the interval between billets. The vision of this new system is to be unique in its flexibility, as it must be capable of responding to changing conditions in the furnace and reliably assess and provide information to the control system. Providing all of this at temperatures of around 1350°C is incredibly challenging technically,” said Jiří Zbořil, Head of Operations at the Wire Rod Mill.





04

Efficient use of resources and high recycling rates

05

Trusted user of air, land and water

06

Responsible energy user that helps create a lower carbon future

Steel is environmentally sound, more so than many other materials, because it is easily recyclable.

Its repeated use is far more energy efficient than its primary manufacturing. Energy saved by recycling steel reduces the annual energy consumption of industry by up to 75%.

We see protection of the environment as a whole. It is only thanks to this complex approach that we can be successful.

We continue in activities that lead to reducing the impact of our manufacturing on the environment.

## 04 Efficient use of resources and high recycling rates

In addition to recycling the steel itself, we also recycle a range of secondary and waste products from industrial production. Some of the waste is certified as products and used primarily in construction.

This includes blast-furnace slag from hot metal production used to produce artificial aggregate and granulate.

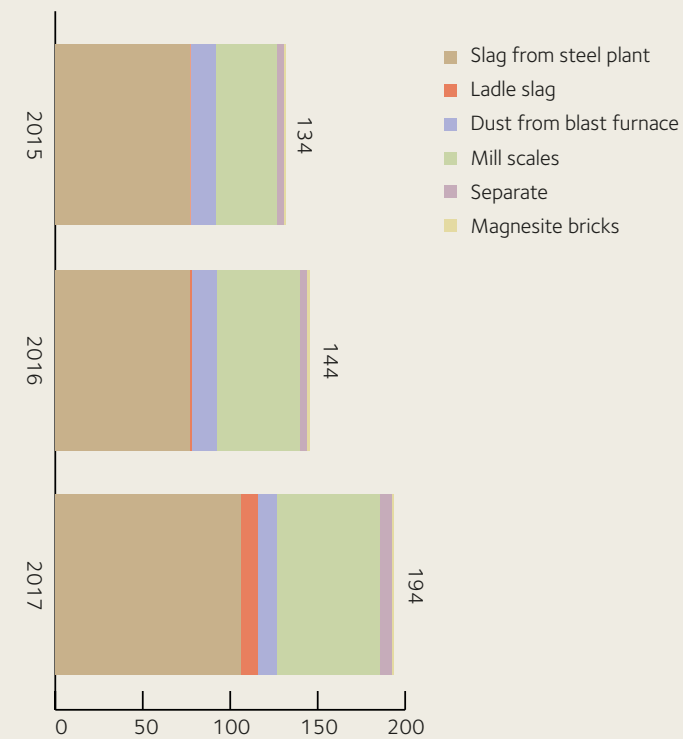
In 2017 we produced 316,354 tons of granulate and 350,437 tons of aggregate, which we supplied to external companies for further use.

Steel slag of various sizes is generated during steel production as a by-product. It is a valuable source of iron,

and given its composition can serve as a replacement for basic ingredients, and for this reason we try to return as much slag as possible back to production. We recycled 178,640 tons of steel slag as a replacement for basic ingredients in sinter technologies and blast furnaces. We offer the slag we do not use in production to external companies for further use. In this manner we supplied external companies with 121,775 tons of certified product.

In the graph below we can follow the growth of the quantity of by-products returned to the production process.

**Increases recycling of by-products at sinter plants and blast furnaces (kg/t of pig iron)**



*"With maximal use of by-products returned 2017 to the production cycle we limit emissions and conserve natural resources."*

**Petr Baranek**  
Chief Green Officer



We recycle and reuse approximately 10% of our linings and refractory material in repairs of our steelmaking facilities. When producing iron in the company blast-furnaces, as a replacement for basic ingredients we used 1,810 tons of crushed magnesite linings. The remaining amount of linings and refractory material is used in construction.

As a substitute for fluxes we also used 845 tons of sludge generated during plate finishing at our plant in Frýdek Místek.

Using low-temperature desorption equipment for treating slag sludge operated in the complex of our subsidiary

we recycled 12,084 tons of modified scale for high furnaces, both our own and external production that without modifications would otherwise end up at hazardous waste dump. We concurrently received 37,539 tons of slag from external companies that needed no further treatment. We recycled both treated and untreated slag in our blast-furnaces.

We also return ferrous metals obtained using magnetic separation from product waste to our production process. In 2017 this amounted to 16,935 tons of recycled ferrous metals.



About 1,100 kg of iron ore, 630 kg of coal, and 55 kg of limestone are saved by recycling one ton of steel.

## PALOZO

Sorting waste into combustible communal waste components is another way we conserve the environment. Using “PALOZO” fuel, which is generated by sorting communal waste, fossil fuels need not be burned nor does additional energy have to be expended to obtain them.

In September 2017 we placed yellow waste baskets, stands, and containers in the steelworks complex, dining halls, offices, and secretarial pools into which our employees can sort paper, plastic, and wood. From these sorted, combustible components of communal waste, a special line of our client produces the “PALOZO” product, which is used as fuel in cement plants or other facilities for the production of energy.

Thanks to this measure, total production of communal waste dropped by 40 tons. In the next year we expect another increased share of PALOZO sorted combustible waste.



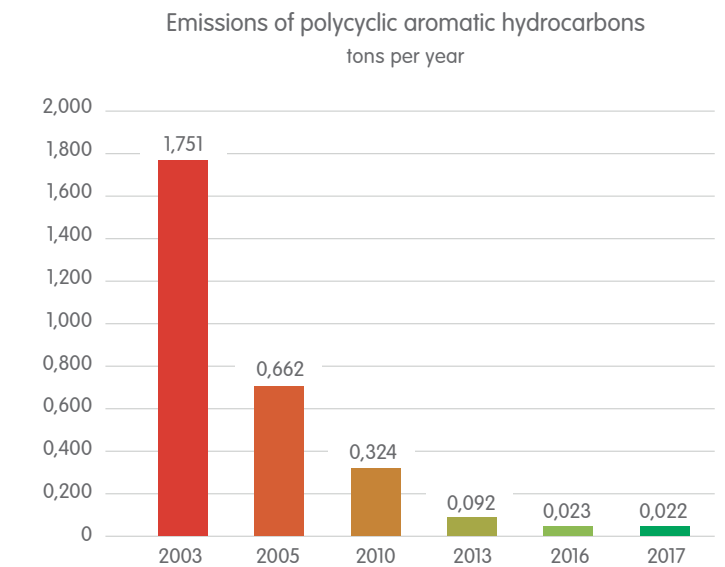
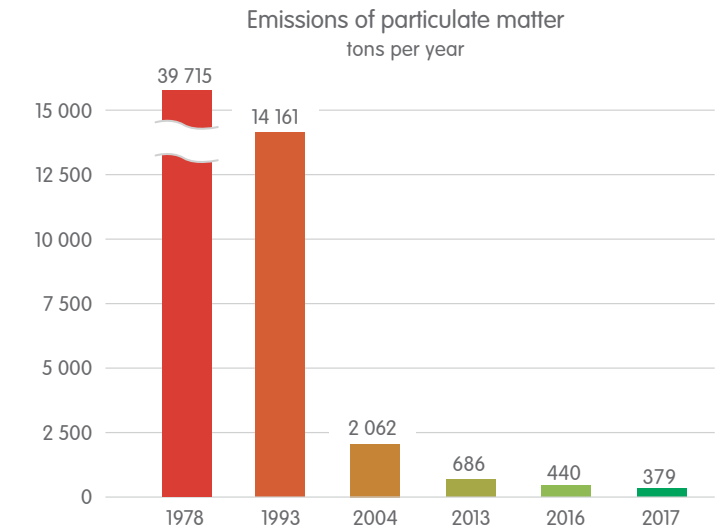
## 05 Trusted user of air, land and water

In accordance with the environmental policy we continue to actively seek and develop technologies and resources for reducing our environmental burden. In all of our activities we use the best available technology and thereby minimize the impact of our activities on the environment.

### Air

In 2017 we continued to operate modern technologies installed for limiting emissions, which was positively reflected in the volume of emissions of particulate matter (PM) released in connection with the operation of our technology to the environment. We continue to maintain record low values of polyaromatic hydrocarbon (PAH) emissions, having reduced them year-on-year.

Our subsidiary ArcelorMittal Engineering Products Ostrava has installed a new fabric filter, which filters the conveyor belts and elevator from the discharge field at the foundry. This fabric filter replaced a wet surface separator. This resulted in a significant decrease in the dust concentration that is released into the air, from a concentration of 50 mg/m<sup>3</sup> to a value of less than 0.7 mg/m<sup>3</sup>, which is a reduction of emissions of more than 98%.

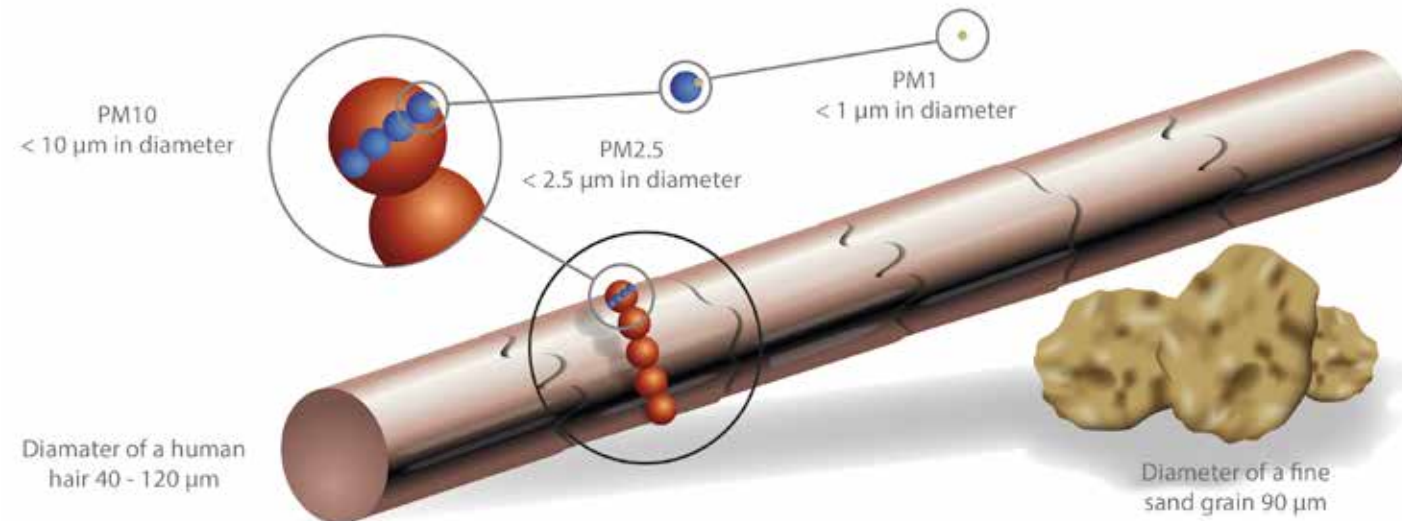


## Recycling in practice

When producing iron and steel, a large amount of dust is emitted. Thanks to modern technologies for limiting emissions, we are capable of capturing these emissions with an effectiveness of more than 99%. Given the composition, which is similar to input materials, the captured dust is a very suitable material for reuse in production. Approximately 95% of all captures particulate emissions are recycled, with the remainder treated as waste. In 2017 about 200 thousand tons of captured particulate emissions were recycled. This method of using particulate emissions is very efficient toward the environment and the use of non-renewable sources of mineral raw materials.

## Fabric Filter

We use a fabric filter to limit particulate emissions in most dust-limiting technologies. These filters are listed in the guiding documents and EU legislation as a “BAT” – that is, the best available technique for limiting dust emissions. Their effectiveness is high, even for very fine dust particles with PM1 fraction. The image shows how small a dust particle this is.



PM1 compared to a human hair

In 2017 a fabric filter on sinter belts at the Sinter Plant was measured by the company Technické služby ochrany ovzduší Ostrava, who confirmed that its effectiveness at capturing PM1 particles is higher than 99%.

## Water

Water is an important part of industrial processes. We use three types of waters to sustain our industrial activities: potable water, service water and additional service water. A separate distribution network is in operation for each of the water types. In 2017 we consumed 536,584 m<sup>3</sup> of potable water from the public water mains. Service water is supplied by our own water treatment station. The company produced a total of 783,005 m<sup>3</sup> of service water in 2017.

The sources of additional service water are surface water from Žermanice dam and from the river Ostravice, and also recycled water from two sewage plants.

From our principal source, Žermanice hydroelectric dam, we consumed 15,109,900 m<sup>3</sup> of surface water in 2017.

We also consumed 824,724 m<sup>3</sup> of surface water from our secondary source, the river Ostravice.

Water treatment technology enables some of the purified wastewater to be returned to the water distribution system of additional service water for reuse. From both of our end water treatment plants we recirculated 6,028,904 m<sup>3</sup> of purified wastewater. This amount represents 27.4% of the water necessary for ensuring production in the steelworks.

We are constantly trying to reduce our consumption of water from surface sources and use as much recirculated water as possible.





## Water for the region

We have been working over the long term with the Salamandr Czech Union for Nature Conservation. Last year we began a new project whose objective was to delay the extinction of smaller Beskid wetlands.

The wetlands and marshes are home to rare animals and plants and play an important role in the overall health of the region. They can absorb and retain a large amount of water and thereby save water for times of drought, reduce summer heat, or mitigate flooding. At the same time, however, it is very difficult to business on them, and for this reason they lie outside the interests of businesses. Machinery can only reach such areas with great difficulty, if at all. Thus maintenance can only take place by hand, or using very light machinery.

Our first success was achieved last year through a one-time rescue effort in the Juráška wetlands in Prostřední Bečva, Hutě, and Jankula in Staré Hamry, where sawing trees, mowing, and clearing mowed grass.

## An old environmental burden

A specific aspect of the region is the issues of ecological commitments arising before privatization. The government committed to handling these obligations on the basis of two separate ecological contracts. Their purpose was to take measures to remedy defective conditions in the area of building structures, soil, groundwater, and the recultivation of dumping grounds. And yet this is a financially demanding and old issue.

In 2017 the restoration of certain structures of the Coke plant in the Ostrava complex was completed. At present a former dump, Skatulův Hliník, is being restored and monitored in Frýdek-Místek and the restoration of the area of the Industrial Waste Burner is under development.

The projected date of completing all restoration work while addressing issues of ecological obligations undertaken prior to privatization is 31 December 2024.



We have been working over the long term with the Salamandr Czech Union for Nature Conservation. Last year we began a new project whose objective was to delay the extinction of smaller Beskid wetlands.

## 06 Responsible energy user helping to reduce emissions

The production of coke, pig iron, steel, and final products rank as energy-demanding processes and have a strong link to CO<sub>2</sub> emissions.

By supporting new manufacturing technologies and conducting business in an efficient and ecologically conscientious manner, we wish to achieve energy savings, manufacture our products with greater respect toward the environment, and accept the basic principles of continuous sustainable development.

### Replacement of lights using a mercury non-ecological power source with an LED module with lower power

The production of mercury bulbs, which were widely used in this country, was ended last year. According to a proposal by a Mr. Jiří Biskup, employee of plant 3 Maintenance, the company Metasport manufactured the replaceable ecological LED module with power of 25.5 W. These new lamps with lower energy consumption and price when compared to other products on the market have thus replaced the mercury bulbs now no longer produced. The replacement of 250 units of lamps last year brought electricity savings of 73 MWh. This represents a reduction of CO<sub>2</sub> by about 73 tons per year and financial savings of approximately CZK 900,000.



### Suggestions for improvement

Our employees submitted a total of 308 suggestions for improvement, 280 of which were accepted for implementation and 175 have already been successfully implemented in practice. These improvements have brought savings to the tune of CZK 14.2 million and the improvers shared CZK 1 million for their ideas.

Almost half of all ideas for improvement consisted of minor improvements. In the past 15 years, employees have submitted 2,786 ideas, of which roughly half of them have been applied in practice. The total benefit has been calculated at CZK 1.4 billion.



## Key performance indicators

### Outcome 05 Trusted user of air, land and water

#### Outcome 06 Responsible energy user

	t/year 2017	t/year 2016	t/year 2015
Liquid steel output	1 826 183	2 457 001	2 043 773
Pig iron output	1 632 237	2 046 682	1 961 504
<b>Air emissions</b>			
Particulate matter	378,601	440,328	591,953
SOx emissions	2 265,663	2 548,621	1 531,940
NOx emissions	2 062,693	2 979,533	2 508,515
<b>Water</b>			
Total water consumption according to source (m <sup>3</sup> of water per ton of steel produced)	9,02	7,11	8,72
<b>Energy</b>			
Total energy consumption per ton of steel per year, unit GJ/t	26,2 GJ/t	20,9 GJ/t	24,4 GJ/t
CO <sub>2</sub> emissions (per ton of steel produced)	1,39 t*	1,32 t*	1,38 t*
CO <sub>2</sub> emissions (in tons)	2 535 886 t	3 237 646 t	2 825 625 t

Additional information on the indicators: NOx, SOx, particulate matter - all emissions measurements are carried out by a laboratory with accreditation by the Czech Accreditation Institute. The procedures for measuring emissions conform to ČSN EN ISO/IEC 17025.

#### Water sources:

2 external sources (Žermanice dam, the river Ostravice) of surface water. Surface water consumption is calculated using water meters specified by Act No. 505/1990 Coll. The measurement is used for billing the water consumption by the watercourses administrator.

Three external sources of potable water (Severomoravskévodovody a kanalizace Ostrava a. s., connections to Ostravské vodárny a kanalizace a.s. from Šenovská and Frýdecká Streets). Potable water consumption is calculated using water meters stipulated by Act No. 505/1990 Coll.

The metered quantity of water in m<sup>3</sup> is divided by the volume of steel production in tons.

\*The calculation of CO<sub>2</sub> emissions applies only to scope 1 of GRI G4-EN15.

CO<sub>2</sub> emissions are calculated according to an approved monitoring plan in conformity to the provisions of Act No. 383/2012 Coll.

The calculation consists of the calculation of the CO<sub>2</sub> emissions from the burned gaseous fuels, the decomposition of carbonates and the carbon balance of the steel mill. The carbon balance is calculated as the difference between carbon input and output. The resulting value is then converted to CO<sub>2</sub> using the conversion factor of 3.664 (the coefficient is determined based on the stoichiometric conversion of C to CO<sub>2</sub>).

The calculation is verified by an independent auditor - TÜV NORD Czech, s.r.o.

In the case of ArcelorMittal Ostrava, only direct CO<sub>2</sub> emissions are used.



07

Supply chain that our customers trust

Supply chain of ArcelorMittal Ostrava includes goods and services that we purchase and use in our business.

They are mostly input materials such as iron ore, solid fuels, alloys, ordinary metals, and energy, but also products and services associated with construction, investment projects, industrial manufacturing, transportation, and logistics.

A responsible approach to procurement is a key principle in purchasing and is on the same level as the factor of price and quality.



## Responsible sourcing

The principles of responsible sourcing procurement of ArcelorMittal define the manner in which we cooperate with our suppliers. We require that they meet the basic standards pertaining to health and safety, human rights, ethics, and the environment.

We challenge our suppliers to cooperate in seeking out and implementing possible improvements to processes in our program of responsible approach to procurement and also to implementing those rules within their own supply chain. We hope that these rules will create continuous sustainable business processes of all suppliers.

These rules are binding for all ArcelorMittal suppliers and contractors and their branch offices and are valid for all products and services that we purchase.

We require of our suppliers that they meet the basic standards related to health and safety, human rights, ethics, and environment.



## In terms of the principles we will:

- Collaborate:** Collaborate with suppliers to improve social (including health and safety and human rights), ecological, and ethical norms. This may include joint assessments, such as visits to worksites for the purpose of determining whether the conditions of the rules have been met.
- Support:** Help suppliers identify activities that do not meet the requirements of the rules and work together to improve conditions in a reasonable timeframe.
- Proceed according to priorities:** Focus on those parts of the supply chain where there is the highest risk of non-compliance with the requirements of the rules and where the greatest improvements can be made.
- Respect:** Do business with our suppliers in a fair, objective, transparent, and professional manner. Part of this obligation is to deal with employees of our suppliers working in our site just as we would with core ArcelorMittal employees.
- Promote:** Advocate a responsible approach to procurement in the supply chain of our industry.
- Communicate and train:** Ensure that all our employees are familiar with the rules and that those who are responsible for purchasing are properly trained.
- Improve:** Regularly review our program and processes so that they can contribute to our vision of a responsible sourcing.
- Listen:** Consider key suppliers in the field to be our partners on the path to reducing overall costs and discuss all initiatives in this area with them.



08

Active and welcomed member of the community

Our path to becoming an active and respected member of society is a long one and we are not yet at our goal. The Ostrava steelworks has a long tradition associated with the support of the socially vulnerable, non-profit organizations, and all who wish for our society to blossom and grow. We are happy to meet with all of them, to communicate, listen, and use dialog to contribute to the successful development of the city and region.

The projects we support and that are carried out with our contributions are diverse, as our partners needs are diverse.

This approach is compatible with the expectations of our partners and the policies of our company.

After a year we can once again report on our joint meeting with representatives of the surrounding towns and cities. From these meetings, beautiful projects typically emerge that we carry out together. Examples of projects we have carried out are listed below:

#### Vratimov – Public Mill in Horní Datyně

A functioning replica of a wooden grain mill built on the initiative of the citizens, an artifact of the history of the city district of Vratimov – Horní Datyně.



#### Playground equipment for children in the Trnkovecká nursery school in Ostrava-Radvanice

New playground equipment in the yard and inside the nursery school in the building of the Vrchlický elementary school, branch location on Trnkovecká Street.



#### Expansion of the quiet zone in Šenov

Recreational facilities in downtown Šenov according to citizen recommendations.



#### Silesian Day at Silesian Ostrava Castle

The 12th annual all-day event for the public with performances by children from the nursery and elementary schools of the City District of Silesia Ostrava and a children's program focusing on farming.



## We support over the long term

### Czech Red Cross

As part of our long term partnership with the Czech Red Cross we supported the gala 10th annual event Hrad žije první pomocí, which took place on 10 September in the spaces of the Silesian Ostrava Castle. A team of paramedics pulled together a classic competition of the non-medical components of Integrated Rescue System with routes for the public. During the day, walking tours were prepared for interested parties focused on practicing first aid, where visitors could choose from trauma, internal, and technical routes. A special preventive/educational route was prepared for children throughout the complex, where they learned fire prevention, crime prevention, and the basics of first aid in an entertaining way.

### Charity Ostrava

We support the services of the St. Kryštof mobile hospice, which provides care for people in the final stages of life. This consists of qualified and coordinated aid to people in the form of palliative care in their home environment in Ostrava and its suburbs.



## Kiwanis Club and the Clowns from Baloon Land

Kiwanis club helps lonely and sick children in the pediatric wards of hospitals. Children receive Kiwanis fabric dolls made by inmates at Ostrava prison when they arrive at the hospital. The doll is a friend who they can paint and name and who will accompany them for the duration of their stay in the hospital. Each year up to 20,000 Kiwanis dolls are provided to hospitals.

We also come into contact with the youngest at nursery schools through the awareness campaigns Be careful and Children, Let's Learn from Animals. Both campaigns warn children of danger in everyday situations using pictures and nursery rhymes, all while advising them on how to stay happy and healthy. We prepared the content in partnership with the Kiwanis Club of Ostrava and popular children's illustrator Vlasta Švejdvá. This partnership resulted in unique posters, coloring books, and puzzles, which we have successfully offered to several children's wards in regional hospitals. The campaign then moved to nursery schools in several towns throughout the Moravian-Silesian region, where a playful educational performance is staged by the Clowns of Balónkov. All campaign materials increase awareness of health and safety, which is the highest priority when working in our company.



## Engaging employees

### Christmas Sheltered workshop markets

These take place each year during the Advent season in the company complex. Employees have the opportunity to purchase ceramic products, candles, Christmas decorations, Christmas cards, or children's toys. Eleven sheltered workshops from Ostrava and the vicinity received almost CZK 100,000 in proceeds from the sale of hand-made products.

*"The December sheltered workshop markets are now a tradition in our company. It is a time when the true Christmas spirit comes to the steelworks. Here employees find and buy gifts for their loved ones, but at the same time help others."*

#### Monika Pěňčíková

Head of Corporate Social Responsibility and Social Services



## Volunteering

For 10 years our employees have been participating in projects focused on the community. They contribute their support to non-profit organizations to a significant extent wherever it is needed. One of the forms of aid is company volunteering. Employees can choose a non-profit organization and an activity they wish to focus on and then spend one fully paid workday volunteering.

Volunteers have become involved in the following ways: they have assisted clients of several facilities, planted trees, cleared gardens and parking lots, washed windows, cleaned gutters, moved furniture, painted rooms and furnishings, sorted plastic, chopped wood, made Christmas wreaths and decorations, wrapped decorative items, baked and decorated gingerbread for seniors, organized educational and cultural events, and more.

*"All the support from company volunteers is beyond price, and I believe that it will continue next year as well."*

### Martina Petrová

Charita Frýdek-Místek



A total of 124 employees participated in company volunteering, altogether working 709 hours and thereby contributing an amount of almost CZK 220,000.



*"I would like to thank the two volunteers who helped prepare our garden for winter and performed minor repairs to the children's playground. We will be happy for you to help make this a more pleasant environment for our children in the future as well."*

### Eva Chodurová

Facility Director,  
Dětský domov Úsměv  
a Školní jídelna



## Where we have helped

- ▮ Klub vojenské historie - Hraničářský pluk 4
- ▮ Domov pro seniory Kamenec
- ▮ Středisko pracovní rehabilitace Ludvíka Podeště
- ▮ Dětský domov Úsměv
- ▮ Mobilní hospic Ondrášek
- ▮ Charita Ostrava (Charitní dům sv. Václava)
- ▮ Armáda spásy v České republice
- ▮ Charita sv. Alexandra
- ▮ Charita Frýdek-Místek (Dům pokojného stáří, Oáza pokoje and Denní centrum Maják)
- ▮ MŠ a ZŠ speciální Diakonie ČCE Ostrava
- ▮ Centrum pro rodinu a sociální péči
- ▮ Sdružení Klíček
- ▮ Dlaň života
- ▮ Domov Korýtko
- ▮ Domov pro seniory Zlaté slunce
- ▮ Trendum

## Employee grants

We have been sponsoring employee grants since 2010. In eight years of operation we have supported 443 projects for more than CZK 5.5 million. In 2017 there were 38 projects for more than half a million crowns. The projects are registered by the employees, who work for non-profit organizations in their free time.

### Areas of support:

- Social
- Environmental
- Health and Safety
- Education
- Free time activities for Children and Youth

## Beekeeper's Club

Thanks to a grant, protective equipment was purchased for members of the beekeeper's club of the Czech Beekeepers Union in Vřesina. Children can therefore participate in practical demonstrations without worrying about getting stung.



## Gospel workshop for the Public

The weekend Gospel workshop for the Public allows anyone, even those without prior experience, to experience what it feels like to sing in a large gospel choir. This project was started in 2014 with support from Arcelor-Mittal and since then has served over sixty interested parties every year.

There are many benefits to this activity. The method of breathing that choral singing requires has a calming effect and benefits for cardiac health. The school helps build self-confidence and overcome stage fright. For many this school is their first direct contact with the English language, while others have the opportunity to apply a foreign language in practice. The event supports cross-generational collaboration and motivates families to experience something unique together. In the same way it allows for becoming acquainted and making new friendships in your town. The outcome of the Gospel workshop is a final benefit concert to raise money for a selected Ostrava non-profit organization.

The event is sponsored by the deputy mayor of Ostrava, Mr. Zbyněk Pražák.



*"Thanks to the employee grant the fourth year of the Gospel School was truly exceptional. Certain songs were complemented with aerial silk acrobatics or accompaniment on Boomwhacker musical instrument.*

*We were also able to collect the most money yet, which we donated to Mobile Hospice Ondrášek."*

### Radim Raszka

Employee grant applicant



## Community activities in Ostrava-Poruba

The Katolický lidový dům society was able to restore its kitchen furnishings thanks to the grant. New plates, jugs, glasses and tablecloths made the community events organized more pleasant.



## Dance for Life

For several years we have participated Festival in the Streets and Colours of Ostrava as a partner. Apart from providing financial support to both events, we also operate the dance tent with our own project, Dance for Life. Last year in our dance tent visitors from the public tried for the 8th time to replicate the movements of the dance instructors. Depending on their level of success, we allowed them to dance for an amount of money that was subsequently donated to one of two non-profit organizations. 4,522 dancers earned a total of CZK 240,000, half of which was donated to Mobile Hospice Ondrášek.

This amount was increased by an additional CZK 10,000, which the hospice won in the concurrent competition Voice for Life on our Facebook page.



We try to integrate the activities we organize. As a result, situations occur in which several partners encounter each other, with our steelworks as the point of intersection.

In this way we supported Mobile Hospice Ondrášek last year through the Employee Grant, the Dance for Life charitable project, company volunteering, and employee collections.

Mobile Hospice Ondrášek is a non-governmental health care facility that provides free specialist aid to terminally ill children and adults and their families 24 hours a day, 7 days a week. It helps people in the terminal stages of their illnesses by giving them an environment they know, surrounded by family and friends, so that they may spend their last moments with dignity and free of unnecessary pain.



During the company volunteering day, our employees washed windows and collection the garden. The November employee clothes drive built on the volunteering as part of the global holiday Giving Tuesday

This holiday of giving and volunteering supports and celebrates the desire to help others. This took place for the 2nd year in the Czech Republic, during which over 170 public appeals and over 100 employee collections took place.

**During the collection our employees brought an incredible 290 kg of undamaged clothing, as well as books, jewelery, electronics, ceramics, and toys. The collection was donated to Moment charitable shops.**

Moment sorts the collected items and sells them, the earnings from the sale are then donated to four non-profit organizations in the region.

Moment is a public benefit corporation that uses a network of charity shops called Moment Charity Shops to financially support other non-profit organizations, including Mobile Hospice Ondrášek. The functioning of Moment is based on the principle of donation and sale of used clothing and other products obtained from fellow citizens, in this specific case from our employees. Repeated use of clothing and other products from Moment helps people limit the wasting of resources and fulfilling the concept of sustainability.



At Moment they have calculated that a single bag of nice clothing can have the following impact on the supported organization:

- for **Mobile Hospice Ondrášek**: An hour and a half of life in a home for the terminally ill with medical supervision.
- for the **social welfare institution Žebřík**: One hour of expressive therapy for all clients of the institution..
- for **Bicycles for Africa**: Transport of one bicycle to Africa, enabling one child to attend school for several years.
- for **Save the Elephants**: Food for one day for an entire dog team in Congo that has been specially trained to detect ivory poachers..



*"I come from a family where it was constantly instilled in us that people must help one another without seeking gain, and as we lived in a village and this principle truly worked (children carried the shopping for their grandmothers, washed their windows and performed other small 'good deeds')."*

*When I got married and moved away to the city, it was this that I began to miss, simply helping someone, making time for someone, gratifying someone with a kind word. Except that in today's rushed era we all have only barely enough time for our loved ones, let alone everyone else. And so even I ended up a bit at odds with disinterested help to others, and to ease my conscience I at least financially supported non-profit organizations. And yet when the possibility arose to get involved in company volunteering, it was an impulse for me to begin again, to get involved personally, to physically encounter people who need help and would appreciate it.*

*Since then I have been using my volunteering days regularly and my involvement with a non-profit organizations has become substantially more intensive. I have come to know a different world, other problems, and other joys, who have begun helping those around us thanks to company volunteering."*

**Taťána Ujházy**

regular participant  
in volunteer activities







09

Pipeline of talented  
scientists and engineers  
for tomorrow

Employers are searching more and more for capable engineers, designers, and specialists educated in technical fields.

The demand for these professions is growing and it is harder than ever to motivate the best to join our team.

## Trainee Program

One of the options for engaging the young and technically minded is our Trainee Program, whose objective is to train young employees with highly technical or managerial potential. This program is intended primarily for graduates of high schools and colleges and its duration is typically one to two years depending on the demands of the position for which the graduate is preparing. During this time we try to make use of the innovative thinking of these fresh graduates, all while supporting their personal and professional development. Graduates can gain profile in a relatively short time and have the option to rotate to other worksites domestically and abroad.

*“After studying at VŠB-TU Ostrava I joined as a tubular product reviewer at ArcelorMittal Tubular Product Ostrava (a subsidiary of ArcelorMittal Ostrava a.s.). As soon as the opportunity arose for me to become part of the Trainee Program in the parent company, I didn’t hesitate for a second and seized the opportunity. I’ve been working for the company since 2013. I started in the Continuous Improvement department, which focuses on improvements and innovations. Here I learned many new things gained experience. I also had the opportunity to visit several European units of ArcelorMittal, where I learned from our foreign colleagues. After my return I implemented my ideas in practice. Now I am working as the executive assistant to the CEO.”*

### Regina Besta Cabáková

Executive Assistant  
to the CEO



## Technical Education

We also try to build interest in technology at all levels of education, from nursery schools to colleges, because we realize that without the support of technical fields we will not be capable of ensuring the sustainable development of our company. Without capable young technicians, scientists, people passionate about the individual fields, it will not be feasible to discover new processes, bring new ideas, and apply new methods in science and research.

Our goal is change the perspective on studying technical fields. To arouse interest in technology among nursery school children, elementary school students, and high school students and dispel any unnecessary fears. To enable college students to enhance their knowledge of theory with practical experience and obtain new knowledge in the real-world environment of our company. To show that technology can be entertaining, informative, and profound.

## Employee grants as a tool for supporting technical education

We come into contact with the youngest in nursery schools via an employee grant project. Ms. Jana Ondrouchová obtained funding for the purchase of chemical, mechanical, and physics laboratories for children from nursery school and elementary school on Volgogradská Street. The children are very excited about the laboratory, as they become part of the individual experiments and can try them out themselves. The children learn to work in groups, to express their opinions, and to assess the outcomes of their work.

Our employee Jiří Chvalina requested a grant for the Leoš Janáček Preschool and Elementary School in Hukvaldy, where as a volunteer teacher he has worked with the technical clubs Model Aircraft Builder and Young Engineer, with a focus on robotics. As part of the school project



From Technical Clubs to Elementary School to Technical Professions in Life we donated CZK 10,000 for the purchase of milling machines, drills, saw blades, airbrush pistols, and technical materials. The technical equipment is used at the school by 170 students.

## A trade in hand finds gold in every land

For several years we have been supporting the project A Trade in Hand, which introduces ninth grade elementary school students to the individual technical fields and trades. We thereby hope to contribute to helping students navigate the choosing of their profession and showing them options for finding their application on the labor market. The project also mutually promotes vocational technical school which obtains students for future study at vocational technical schools by presenting their fields.

*"I am convinced that technology in a playful format helps overcome concerns and motivates them to study a technical field, where there is currently a shortage of applicants."*

**Jiří Chvalina**  
Employee grant applicant



## School as a game: Science and Technology Centre

Since 2015 we have been a partner of Lower Vítkovice and Science and Technology Centre, where we built our own interactive exposition, Steel: The Fabric of Life. This exhibition is open year round and here attendees can try out the steelmaking process step by step.

The production process is simulated as faithfully and demonstratively as possible, so participants may try out

production in a safe environment, without having to enter an actual manufacturing operation. The outcome of this process is an actual teaspoon, which they can take home as a souvenir. And with a spoon – with Mr. Lžička, to be exact (whose name is Czech for spoon), they also encounter a short film in the screening space of the exposition, where Mr. Lžička explains to them the importance and meaning of steel in our modern world.



In an effort to motivate young people to study technical fields, we have prepared a demo lesson for school about iron and steel production as part of the Science and Technology Centre, which contains active training components. We have trained the individual teachers in our company.

We participate every year in the the Science and Technology Centre as part of the event Living Library of Professions, which was attended last year by 700 students in eighth and ninth grade. We help students decide what direction to take after completing their required schooling, and to secure elementary school students for technical fields at certain high schools.

In the Living Library of Professions we have presented the fields of **steelmaking machinery and electronics**. Over the course of twenty minutes the students learned in an entertaining way what a machine engineer (mechanic) or electrician does, and that a technical profession need not be boring.

The popularity of Lower Vítkovice is evidenced by growing attendance; last year it was visited by a record 1,557,784 people.

In this way Lower Vítkovice became the most visited tourist spot outside of Prague and in the overall Czech rankings earned fourth place.

## The best student innovators from our region

We have now participated in the fifth year of the Innovative Company of the Moravian-Silesian Region competition. We assessed and awarded the best improvements by individuals and teams from the ranks of elementary schools, high schools, and colleges.

Among the youngest students, Mateusz Wojnarowicz of Wichterlovo Gymnázium ranked highest with his project My ITS, which proposed replacing part of city transit with interesting electrical modes of transportation.

The best high school project was awarded by the jury to an innovative solution using old printers and copiers for building electronic and robotic devices. It was created by Michal and Martina Hanus from the Gymnázium and Industrial Electrotechnical High School in Frenštát pod Radhoštěm.





## Technical lectures

We educate the generation of youth in the form of lectures and round tables on ecology and the environment. We familiarize students from high school and college with the active and responsible approach of our company to environmental protection as a whole. Our specialists present their experiences from the field of protection of the atmosphere, handling waste and wastewater, recycling materials, and recirculating waste water.

As part of International Earth Day, which always takes place on 22 April, we presented our successes in environmental protection to visitors at the Great World of Technology.

We managed to establish a partnership with American students from a technical university in the state of Virginia. They were mostly interested in how our company approaches environmental protection. They were impressed at how significantly our steelworks has reduced emissions of key contaminants over the past 15-20 years. The measures our company has taken beyond the requirements of legislation made a particularly strong impression on them.

*"The best is to cultivate your own experts. We've learned the wisdom of starting to collaborate with students during the course of their studies. It then comes as a surprise how far classroom training is from practical application, and how long graduates need to attend school. That's why we place an emphasis during recruiting on who already has experience working with us during their schooling."*

### Jan Rafaj

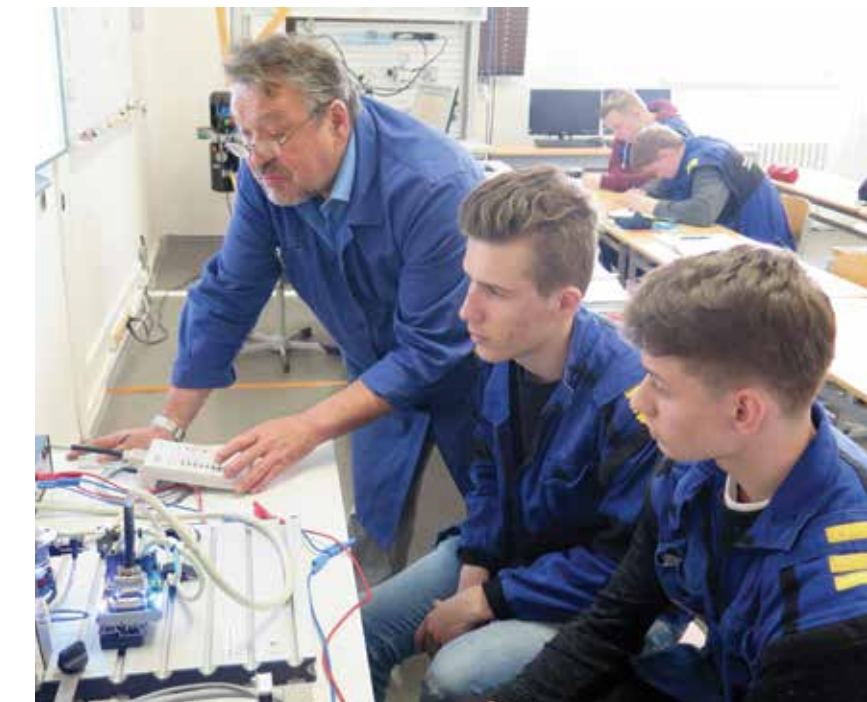
Vice Chairman of the Board of Directors



## Technical internships for student apprentices

In 2017 we invited 52 apprentices to participate in technical internships. We wanted them to gain experience in the real-world environment of our company. They are taught in technical matters by instructors who supervise the students during their apprenticeships and attempt to show them as much as they can in practice, so that the technical skill of the students could match the theoretical preparation they have gained from school and be integrated with their work experiences and habits.

We regularly communicate with the apprentices, answering any questions they have. We get feedback from our operations and from the schools. We actively communicate with parents. We realize that it is these young apprentices that will form the core of our potential employees.



## Excursion for Students and Teachers

There is a high demand for excursions in our company. Where else could students see manufacturing in full operation and also get technical explanations? It is important to us for every participant to gain the largest amount of information, and for that information to be clear, understandable, and appropriately communicated and adapted to the age category of the participants. In 2017 a total of 446 students visited our company. With excursions our other top priority is ensuring the safety of the participants.

## Interesting projects at selected high schools and colleges

In partnership with VŠB-TUO we support the fields of science and research, as our specialists collaborate on common projects. At selected high schools our donations have enabled students better workshop environments or new equipment granting an awareness of the automation and digitization, which is gradually infusing all fields.

## Career Plus job fair

In March we once again participated in the Career Plus job fair, which was organized by the Technical University of Ostrava. Our company's offering was once again diverse. Applicants for work from the ranks of future graduates were presented with our Trainee Program, which allows students to begin their career growth after the successful completion of their studies. Those who still have a few semesters of study ahead of them were offered technical paid internships and the option to complete short-term unpaid practical training. There was also interest from the ranks of students in the option of completing their baccalaureate or high school diploma thesis in our company, to complete unpaid technical practical training and temporary summer jobs.



## School Friendly Award for collaboration with schools

Our efforts in partnering with schools were recognized at the end of 2017 by the Development Association of the Moravian-Silesian Region. In the competition, which was entered by 23 regional companies, we won the highest honors, the Platinum award, for working with schools of all levels – from nursery school to college..



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Our contribution to society measured, shared and valued, all underpinned by transparent governance



Transparency and openness are Arcelor-Mittal's fundamental principles for communication with all stakeholders.

We actively seek dialog and we are constantly in contact with them according to their current needs and requirements.

We regularly meet with representatives of the surrounding towns and city districts.

We meet with members of the government of the Czech Republic, specialist personnel of the ministries, and representatives of other government and other organizations. We also actively communicate at the European level.



We make use of a variety of communications methods, whether personal interview with representatives of the institution, electronic communication, or various printed materials. We communicate with company employees in personal meetings or via the company intranet, or bulletin boards and TV screens. One new form of communication consists of kiosks distributed throughout the company complex where all employees can access them.

Employees can send their questions and comments to the internal link **Call the CEO**. A H&S line has been set up for comments from the area of occupational health and safety.

The **Green Line 800 100 648** is available to stakeholders.

Our most important communications tools include our website: <http://ostrava.arcelormittal.com/> and social networks, where we publish all important news about the steelworks..

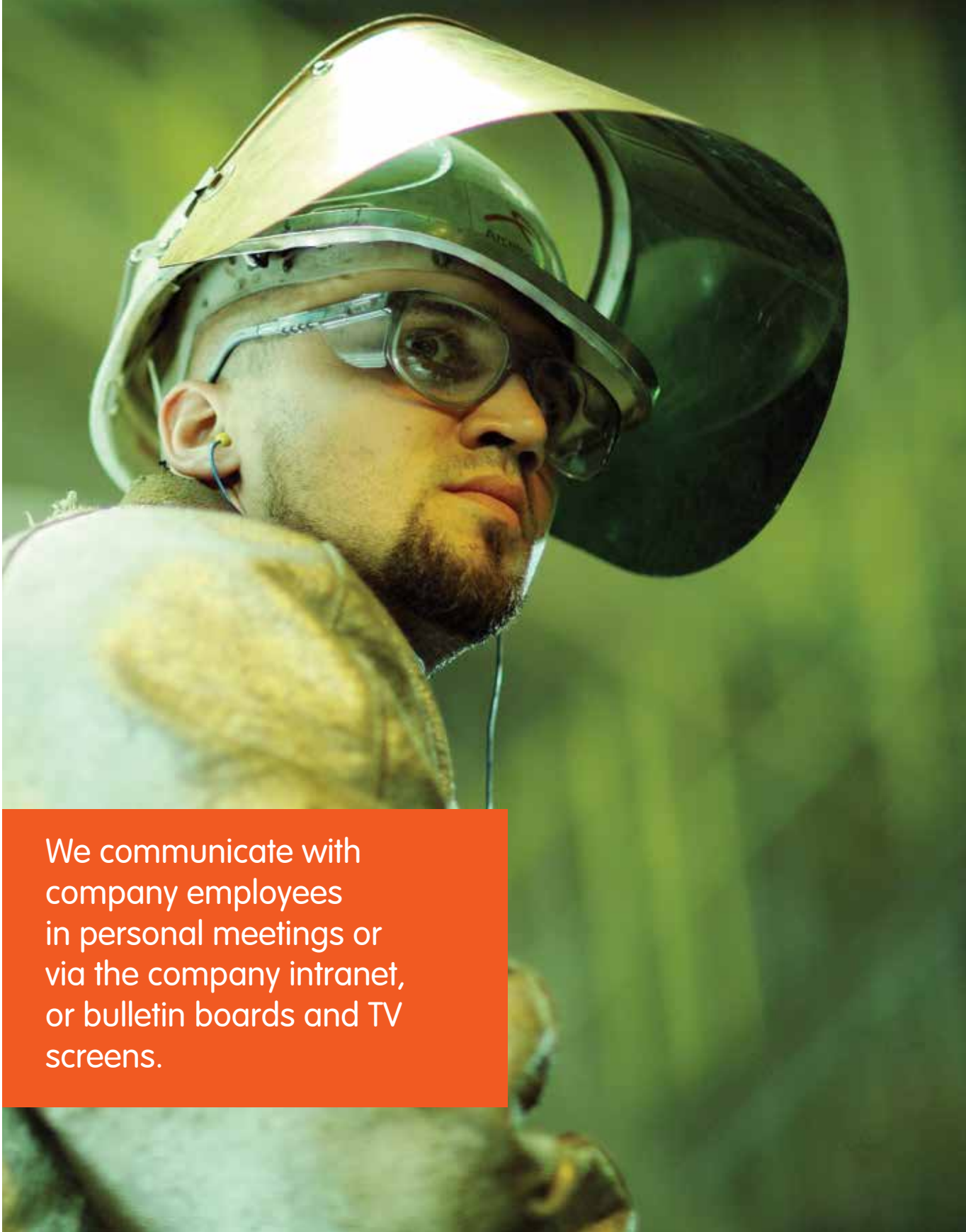
 Facebook  
[www.facebook.com/AMOstrava](http://www.facebook.com/AMOstrava)

 Twitter  
[www.twitter.com/AMOstrava](http://www.twitter.com/AMOstrava)

 LinkedIn  
[www.linkedin.com/company/arcelormittal-ostrava](http://www.linkedin.com/company/arcelormittal-ostrava)

 Instagram  
[www.instagram.com/arcelormittal.ostrava](http://www.instagram.com/arcelormittal.ostrava)

We communicate with company employees in personal meetings or via the company intranet, or bulletin boards and TV screens.



We try to accommodate our stakeholders as much as possible and to offer them the information they need. Last but not least, they are important to us because they help point us in the direction we would like to go in the future.

We are a member of many industry associations: the Confederation of Industry of the Czech Republic, the Steel Union, the Steel Strip Society, the Czech Coke-making Society, the Czech Material Handling and Logistics Company, the Czech Constructional Steelwork Association, and the Association for the Use of Energy Products.

In the region we are active participants in the Association for the Development of the Moravian-Silesian Region, the Regional Chamber of Commerce of the Moravian-Silesian Region, the Association for Collective Bargaining, the Association of In-House Lawyers, the Czech Institute of Internal Auditors, and the Employers' Club.

## Key performance indicators

### Transparent good governance

	2015	2016	2017
Number of inquiries on the CEO line	70	88	99
Number of inquiries on the H&S line	2	4	3
Number of inquiries on the Green Line	77	30	13
Trainings in Anti-Corruption Guidelines*	56	302	111
Trainings in the Code of Business Conduct*	1 208	231	4 118
Trainings in respecting human rights*	1 973	182	1 603

\*number of employees trained



The following diagram displays our company management system

### General Meeting

the supreme body of the company, which decides on authorization of financial statements, changes to the articles of association, appoints the auditor, appoints and dismisses members of the Audit Committee as well as members of the Board of Directors and the Supervisory Board

### Supervisory Board

the controlling body of the company, it supervises the performance of the Board of Directors and the company's activities

### Audit Committee\*

monitors the preparation of financial statements, evaluates the efficiency of the internal controls of the company, internal audit, and risk management system

### Board of Directors

the statutory body, whose members represent the company in all matters

### CEO and Top Management

\* On 27 June 2017 the General Meeting decided on a change to the articles of incorporation dissolving the Audit Committee as of 30 June 2017.

Additional information about the organizational structure of the company can be found in the latest Annual Report at: <https://ostrava.arcelormittal.com/o-spolecnosti/vyrocní-zpravy.aspx>

In the accounting period from 1 January 2017 to 31 December 2017, the following changes in the Board of Directors, the Supervisory Board, and the Audit Committee took place:

- On 14 March 2017 the General Meeting appointed Mr. Jean-Paul Ordioni to the function of Audit Committee member for the next functional period.
- On 28 April 2017 the General Meeting dismissed Mr. Vijay Mahadevan Subramanyam from the position of member of the Board of Directors as of 30 April 2017.
- On 2 May 2017 the Board of Directors appointed Mr. Pradhan Suyash Kumar a substitute member of the Board of Directors for the period until the next General Meeting and appointed Mr. Ashok Virupaksha Gowda Patil as Chairman of the Board.
- On 7 June 2017 the Board of Directors appointed Mr. Ashok Virupaksha Gowda Patil a substitute Board Member and appointed him Chairman of the Board.
- On 27 June 2017 the General Meeting:
  - appointed Mr. Ashok Virupaksha Gowda Patil to the role of member of the Board of Directors
  - appointed Mr. Pradhan Suyash Kumar to the role of board member
  - appointed Mr. František Chowaniec to the role of Supervisory Board member as of 8 October 2017, for the upcoming functional period
- On 21 July 2017 the Board of Directors appointed Mr. Ashok Virupaksha Gowda Patil to the role of Chairman of the Board.
- On 20 November 2017 the Board of Directors acknowledged the resignation of Mr. Jan Rafaj, member and vice chair of the Board of Directors, effective 27 November 2017.





## Selected financial indicators for 2017

In the monitored period from 1 January 2017 to 31 December 2017 the company generated profit before tax of CZK 2,658 mil. The total profit after tax for the accounting period represented profits in the amount of CZK 3,177 mil. In the monitored period, the company reported operating profit of CZK 2,618 million and a financial profit of CZK 5,276 million.

Total revenues from sales of products, services and goods for the reported period were CZK 27,179 million.

As of 31 December 2017 the company reported assets of CZK 24,991 million. The value of fixed assets is CZK 12,112 million, of which CZK 9,605 million were long-term tangible assets and CZK 664 million were long-term financial assets. Equity amounted to CZK 15,627 million.

Total research and development (R&D) costs, including for 2017 amounted to CZK 11,711 thousand. No grant projects were addressed in 2017 as part of R&D.

Dividends were approved by decision of the sole shareholder as part of the general meeting of the company ArcelorMittal Ostrava a.s. A dividend amounting to CZK 6,760,808 thousand was paid out as a share of profits.

## ArcelorMittal Ostrava's economic contribution in 2017

	CZK thousand
Wages and salaries	1 941 354
Consumed material and energy	22 063 090
Services	4 851 405
Contributions to the state budget	679 708
Social security and health insurance - employer deductions	635 523
Taxes	44 185
Capital expenditure	525 544
Regional support and development	23 778

## International certification

Quality of products and services, environmental protection, energy management, employee health and safety, and prevention of serious accidents rank among the highest priorities in the company. We have implemented

and certified a system of integrated management according to EN ISO 9001, EN ISO 14001, OHSAS 18001, EN ISO 50001 and Act No. 224/2015 on the prevention of serious accidents.



## About this report

The Sustainability Report has been published every year since 2008. The report always covers one calendar year. The previous report covered the year 2016.

The 2017 Sustainability Report summarizes the activities and describes the benefits and effects of ArcelorMittal Ostrava and its subsidiaries in the area of sustainable development that took place in 2017, as well as the activities that the company expects in 2018.

The report contains data collected by the individual departments using KPI parameters or data related to the GRI methodology covering 2017. Supplementary information may be found in ArcelorMittal Ostrava's Annual Report for the year ending 31 December 2017.

We declare that the data provided in this report conform to the GRI G4 methodology.

Further information can be found on the company website:

<http://ostrava.arcelormittal.com/>

## ArcelorMittal Ostrava Subsidiaries

ArcelorMittal Ostrava has controlling ownership in the following companies:

**ArcelorMittal Engineering Products Ostrava s.r.o.** is a manufacturing and repair plant that brings together the engineering and foundry industries. The basic range of engineering industry products includes production of machine parts and devices, steel constructions and railway wheels. The foundry plant focuses on the production of steel and cast-iron castings.

**ArcelorMittal Distribution Czech Republic, s.r.o.** is a distribution and service company for the Czech Republic. It deals with the production and division of flat and long products. The company also offers end consumers a wide range of metallurgical material, together with the required range of services, quantity and speed of delivery.

**ArcelorMittal Technotron s.r.o.** is engaged in the manufacture of cores for magnetic circuits, which are used in the engineering, electrotechnology and metallurgical industries, and also in health care. As for the scale of production, ArcelorMittal Technotron s.r.o. is the third largest producer of cores on the European market.

## Scope of this report

For the purposes of the Sustainability Report for the year 2017, the data used mostly covers ArcelorMittal Ostrava a.s., as well as its subsidiaries in certain individual indicators.

## Key GRI indicators

### G4 Communication of General Standard Disclosures

Strategy and analysis		page
G4-1	CEO letter	6
Organization profile		
G4-3	Name of the organization	4 and the cover
G4-4	Primary brands, products, and services	6
G4-5	Location of the organization's headquarters	6, 7
G4-6	Countries and operation	2
G4-7	Nature of ownership and legal form	85
G4-8	Markets served	2
G4-9	Scale of the organization	2 and 85
G4-10	The total number of employees	2
G4-11	The percentage of total employees covered by collective bargaining agreements	24
G4-12	Supplier chains	47-49
G4-13	Significant changes during the reporting period	80
G4-14	Precautionary approach	78
G4-15	Externally developed charters, principles, or initiatives which the organization subscribes to or endorses	79
G4-16	List memberships of associations	79
Stakeholder Engagement		
G4-24	List of stakeholder groups engaged by the organization	10
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G4-26	Organization's approach to stakeholder engagement	10
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Report Profile		
G4-28	Reporting period	85
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G4-32	Content index according to GRI	86 and 87
Governance		
G4-34	Governance structure of the organization	80
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G4-56	Organization's values, principles, standards and norms of balance	8 a 9

### G4 Specific Standard Disclosures

Economic Performance		
G4-EC1	Direct economic value generated and distributed	83
Environmental Performance		
G4-EN3	Energy consumption within the organization*	45
G4-EN8	Total water withdrawal by source	45
G4-EN15	Emissions of CO2*	45
G4-EN21	NOx, SOx, and other significant air emissions*	45
Environmental Grievance Mechanisms		
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	78
Social Performance		
Sub-category: Labour Practices and Decent Work		
G4-LA2	Benefits provided to full time employees that are not provided to temporary or part-time employees, by significant locations of operation	25
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities	24
G4-LA9	Average hours of training per year per employee by gender, and by employee category	24
Sub-category: Human rights		
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	79
Sub-category: Society		
G4-SO4	Communication and training on anti-corruption policies and procedures	79

Selected GRI indicators labelled\* have been audited by Deloitte Advisory Sp. z o.o.



Dear readers,

We deeply appreciate the time you have spent reading this report.

We welcome your tips and feedback regarding the activities described in this report.

Contact us at: [cr.ostrava@arcelormittal.com](mailto:cr.ostrava@arcelormittal.com).

Thank you!

**ArcelorMittal Ostrava a.s.**

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[ostrava.arcelormittal.com](http://ostrava.arcelormittal.com)

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Michal Berger, Ivo Štěrba, Petr Kupčík

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