



ТЕМПЕРИЛОДЖИСТИК СЕООД
TEMPERI LOGISTICS LTD



Член на Търговско-Промышлена Палата Стара Загора
Chamber of Commerce and Industry Stara Zagora member

9000 България, гр. Варна, р-н Младост, бул. Сливница 166А, ет. 6 ап. офис 459000, Bulgaria,
Varna, district Mladost, 166A, Slivnitsa blv, fl. 6, off 45

Company Registration № (ЕИК): 206032947
VAT Number: BG206032947

Web page: www.temperi-logistics.com
E-mail: temperilogistics.bg@gmail.com

Metallurgical plants in Bulgaria, Hungary, Moldova, and Poland



2023

Contents

Introduction	3
1. Bulgaria	4
1.1. STOMANA Industry S.A	4
1.2. PrometSteel EAD	8
2. Hungary	11
2.1. ISD Dunaferr Danube Ironworks Co. Ltd.	12
2.2. OAM Ozdi Steel Works Ltd. / ÓZDI ACÉLMŰVEK	13
3. Moldova	15
3.1. JSC Moldova Steel Works	15
4. Poland	18
4.1. ArcelorMittal Poland	18
4.1.1. Metallurgical Plant in Świętochłowice	19
4.1.2. Metallurgical Plant in Dabrowa Gornicza	20
4.1.3. Steelworks in Krakow	21
4.1.4. Former Metallurgical Plant Cedler in Sosnowiec	22
4.1.5. Guta Korolska ArcelorMittal Poland plant in Chorzów	22
4.2. ArcelorMittal Warszawa	25
4.3. Group of companies Węglokoks	27
4.3.1. Huta Pokoj S.A.	27
4.3.2. Huta Łabędy	28
4.3.3. Walcownia Blach Grubych Batory	31
4.4. Huta Ostrowiec	33
4.5. Liberty Czestochowa Sp. z oo.....	36
4.6. Alchemia SA	39
4.6.1. Huta Bankowa Spółka z o.o.	42
4.7. Cmc Poland Sp. o.o.	44
4.8. Ferrum SA	46
4.9. KGHM Zanam SA	48
4.10. Cognor S.A.	49
4.10.1. Metallurgical Plant HSJ in Stalewa Wola	52
4.10.2. Cognor SA Branches Ferrostal Łabędy in Gliwice, Krakow, Zawierc	52
4.10.3. Cognor Złomrex branch in Wrocław	53
4.11. Huta Małapanew Spolka z o.o.	53
4.12. Hydro-Vacuum Group	55
4.13. Baildon steelworks, Katowice (BGH Polska Sp. z o.o)	57
4.14. Mangata Holding SA	60
4.14.1. KUŹNIA POLSKA S.A., Skoczow - steelworks	60
4.14.4. Zetkama Sp. o.o.	63
4.15. Re Alloys Sp. o.o. Huta Łaziska	64
4.16. Huta Zabrze SA	66

Introduction

Steel consumption is a litmus test of the economy. After a good 2021, 2022 was an unfavorable year for steel distribution in Eastern Europe.

In Poland, for example, demand and prices for steel products have been declining since about the middle of last year. This is the result of turbulence in the economy caused by the war in Ukraine: rising energy prices, inflation, and postponement of investment decisions until better times. This is exacerbated by the lack of funds under the National Reconstruction Plan. As a result, apparent steel consumption fell from 15.3 million tons in 2021 to 13.3 million tons in 2022, 15 percent.

Since last July, the level of stocks at the distributors is at a constant, rather low level. There is no tendency for their recovery. For the first time in many years, apparent steel consumption fell below 1 million tons in July, and in December it was only 680,000 tons, and in January 2023 it was down more than 30 percent. The demand problems are due to declining orders in industries such as housing, infrastructure construction, and machinery. It is recovering only in the automotive sector.

The European steel industry is increasingly being supplanted by imports from third countries, i.e., from outside the EU. Since 2016, Europe has become a net importer of steel. Year after year, imports are increasing. In just a decade, the EU lost 26 million tons of production capacity, of which Poland lost 2.6 million tons. Polish steel products account for about 20 percent of the market, the rest being imports and imports from other EU countries. From 2016 to 2022, Poland's crude steel production decreased by 1.6 million tons.

Exporters make money from this - and from outside the EU, unencumbered by the Emissions Trading System (ETS) and other rules. In 2021, Russia, Belarus, and Ukraine were among the main exporters from the group of so-called third countries. In 2022 - after sanctions were imposed - imports to Poland were developed by such faraway countries as Indonesia (357 percent growth in the second half of 2022), Japan (+422 percent), and Australia (+138 percent).

In 2022 more than 11 million tons of imported products were used in Poland, and only 2 million tons were produced locally. This is a prerequisite for increasing production capacity in Poland and restoring the state's influence in such a strategic area as steel production. Węłokoks is preparing to build a new steel plant in Ruda Śląska. It will be a steel smelting plant using electricity. The electricity will come from renewable energy sources, and the steel will be environmentally friendly.

The review looks at the steel industry in several Eastern European countries: Bulgaria, Hungary, Moldova, and Poland.

1. Bulgaria

Bulgaria is among the countries that are small producers of steel and steel products, which is the result of the closure of the largest steelmaking capacities in blast furnaces. Production in neighboring countries Romania, Serbia, and Greece is much higher, at 2.8 million tons, 1.5 million tons, and 1.4 million tons, respectively. In 2020, the share of Bulgarian steel production in European crude steel production was 0.4% (the amount of crude steel produced was 483.8 thousand tons, a decrease of 82.1 thousand tons compared to 2019, and represents a decrease of 14.5% and exceeds the percentage of total decrease for the EU - 11.1%).

In 2020, the total production of rolled ferrous metals in the country was 930.8 thousand tons, a decrease of 37.3 thousand tons (a 3.9% drop) compared to the previous year. Produced long products 731.3 thousand tons (79%), flat products 199.5 thousand tons (21%).

In 2020 the production of long products exceeds the previous year by 5.3 thousand tons, for flat products, there was a decrease of 42.6 thousand tons (a 17.6% drop).

The share of metallurgy in the total output of Bulgaria is 15.5%, and in the industrial production of the country - 13.2%.

1.1. STOMANA Industry S.A, Pernik



Stomana Industry A D is a part of Sidenor Group - one of the largest steel producers in the Balkan Peninsula, with a leading position in Europe.



The group's plant was built in 1953 under the name Metallurgical Plant named after Lenin, later the name was changed to Metallurgical Plant. In June 2001 Sidenor AD acquired a controlling stake in Stomana AD (86% at the moment) and took over the management and general operations of the company.

Steel production at Stomana Industry Pernik is based on scrap melted in an electric arc furnace (EAF) with a capacity of 1400 thousand tons per year.

The company produces a wide range of products, including sheet metal, rolled steel, steel spheres, and special profiles.

Production facilities and equipment:

Covered scrap yard equipped with electromagnetic cranes, scrap processing line, scrap trucks, and developed ground and rail network.

Steelmaking shop equipped with two powerful electric arc furnaces, two steelmaking plants, a continuous slab casting machine, and a continuous ingot casting machine.

The sheet rolling shop is equipped with methodical furnaces, a universal rolling mill, two sheet straightening machines, two cooling beds, and a special quality sheet metal normalizing furnace and ultrasonic testing with a cart for special steel grades.

The rolling shop is equipped with methodical furnaces, a rolling mill, intermediate rolling mills, a cleaning shop (end mill), circular saws, coolers, and a repair machine.

Ball shop equipped with methodical furnaces and rolling mill.

Cold-rolled steel shop equipped with repairing machines, tempering furnaces, drawing and pressing lines, forming lines, and ultrasonic defectoscope for surface and internal defects for both hot-rolled and cold-rolled steel types.

The new rolling shop for long products: rebars, long products, rounds, and wire rods is equipped with a methodical furnace, a rolling mill, a ribbing section, coolers, and finishing machines.



Steel production capacity: 1400.0 (thousand tons per year).

Number of employees: 1,200

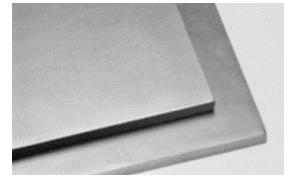
Steel product category: semi-finished products; finished rolled products

Steel products: rebar for concrete, SD steel, hot-rolled steel sheet, commercially rolled rounds

The product range


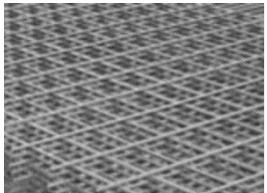
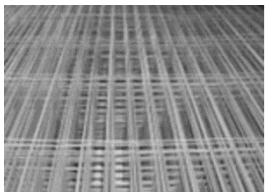


Sheet metal: hot-rolled steel sheets of different grades:

- construction and general purpose (S235JR, S235JR+N, S275JR, S355J2+N, A36)
- marine applications (LR-A, GLA, BV-A, ABS)
- boiler and pressure vessel (P235GH, P265GH)
- for hardening and tempering (C45)



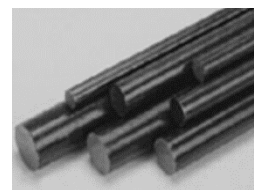
The size range includes thicknesses from 8 to 60 mm with a maximum width of up to 2 meters and a maximum length of up to 12 meters, depending on the thickness.

Rolled steel:

- Steel for concrete reinforcement: reinforcement steel of quality class B500B - BDS 9252 (new Bulgarian standard from 2007) based on new European requirements (EN 10080). The SD (B500B) rebar steel is available in diameters of 10, 12, 14, 16, 18, 20, 22, 25, 28, 32, and 40 mm, with a standard length of 12 meters and an approximate link weight of 2 tonnes. The range of SD rebar is supplemented by bar products in 8mm diameter and coils in 6, 8, 10, 12, 14, and 16mm diameter, in B500B - BDS 9252 quality, both produced in the Sidenor Group rolling mills in Greece. 
- SD reinforcing steel is also certified according to the German standard DIN 488 in BSt500S grade, for sale in other countries.
- SIDEFIT concrete reinforcement sieves: used in construction work to form a reinforcement mesh for surface structures (slabs, walls, standard reinforcement screens SD for columns). There are two main categories of SIDEFIT reinforcement: in SIDEFIT 1D sieves the main reinforcement is embedded in one direction; in the other direction small-diameter bars ($\varnothing 6$) of SAE 1010 are welded. They overlap the reinforcement of the required space. The number of these bars ($\varnothing 6$) is the minimum necessary to ensure the fit of the sieve and their position may vary depending on the type of application (e.g. curved points, dropped ends, "guides" to form a sieve, etc.) Their material enables easy cutting when required. SIDEFIT 1D can be used for all applications in longitudinal reinforcement (all types of beams, columns, walls, etc.) as well as in the construction of reinforcement meshes for above-ground structures (slabs, walls, etc.). A wide range of sizes up to 12.0 m in length and 3.6 m in width, which cover almost all applications. SIDEFIT 2D screens have the main reinforcement welded in both directions of the screen ($\varnothing 8$ - $\varnothing 25$ in one direction and $\varnothing 8$ - $\varnothing 16$ in the other). 
- Lightweight reinforcement screens for concrete: wire mesh screens using BSt500M reinforcing steel by DIN488, various types of screens type Q and R are manufactured from SAE 1010 cold-rolled wire rods welded transversely and longitudinally. The wire diameters range from $\varnothing 4.0$ to $\varnothing 8.0$ mm and the sieve shapes are rectangular or square. 
- Steel reinforcement frames for concrete - SIDEFOR: 3D steel frames for transverse reinforcement are used to reinforce concrete columns, beams, and walls in many transverse geometries and diameters. 
- Equilateral hot-rolled angles: with flange lengths from 60 to 100 mm and flange thicknesses from 6 to 12 mm in lengths from 6 to 12 m and as in the SIDENOR factory in Thessaloniki, with leg lengths from 20 mm to 50 mm and leg thicknesses of 3 mm and 6 mm, used in fences, as support posts for sheds and vineyards, for sheds and ceilings, in truck structures and for steel electric poles, etc. 

Special steels

- Hot-rolled rounds: produced at TEPROSTEEL, a subsidiary of the SIDENOR Group, in Pernik, Bulgaria. The products are used in forging, machine tool production, and hydraulic cylinder production, as well as in mechanics, mechanical engineering, automotive and other applications.
- Hot-rolled round bars: Round bars (round bars) are produced at the STOMANA AD plant in Bulgaria with a diameter from $\varnothing 40$ mm to $\varnothing 120$ mm, and the SIDENOR plant with a diameter from $\varnothing 10$ mm to $\varnothing 40$ mm. Length: 6 m, designed for the CommonRail market, screw manufacturers, mechanical equipment manufacturers, etc.



Special profiles

- Hot-rolled rectangular steel (bar): Width 80 to 180 mm - Thickness 25 to 90 mm, Length 6 - 12 m with a tolerance of $-75 / + 75$ mm. Packages weighing up to 5200 kg. DIN 1017. Modified common steel grades 15B35 and 35Mn5.
- THN hot-rolled mining sections: rod weights 16.50 / 20.92 / 29.00 kg/m and lengths from 6 to 12 most steel grades produced by STEEL are 31Mn4 by DIN 21544. Other standards can also be manufactured to order.
- Hot-rolled plow blades: hot-rolled steel for plow sections with a weight of 9.6 kg/m, C 50 according to DIN 17200, packing weight up to 5200 kg.
- Hot-rolled railway sleepers: Hot-rolled steel profile for railway rails type 49, STEEL MARK C 30 according to EN 17200



Steel balls (spheres)

- Steel grinding balls: in diameters from 40 to 120 mm. Grinding balls are used in mining for many metals such as gold, copper, lead, zinc, nickel, tin, and silver.



Other steel products

- Wire products and welding products (ERLIKON SA)

Contacts:

Central Offices:

1, VladaiskoVastanie str., BG-2304, Pernik, Bulgaria

Tel.: +359-76-681-023

Commercial network: Domestic sales team:

+359-76-681232, 681332, 681432

local@stomana.bg

Export Department: +359-76-681023

export@stomana.bg

<http://www.stomana.bg/online/home.aspx?langid=1&code=home>

1.2. PrometSteel EAD, Burgas



"Promet Steel EAD is a high-tech enterprise specializing in the production of a wide range of hot-rolled products in a wide range of standard and special steels. It is located 25 km from the port of Burgas in the territory of the village of Debelt, Burgas municipality, and is connected to it by rail and road.



Since 2010, Promet Steel EAD has been part of the Ukrainian **Metinvest Group**, which is among the 50 largest steel producers and the top ten largest iron ore producers in the world. The group includes steelmaking companies in Ukraine, steel mills in Italy, Bulgaria, and the UK, and coal refineries in the USA.

Production premises and equipment:



Rolling mill

The Promet Steel EAD mill includes a Stein-Heurty reheating furnace, a 300 mm rolling mill supplied by SKET under license from KRUPP, as well as a modern product packaging line from Sund Biersta. The production capacity of the mill is 800,000 tonnes per year.

The reinforcing bar shop

There is a fully automated cutting and bending shop on site for the production of reinforcing bars of varying degrees of complexity, with a production capacity of 24,000 tonnes per year.

Laboratory

The company has its central laboratory accredited by EN ISO/IEC 17025 by the Bulgarian Accreditation Service.

An integrated quality management system by ISO 9001:2008, ISO 14001:2004, and OHSAS 18001:2007 standards is in place.

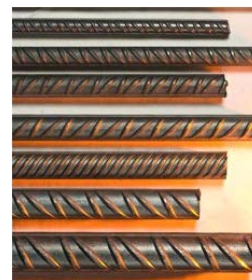


Product range

Hot-rolled (ribbed) steel reinforcement

The plant produces hot-rolled rebar of diameters 8, 10, 12, 14, 16, 18, 20, 22, 25, 28, 32, and 40 mm in standard length of 12 m, non-standard length of below or above 12 m.

The quality of manufactured products complies with BDS 9252 (B500B and B500C steel grades), and BDS 4758 (B420B and B420C steel grades). Moreover, PrometSteel EAD is certified for the production of batch sections by specifications of different standards, such as DIN 488 (steel grade B500B), STAS 438 (steel grade PC 52), ELOT 1421-3 (steel grade B500C), BS 4449 (steel grade 460B and B500B), DM 14.01.2008 (steel grade B450C), NEN 6008 (steel grade FeB500HWL). DIN 488 products are also certified for sale in Spain and Ukraine.



Hot-rolled steel angle equilateral/winckel/on bars

The plant produces hot-rolled angle equal flange/angle/bar steel with an arms width from 25 to 50 mm and a thickness from 3.0 to 6.0 mm, according to the requirements of EN 10056 and GOST 8500. Steel grades according to EN 10025-1.2 (S235JR/S275JR/S355JR) and GOST 380, GOST 535 (St3sp/ps).

The standard length of the corner sections is 6 m, but according to the customer's request products of different lengths from 4 to 18 m can be produced. Products EN 10025-1,2/ EN 10056 are certified for sale in Ukraine.



Steel hot rolled flat / rail / on bars

"Promet Stiiil" produces hot-rolled flat steel/bar/ in rods in widths from 30 to 80 mm and thicknesses from 5 to 20 mm according to EN 10058 and GOST 103. Steel grades produced by N 10025-1,2 (C235ZhR, C275ZhR, C355ZhR) and GOST 380, GOST535 (St3sp/ps).

The standard length of angle sections is 6 m, but according to the customer's request products of different lengths from 4 to 18 m can be manufactured. Products EN 10025-1,2/ EN 10058 are certified for sale in Ukraine.



Hot-rolled steel rounds

The plant produces hot-rolled round steel in bars \varnothing 10 to \varnothing 50, by the requirements of EN 10060 and GOST 2590. Manufactured steel grades comply with EN 10025-1,2 (S235JR, S275JR, S355JR), EN 10083-1,2 (C45, C20, etc.), GOST 380, GOST 535 (St3sp/ps) and GOST 1050 (St45, St20, etc.).

The standard length of the round profiles is 6 meters, but on customer request, different lengths from 4 to 18 meters can be produced. EN 10025-1,2/ EN 10060 products are certified for sale in Ukraine.



Promet Steel's revenues are around €440 million in 2021.

PrometSteel's Bulgarian rolling mill produced a record 501,000 tonnes of products in 2020.

The geography of deliveries is South-Eastern European countries, including Greece, Macedonia, Hungary, and Bulgaria. Romania accounted for the bulk of deliveries: during the year, the company supplied 294,000 tonnes of products to the country.

Contacts:

Promet Style EAD

reg. Burgas, Municipality. Sredets, v. Debelt, 8314,
Administrative building "PrometSteel",
office@promet.bg

Commercial Office Sofia

1, 1000 Dobrudja Street, Sofia
office.sofia@promet.bg

Commercial Office Burgas

6, Khan Krum Str., 8000, Burgas
kiril.tomov@promet.bg
Розалина.Дикова@promet.bg

MetinvestCarpatia Ltd. Romania

Turturelelor str. Turturelelor 11,
floor 2
Phoenicia Business Center, sector
3, Bucharest
Tel.: +40 314 378 372
[romania@metinvest-
international.com](mailto:romania@metinvest-international.com)

Commercial Agent Serbia

Slobodan Davidovic
ul. 37 Kosta Abraševića Street,
11050, Belgrade
Tel: +381 63 231 441
meta15@mts.rs

2. Hungary

Hungary has not been a major producer and consumer of steel in recent years. The maximum level of ferrous metal production in Hungary was in the 80s of the last century. The decline in steel production occurred during the privatization of the Hungarian steel industry, which started in 1990. In the same period, Hungary abandoned state subsidies in steel production.

Until now, one of Hungary's largest steel producers, the Dunafer plant, ISD Dunafer Zrt, owned by the Ukrainian corporation ISD (Industrial Union of Donbas), has remained in Hungary. The plant, which has a full metallurgical cycle, was initially linked to the Kryvyi Rih iron ore basin, as Hungary has no iron ore deposits of its own. The plant produced about 1.4 million tonnes of iron and 1.7 million tonnes of steel per year.

The Dunafer plant has always been in a tough competitive situation. It is a four-hour drive away from Linz (Austria) and from Kosice (Slovakia), two of the largest steelworks in Europe, which fulfill the largest orders. Hungarian plants in this case received small orders, which are not of interest to the giants. On January 5, 2023, the Municipal Court issued a final and binding ruling to liquidate ISD Dunafer Zrt. In addition, there is a steel company operating from the former Ozda Steelworks in the industrial region of Northern Hungary.

2.1. ISD Dunafer Danube Ironworks Co. Ltd.

ISD Dunafer Danube Ironworks Co. Ltd. is one of Hungary's largest manufacturers with more than 5,000 employees and an annual turnover of over €1 billion. Thanks to its integrated technology it offers a wide range of steel products including hot rolled coils and sheets, pickled coils and sheets, cold rolled coils and sheets, hot dip galvanized coils, and sheets, and open and hollow cold bent profiles. The annual output of finished steel products is 1.8 mln tons. Member of the ISD group (Industrial Union of Donbas), Ukraine.



Liquidation:

The Municipal Court has issued a final and binding order for the liquidation of ISD DUNAFERR Dunai Vasmű Zrt. "fa" (registered office: 2400 Dunaujvaros, Vasmu Street 1-3. Company registration number: Cg. 07-10-001049, tax number: 11102539-4-07).

The starting date of the liquidation is 5 January 2023.

The Dunafer plant has been idle since the third quarter of 2022. In August and September 2022, the company suspended operations of two blast furnaces with a total annual capacity of 1.2 million tonnes due to disruptions in the supply of coking coal. The actual reasons for the stoppages were the refusal to supply coke from Austria's DBK, a long-time partner of the group, lack of funds, and waiting for government support. Also, the combine has accumulated over \$500m of debt, which consists of unpaid carbon emission allowances, and some outstanding loans to shareholders, among others. Dunafer started facing problems a few years ago due to the impact of the COVID-19 pandemic and rising commodity prices.

Contacts:

+36 25 581305

<http://dunaferr.hu/en>

2.2. OAM Ozdi Steel Works Ltd./ ÓZDI ACÉLMŰVEK



Max Aicher GmbH is a steel company based in the former Ozda Steelworks in the industrial region of Northern Hungary.

On May 3, 1997, ÓAM Kft. was acquired by the German Max Aicher GmbH & Co. group, which in 2000 commissioned a small steelworks to operate a bar and wire rolling mill.

The day before, a 20 percent stake in the property was purchased for more than €30 million from the current owner of the German Max Aicher group by the Hungarian state.



Max Eicher's OAM steelworks successfully continues the long tradition of Hungarian steelmaking in Ozda in the northeast of the country. With around 500 employees, OAM is now Hungary's largest producer of recycled reinforcing steel and exports its products to all neighboring countries.

Equipment:

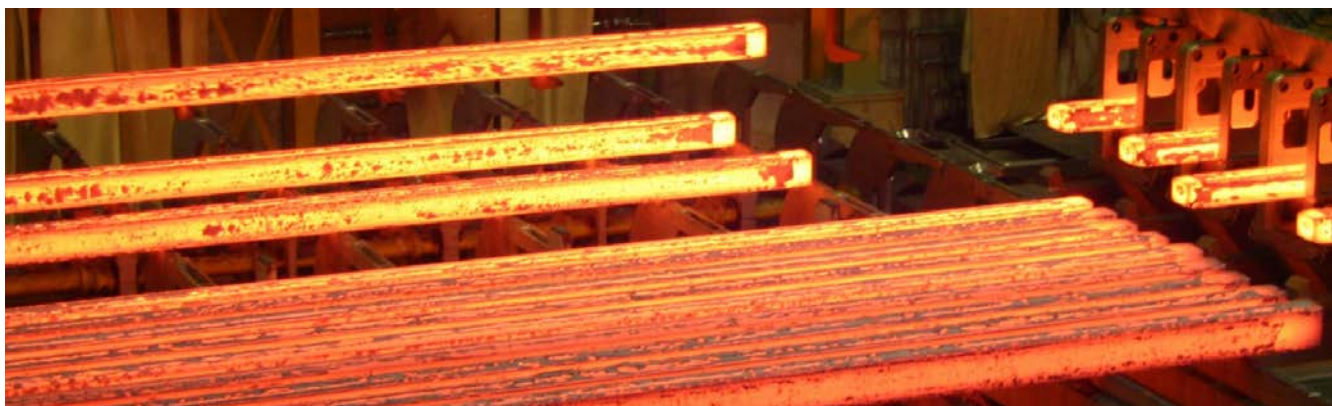
The steelworks consists of an electric furnace with a modern discharge system (liquid steel capacity of 60 t/portion), a ladle furnace, and a four-line continuous casting facility. Its main material is steel scrap, supplemented by various additives.



The mill is a rolling line with a nominal capacity of 360,000 tonnes, with a continuous arrangement suitable for the production of concrete reinforcement and round bars in the size range of 8-40 mm, as well as for the production of wire rods in the 7-14 mm range.

The plant manufactures wire rods and wire mesh by MSZ and DIN standards by hot rolling. A wide range of in-house-produced flat mesh reinforcing bars.

The products and the quality assurance system of ÓAM Kft. comply with the requirements of ISO 9001.



Products:

Hot-rolled concrete steel

- Ribbed concrete steel 8; 10; 12; 14; 16; 18; 20; 22; 25; 28 (26; 30); 32; 36; 40 mm
- Hot-rolled wire rod 7; 7.5; 8; 8.5; 9; 9.5; 10; 10.5; 11; 11.5; 12; 13; 14 mm
- Hot-rolled round, flat and square steel



- Round bars \varnothing 12-30 mm, 3000-13000 mm
- Flat steel 25-50 x 5-10 mm
- Square steel \varnothing 12-20 mm 3000-13000 mm

Downstream products



Hot-rolled rebar produced in coils is ribbed by cold stamping. Available in sizes: 4; 4.2; 5; 5.5; 6; 7; 8; 9; 10 mm. Design: coils weighing 2-3 tonnes are strapped in 4 places with steel banding.

Sikhalok welded fittings

Sikhalo products are manufactured according to DIN 488-4: 2009-08 MSZ 5761:1987, single wire construction, contact spot welding. The mesh is made of cold-ribbed wire.

Factory data on welded reinforcement in schlock (4; 4,2; 5; 6 mm):

Mesh size: Length max. 6000 mm, width 2150 mm.

Factory data for welded reinforcement in sychaloc (7; 8; 9; 10 mm):

Mesh size: Length max. 8100 mm, width 2400 mm.

Contacts:

ÓAM ÓZDI ACÉLMŰVEK KFT.

Max Aicher Vállalatcsoport, 3600 ÓZD, Max Aicher út 1.

(+36) 48-575-500, 575-510

oamkft@oamkft.hu

www.oamkft.hu

2. Moldova

The Moldovan Metal Works, built in 1985, operates in Ribnita, and its products are exported to EU countries, the USA, Canada, and Australia. In general, Moldova is considered an agrarian-industrial country and its economy is based on agriculture. Lack of minerals, and investment, coupled with several political contradictions, hinder the development of the economy and metallurgy in particular.

3.1. JSC Moldova Steel Works





Moldovan Steel Works is a plant for the production of metal products in Ribnita, built to recycle scrap metal. Since 2015 it is owned by the state.

Construction of the plant began in August 1981 and the first steel castings were made in October 1984. The two main shops are the electric steelmaking shop and the section rolling shop.

The Moldovan Steel Works in Ribnita produces 1 mln t of rolled products and the same number of tones of steel annually. Currently, 80% of the produced metal is exported to the European Union, the USA, Canada, and Australia.

Moldova Steel Works turnover: \$500 million (2006)

Equipment: The plant uses a heavy-duty electric arc furnace, which can produce approximately one million tonnes of liquid steel per year.

The EAF is a 120t electric arc furnace with a maximum capacity (liquid steel) of 140t. Ladle furnace. A continuous small-section rolling mill (320/150). The annual production volume of rolled products is 900 thousand tonnes.



Types of manufactured products:

- Commercial continuous cast billets
- Rolled rebar in a wide range of profiles and diameters
- Rolled bar
- High plastic wire rod
- Cold heading wire rod for the production of fasteners
- Preformed rolled products

Products:

The company's long products are angles, rods, rebars, and channels.

Steel reinforcement is deformed and plain in rods and coils. Sizes from 6 to 40 mm.

- Wire rods: диаметр от 5,5 до 14 мм

Bale weight 1350±150 kg; bale outer diameter 1250 mm; bale inner diameter 850 mm; bale height max. 1110 mm.

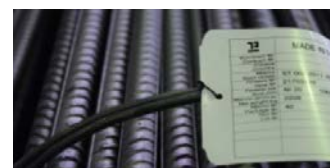
- Angles: wing width: 25-50 mm, wing thickness: 3-5 mm
- Reinforcing steel bars

Reinforcing steel in coils: rod length 6000-12000 mm, bundle weight up to 5 tons, coil outer diameter 1250 mm; coil inner diameter 850 mm; coil height max. 1350 mm; bale weight 1350±150 kg

- Steel billets

The twist is not specified. $h = b = 125\text{mm}$ (+/- 3,0 mm) $L = 11700 \pm 100$ mm (8, 9, 10, 11, 12 m are acceptable)

Rhomboidity - up to 10 mm, max Camber - up to 60 mm, max.



Thanks to absolute compliance with production technology, the plant holds the necessary international quality control system certificates. This has enabled MMZ to supply products to the Middle East, Latin America, the European Union, the CIS, and South-East Asia.

The plant has its own Central Testing Laboratory equipped with standard instruments and control methods for chemical analysis and testing mechanical properties.



Contacts:

1 Industrial street, Ribnita

[+7 \(373\) 55576141](tel:+737355576141)

aommz@aommz.com

<https://www.aommz.com/ru>

4. Poland

The steel industry is one of the oldest industries in Poland. Steel and ferrous metallurgy account for 91% of Polish metallurgical production, with the rest coming from non-ferrous metallurgy: copper ranks second after steel with a share of 7%. Lead and zinc account for the remaining 2%.

Back in 2011, Poland produced 8.8 million tons of crude steel, which was 0.6% of global production (ranking 8th in Europe and 19th in the world). Nowadays, iron ore is no longer mined in Poland (the ores were poor and the deposits were often small). For a long time, however, Polish steel mills relied on imported raw materials, from the Kryvorizka Basin in Ukraine.

The largest steelworks in the country: Huta Katowice in Dąbrowa Górnicza and Huta im. T. Sędzimir in Nowa Huta in Kraków (as well as the steelworks in Świętochłowice and Sosnowiec), which are combined in the Polskie Huty Stali group, are now owned by the steel giant Arcelor-Mittal, which produces 70% of the steel produced in Poland. The Katowice and Sendzimir steelworks now have modern continuous casting lines (COS). Guta Sendzimir was established in 1949-54 (under the name of Lenin Guta) and Guta Katowice in 1971-76.

Other steelworks in the area of Upper Silesia and the Krakow industrial region are located, among others, in Ruda Śląska (Kompania Metalworks), Chorzów (Batory Metalworks), Lasiska Górne (Lasiska Ferroalloys Steelworks - the biggest electricity consumer in the country) or in Zawierc. They were placed there because of the proximity of the coke plant (coke is needed in steelmaking). In the center of the region, where until recently iron ore was extracted, there was founded Huta Częstochowa - one of the biggest factories in Poland that produced ship plates (currently, the problem is with their sale due to the collapse of the Polish shipbuilding industry). In May 2021, it was bought by Liberty and became Liberty Częstochowa.

In the former iron ore mining area - in the Świętokrzyskie Mountains - there is the Ostrowiec Ironworks, owned by the Spanish company Celsa, which produces, among other things, steel bars for concrete reinforcement.

Huta Warszawa was founded in Warsaw in the 1950s, specializing in the production of stainless steel sheets (including those used to manufacture car bodies at the Gieran plant in Warsaw). It is also owned by the Mittal group.

ArcelorMittal Poland, the holding of Polish steel mills, accounts for most of the country's steel production. The company has invested in Poland a total of around PLN 7 billion and has become one of the most important players on the international stage. The holding company employs over 10,000 people in six branches across Poland.

Since about mid-2022, demand for and prices of steel products in Poland have been declining. This is the result of turbulence in the economy caused by the war in Ukraine: rising energy prices, inflation, and postponement of investment decisions until better times. This is exacerbated by the lack of funds in the National Reconstruction Plan. As a result, apparent steel consumption has fallen from 15.3 million tonnes in 2021 to 13.3 million tonnes in 2022, a reduction of 15 percent. Despite the reduction of production capacity by producers (in 2022 all Polish steel mills produced 7.41 million tons of steel, which is 12.31 percent less than the year before), there is no shortage of goods on the market.

4.1. ArcelorMittal Poland



ArcelorMittal Poland is the largest steel producer in Poland. Lakshmi Mittal's global steelmaker took over the bankrupt Polish steel mills in March 2004 to restructure them over the next few years, restore their financial liquidity, and, with an investment of several billion zlotys, give the Polish steel sector a new character.

Two months after the privatization of PHS, the district court in Katowice changed the company name to Ispat Poland Steel to create Mittal Steel Poland SA in February 2005 in connection with the creation of the Mittal Steel Group.

In June 2006 the largest steel producers, Arcelor and Mittal Steel merged to form the global ArcelorMittal group. In connection with the merger, the name Mittal Steel Poland was officially changed to ArcelorMittal Poland on 2 October 2007.

Production capacity reaches 7.6 million tonnes of steel and around 6.5 million tonnes of rolled products per year.

Operating income ArcelorMittal Poland: USD 7,072,876,007.



ArcelorMittal Poland consists of:

- Metallurgical Plant in Swietochlowice
- Metallurgical Plant in Dąbrowa Górnicza
- Steel Works in Krakow
- Rolling plant Graf Renar in Sosnowiec
- Guta Korolevska Plant in Chorzów

4.1.1. Metallurgical Plant in Swietochlowice

A Metallurgical Plant in Świętochłowice with more than 190 years of history. Founded as Bethlen-Falva, renamed Florian, it has now transformed from a raw material plant into a processing plant, which has led to the closure of the blast furnace department and the liquidation of the open-hearth steelworks.

As a result, ArcelorMittal Poland's plant in Świętochłowice now produces first-class flat-rolled products: galvanized and organically coated sheets. The plant currently employs more than 400 people.



ArcelorMittal Poland invested about 150 million zlotys in the plant, most of which was spent on the construction of a modern organic coating line. Thanks to this, the Świętochłowice steelworks, in addition to galvanized sheets, also produces high-quality organically coated sheets. They are used to produce e.g. metal tiles used to cover the roofs of private houses or façade panels that form the cladding of walls and façades of industrial buildings, production halls, warehouses, and supermarkets.

**Contacts:**

Branch office in Świętochłowice

ул. Metalowców 5, 41-600 Świętochłowice

+48 32 776 66 66

edward.wojcik@arcelormittal.com

4.1.2. Metallurgical Plant in Dąbrowa Górnicza

The former steelworks Guta Katowice today-ArcelorMittal Poland in Dąbrowa Górnicza, today ArcelorMittal Poland is proud to be one of the few plants in the world to produce rails with a length of 120 meters.



Production profile

Production of pig iron, and steel in the form of continuously cast billets, billets, and slabs, as well as hot-rolled billets, rails, and sections.

The plant accommodates 3 blast furnaces, operates an oxygen converter melting furnace, 2 continuous casting facilities, and a rolling mill: a rolling mill for the production of railway rails with a length of 120 m.

Production capacity of the plant (in million tonnes of steel per year):

- plan - 9,5
- real - 5,5
- in perspective - an increase of 11

Continuous casting capacity of 3 million tonnes of steel per year.

Contacts:

M. Dąbrowa Górnicza, gmina M. Dąbrowa Górnicza

Tel: (48-32) 776-66-66

4.1.3. Steel Works in Krakow



Steelworks in Krakow, founded in 1954 - ArcelorMittal Poland branch in Krakow-historical Guta T. Sendzimir. During the 1970s, the Krakow steelworks produced close to 7 million tonnes of steel per year. Today, there is one modern coke oven battery and one blast furnace in operation, and production levels are five times lower. The hot strip mill, launched in 2007 for PLN 1.2 billion and expanded in 2016, is still the most modern rolling mill in Europe.

Production profile

Production of hot-rolled sheets, cold-rolled ferrous sheets, galvanized and coated with organic coating; production and sale of coke and carbon products, as well as production and distribution of energy media.

Contacts:

31-752 Krakow ul. T. Sendzimir 1
Phone: PKP (48-32) 776 66 66;
REGON 277839653-00030

4.1.4. The former Cedler Steelworks in Sosnowiec

The former Cedler steelworks in Sosnowiec, and now one of the branches of ArcelorMittal Poland, is famous for the production of wire rods, i.e. semi-finished products from which, among others, bolts, fence nets, steel ropes and even shopping carts or metal shelves for refrigerators are made.

After a period of major modernization in 2003, it was incorporated into the Polish Steelworks group and today belongs to ArcelorMittal Poland.

Production capacity of 800,000 tonnes per year.

Contacts:

ArcelorMittal Poland SA branch in Sosnowiec
ul. Nywiecka 1, 41-200 Sosnowiec
T: +48 32 776 66 66



4.1.5. Guta Korolevska ArcelorMittal Poland plant in Chorzów

ArcelorMittal Poland's Guta Korolevska plant in Chorzów. It has transformed a raw materials plant into one of the most modern production centers for the rail and mining industry. It is also equipped with a modern rolling mill. Since 1 January 2009, it is owned by ArcelorMittal Poland s. a.

Contacts:

ArcelorMittal Poland SA Branch Huta Królewska
ul. 13 Metallistov Street, 41-500 Chorzów
T: +48 32 776 66 66

ArcelorMittal Poland produces:

- Valuable long products: profiles, rails, railway accessories, mining enclosures
- Flat products for the automotive, domestic, and construction industries

ArcelorMittal Poland products:

- Products for construction

Hot-rolled profiles

Hot-rolled sections: I-beams, channels, angle beams, T-beams, flat beams, and bars.

T: +48 32 776 73 85/ M: +48 606 331 066

Email: anna.wisniewska1@arcelormittal.com

Smooth round wire rod

Wire rod (5.5-21 mm) is manufactured from billets cast on COS machines.

T: +48 32 736 14 01 ; м. +48 600 296 865

e-mail: tomasz.laczkowski@arcelormittal.com

Profile wire rod

Maximum cross-sectional area 180 mm²

Max. cross-sectional area 180 mm²

- Household goods and appliances

Galvanized/organic coated sheets

Granite Storm is a coated sheet designed for roofing materials, featuring superior strength, a matt finish, and exceptional ductility.

T: +48 61 222 50 66

Email: zbigniew.taciak@arcelormittal.com

Hot-rolled sheet in circles

Thick plates of unalloyed and alloyed steels (including tool steels) and special applications.

T: +48 664 968 251, +48 12 293 2102 e-mail: pawel.chamczyk@arcelormittal.com

Cold-rolled sheet

T: +48 664 968 251, +48 12 293 2102

e-mail: pawel.chamczyk@arcelormittal.com

Hot-dip galvanized steel sheets and strips

T: +48 61 222 50 66

Email: zbigniew.taciak@arcelormittal.com



Hot dipped galvanized and coated sheets and strips

T: +48 12 293 2145, +48 12 293 2102

Email: zbigniew.taciak@arcelormittal.com

Cold rolled strip

T: +48 12 293 2145, +48 12 293 2102

Email: zbigniew.taciak@arcelormittal.com

- Special products

Railway rails

T: +48 32 776 86 16 M: +48 668 312 598

Email: marek.bednarek@arcelormittal.com

Tram rails

T: +48 32 776 86 16 M: +48 668 312 598

Email: marek.bednarek@arcelormittal.com

Crane rails

T: +48 32 776 86 16 M: +48 668 312 598

Email: marek.bednarek@arcelormittal.com

Rafter rails

T: +48 32 776 86 16 M: +48 668 312 598

Email: marek.bednarek@arcelormittal.com

Intermediate rails

T: +48 32 776 86 16 M: +48 668 312 598

Email: marek.bednarek@arcelormittal.com

Profiles for railroad crossovers

T: +48 32 776 86 16 M: +48 668 312 598

Email: marek.bednarek@arcelormittal.com

Railway accessories

T: +48 32 776 86 16 M: +48 668 312 598

Email: marek.bednarek@arcelormittal.com

Profiles for the mining industry

T: +48 32 776 61 32; +48 662 168 128

e-mail: agnieszka.koszowska@arcelormittal.com

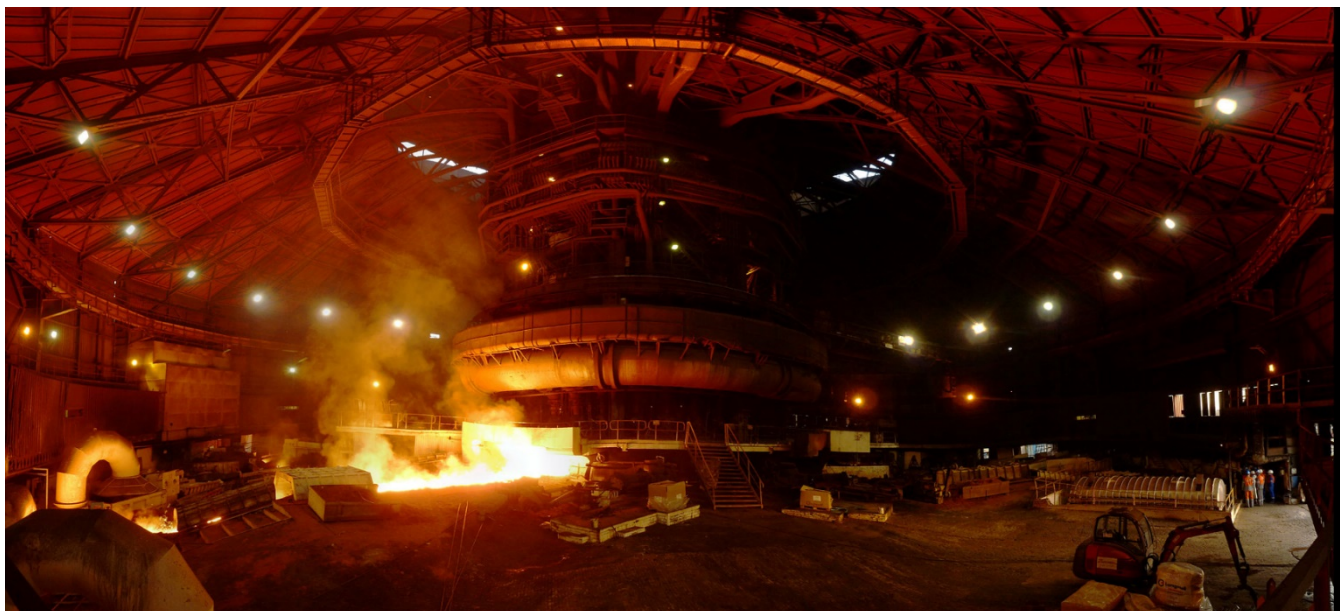
- Semi-finished products

Billets and heavy cast steels

T: +48 32 776 98 48

M: +48 606 338 807

e-mail: grzegorz.cieslik@arcelormittal.com



Contacts:

Headquarters ArcelorMittal:

PolandAl. Józefa Piłsudskiego 92 41-308 Dąbrowa Górnicza

T: +48 32 776 66 66

<https://poland.arcelormittal.com/>

4.2. ArcelorMittal Warszawa

ArcelorMittal Warszawa is a steel company based in the Białański district of Warsaw, in the Guta district (from 1992-2005 it was owned by the Italian group Lucchini), now owned by ArcelorMittal. Construction of Huta Warszawa started in 1952.

The company operates as a limited liability company and is a subsidiary controlled by ArcelorMittal Lakshmi Mittala. The plant mainly produces stainless steel.

ArcelorMittal Warszawa is currently one of the most modern steelworks in Europe. It produces sections of carbon and alloy steels used in the automotive, mechanical engineering, bearing, plastics, and construction industries.



Production units

ArcelorMittal Warszawa includes the following production units: an electric arc furnace plant capable of producing more than 500 types of steel, a rolling mill for quality and ribbed steel (one of the most modern rolling lines in Europe), finishing lines.

Operating income of ArcelorMittal Warszawa: USD 645,533,247.

Products

ArcelorMittal Warszawa's steelmaking output includes the following grades of hot-rolled steel: carbon, alloyed, micro-alloyed, automotive, spring, bearing, hot-rolled, or heat-treated forging and machining.

Quality steel products

- Round bars

Dimensions: 20-80 mm, Tolerances: EN 10060, DIN 1013, PN/H-93200-02. Lengths: 3.5-12 meters

- Ribbed bars
- Krybar® cryogenic rods

In size range of 12-32 mm for cryogenic applications (used for reinforcing LPG and LNG tanks at temperatures down to -170 oC)

- Semi-finished products in the form of square billets with COC dimensions:

140 mm, length no less than 4 m, max 14.9 m

160 mm, length not less than 4 m, not more than 14,9 m

220 mm square, length not less than 4 m, not more than 9 m



Investments

More than 500 million zlotych was invested in the modernization of the Warsaw steelworks between 2008 and 2020. ArcelorMittal Warszawa reduced the number of accidents by more than 90% by significantly improving occupational health and safety standards. This reduced dust emissions by more than 90% and gas emissions by more than 60%.

Huta ArcelorMittal Warszawa produced more than 500,000 tonnes of steel in 2022.

Contacts:

Head Office of ArcelorMittal Warsaw Sp. z o. o.
ul. Kasprowicza 132, 01-949 Warsaw, PL
+48 22 835 8000, +48 22 835 8100, +48 22 835 8049
<https://www.arcelormittal-warszawa.com/>

4.3. Węłokoks Group of Companies



The Węłokoks group includes the following steel companies: Huta Pokoj S.A., Huta Łabędy, Walcownia Blach Grubych Batory.



4.3.1. Huta Pokoj S.A. is a steelworks in Ruda Śląska in southern Poland, in the Upper Silesian Industrial Region. One of the oldest iron and steel works in Poland. It was the biggest steelwork in Poland between World Wars I and II and in the first years after World War II.



Products

Produces rolled products and steel structures:



- Cold-formed profiles with different cross-sectional geometries and very high-quality and precision
- Hot-rolled profiles in a wide range of steel grades with complex cross-section geometries

Quality:

Quality and environmental management system by PN-EN ISO 9001, PN-EN ISO 14001, and quality management system in testing laboratories by 17025.

Huta Pokoje Capital Group includes **Huta Pokoje Konstrukcje Sp. z o.o.** which produces steel structures with design and assembly capabilities, as well as welded profiles and precast elements, and **Huta Pokój Profile sp. z o.o.** which produces cold-rolled and hot-rolled profiles.

Huta Pokoje Products:

- Cold-rolled moulded profiles

Structural: Equilateral angles, unequal angles, isosceles channels, closed rectangular, round, square profiles, semi-closed channels

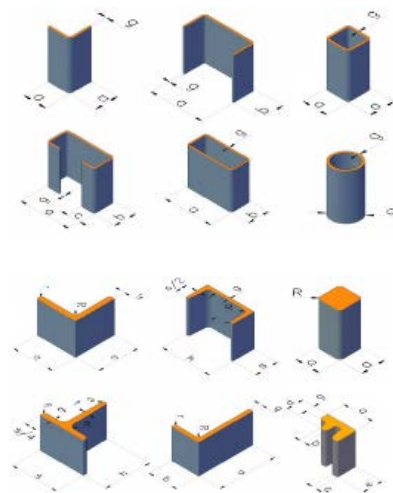
Special: Hat-shaped, shelf profiles, perforated profile, RS6 gutter section, roof profile, profile strip for road traffic lanes, etc.

These are cheaper and lighter replacements for hot rolled forms. They are widely used as specialty products in many different industries.

Packaged in bundles weighing up to 4 mg (by arrangement), bound with steel banding.

Hot-rolled profiles

Standard: isosceles, unequal angles, normal c-angles, tovers.



Special: I-beams, special profiles, railway rail S-18, etc.

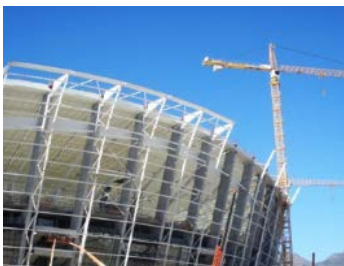
Other special profiles: 25 different types of special profile sizes available on request.

- Welded profiles

Straight welded profiles as per documentation

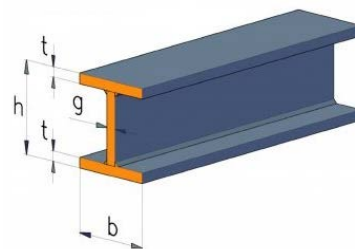
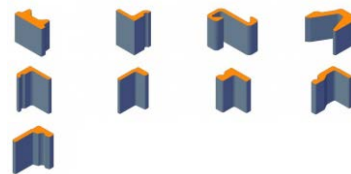
Special welded profiles

A wide range of welded products manufactured on automated welding lines: T-beams and I-beams, single-sided and double-sided converging profiles, I-beams, box girders, Maltese crosses, openwork beams, and welded profiles with complex geometries.



- Steel constructions

Road infrastructure, sports infrastructure, building structures, energy industry, tank structures



Contacts:

Huta Pokój S.A.

ul. Piotra Niedurnego 56, 41-709 Ruda Śląska

(+48) 32 772 10 00

sekretariat@hutapokoj.eu

<https://www.hutapokoj.eu/>

Huta Pokój Profile sp. z o.o.

ul. Gen. Hallera 70, 41-709 Ruda Śląska

(+48) 32 772 43 73 – sekretariat

hpp@hutapokoj.eu

Huta Pokój Konstrukcje sp. z o.o.

ul. Piotra Niedurnego 56, 41-709 Ruda Śląska

(+48) 32 772 10 10

hpk@hutapokoj.eu

4.3.2. Huta Łabędy



Huta Łabędy is a steel company based in Gliwice-Labendach, founded on 1 April 1950, active in the production and supply of steel products for coal mining, steel processing, construction as well as heating and gas supply. The state-owned enterprise Guta "Swan" was commercialized on 1 January 1998.

Its main shareholders are Węglokoks S.A. and the Treasury.

For more than 170 years, Swansea Steel has established itself as one of the country's best-known and most respected suppliers of steel products and services, including, in particular, products for the mining and construction industries.

Huta Labady S. A. has the following departments:

- Rolling mill,
- Mining Division,
- Pipe Department,
- Profilers Department,
- Laboratories

Rolling shop

The shop is equipped with a shaping mill for the production of long products. The mill is mainly used for the production of V, J, KO (USG) type sections as well as sections for building structures - channels, I-beams, and flats. Long products are subsequently transferred from the Rolling Shop as semi-finished products to the Mining Products Shop for further processing.



Department of Mining Products. The Rolling Mill Department runs its operation within the Special Economic Zone of Katowice and is involved in the manufacturing of final products for the mining sector. These products are finally fabricated in two manufacturing divisions: the Division of Arch Bending and the Division of Yokes.



Division of Arch Bending fabricates:

- modern series of roadway roof supports made of V-shaped sections (the V-shaped sections were developed by the Central Mining Institute in Katowice in cooperation with the Institute of Ferrous Metallurgy in Gliwice. These roof support arches are made of the most advanced steel grades, purposefully developed for mining arch supports, i.e. steel grades with enhanced strength parameters and improved immunity to corrosion, for instance, S480W and S550W,

- arched components of roadway roof support for the mining industry,

- shaped sections of the KO (USG),

- roof support systems for branching and crossing of roadway workings.

Division of Yokes fabricates two-yoke shackles of SD and SDO type, bow-shaped shackles, SV friction props, USG and V types of crossbars, flanged tubes, and other accessories for the mining sector.

Department of Shaped Sections

The core business of the department consists manufacturing of products for the needs of the civil engineering sector, and the erection of steel structures.

The department has two modern technological plants:

- plant for longitudinal slitting of steel coils, designed for slitting of coiled steel with the thickness range from 3 to 12.7 mm,

- manufacturing plant for shaped sections to fabricate cold-bent hollow sections with square and longitudinal cross-sections. The hollow sections are welded with high-frequency currents (HFW) and are manufactured with cross-section ranges from 70x70 mm to 140x140 mm for products with square cross-sections and from 80x50 mm to 160x120 mm for products with rectangular cross-sections.

Pipe department

The key focus of the department is the production of products for the heating, liquid fuel distribution, construction, and steel construction industries.

The department's product range includes:

- steel pipes electrically welded with electric currents (EHT) above 100 kHz. The pipes are manufactured from hot-rolled, low-sulfur, high-purity steel strips up to X80 grade. The product range includes pipes of an external diameter ranging from 114.3 mm to 323.9 mm, with wall thicknesses from 3.0 mm to 12.7 mm and unit lengths from 6 m to 18.0 m, as per PN-EN ISO 3183, PN-EN 10217-1/2, PN-EN 10224 and PN-EN 10219-1/2 standards both in Poland and abroad.,



- Longitudinally welded hollow sections, manufactured by cold-bending from unalloyed and fine-grained structural steel. Hollow sections with a square cross-section are produced with a size range from 90 x 90 mm to 250 x 250 mm and a wall thickness of 3.0 to 12.5 mm. Rectangular hollow sections range in size from 100 x 80 mm to 300 x 200 mm with a wall thickness of 3.0 mm to 12.5 mm. Available profiles are made of steel grades S235JRH, S275J0H; S275J2H; S355J0H; S355J2H; S355K2H by the requirements of PN-EN 10219-1/2. Profiles available in standard steel grades: S235JRH; S275J0H; S275J2H; S355J0H; S355J2H; S355K2H; made in accordance with PN-EN 10219-1/2.

Laboratories

Performs specialized services in the field of non-destructive testing of metals with the following methods: VT, MT, PT, UT, ST, HT, ETD, and ETT, as well as static tensile tests, impact tests, metallographic tests, and hardness tests. The laboratory has UDT approval for the test methods offered.

Certificates and quality

LABĘDZY S. A. has all the necessary certificates for its products, including:

- ISO 9001 quality management system,
- a set of Safety Label B certificates for mining products,
- a set of national certificates of operational consistency for pipes,
- a set of factory production control certificates for construction profiles (CE mark).



Products:

- Metallurgical

Cold bent closed profiles

C-profiles

I-beams

Special I-beams

Steel Tubes

- Mining products

Sections for pavement trim

Door frames for paving mouldings

Crossing and branching excavations



Contacts:

44-109 Gliwice ul. Anny Jagiellonki 45

T: (48 32) 234 72 01

office@hutralab.com.pl

4.3.3. Walcownia Blach Grubych Batory





Walcownia Blach Grubych Batory is a Batory sheet metal rolling plant that is part of the Węłkokok group of companies.

Production of thick hot-rolled sheets of unalloyed and alloyed steels and special-purpose steels, including:

- steel sheets: structural, boiler, shipbuilding
 - low-carbon steel sheets
 - alloyed steel plates: structural, boiler, spring, and tool plates,
 - steel sheets with special physical properties (wear-resistant, corrosion-resistant, heat-resistant).
- We have our strength testing laboratory. Batory SP. rolling mill. o. o. produces thick plates from unalloyed and alloyed steels (including tool steels) and special-purpose steels.



Production of sheets in the following sizes:

thickness: 8-150 mm, width: 1500-3600 mm, length: 4000-12000 mm
Sheet metal can be manufactured to the following dimensions upon agreement:

thickness: 6-250 mm, width: 1250-3800 mm, length: 4000-17000 mm

Types of products produced:

1. Alloy steel sheet: S235JR, S235J0, S235J2, S275JR, S275J0, S275J2, P265GH, A, B, D, E S355JR, S355J0, S355J2, S355K2, S355NL, S355N, AH32÷EH36, P355GH, P355NH, P355NL1, and P355NL2.



2. Alloy steel sheets: S420N, S420NL, S460N, S460NL, P460NH, P460NL1, and P460NL2.

3. Sheets of unalloyed and alloyed steel for specified purposes: C45, 40h, 40HM, 35sg, 65G, 16hg, 20HG, 18HGT, 38HMJ, 110G12, NMV.

The maximum weight of sheet metal is 8 t.

Production of sheet metal elements by PN-EN ISO 9013 in a range of dimensions:

thickness: 6-300 mm, width: up to 3400 mm, length: 2000-20000 mm.

Sheets with thicknesses above 100 mm are rolled from conventional ingots. The maximum plate weight is 7.5 t or 9.4 t, depending on the feed used. For certain ranges, there may be dimensional limitations due to the size of the batch used, the dimensions of the production equipment, etc.

Contacts:

ul. Lesna 42, 41-506 Chorzów

[+48 32 411 01 01](tel:+48324110101)

Secretariat

[+48 515 852 440](tel:+48515852440)

[+48 32 411 01 01](tel:+48324110101)

sekretariat@wbbatory.pl

<https://wbbatory.pl/>

Outlook for the Węglokoks Group



In August 2022, Węglokoks announced its intention to build a new steelworks in Silesia Ruda with a production capacity of 1 million tonnes of steel per year by 2027 for PLN 5 billion.

The new zero-emission steelworks will be built on the site of the former Silesian Ruda steelworks; the design of the new steelworks - a modern one with electric furnaces that will melt scrap metal - has already been prepared.

4.4. Huta Ostrowiec



CELSA Huta Ostrowiec Sp. z o.o. - Ostrowiec Ironworks is the biggest industrial enterprise in Świętokrzyskie Voivodeship.

The beginning of steelworks began with a small blast furnace built in the 1830s, owned by the Bank of Poland from 1843, by A. Frenkel from 1867, and 1881. - B. Laski, in 1886 was taken over by the Joint Stock Company of Blasting Works, Ostrowiecki Furnaces and Plants; expanded and modernized, it became one of the biggest steelworks in Poland; it owned iron ore and refractory clay mines and a brick factory; in 1913 it employed approx. - about 3,600 workers; the steelworks worked mainly for the railway industry; partly destroyed in 1915, rebuilt after 1918, in 1928 accounted for 6.2% of domestic iron and steel production; was again significantly damaged during the Second World War, was completely rebuilt and expanded until 1948 (blast furnace, steelworks, rolling mills); in 1994 it was transformed into a joint stock company, fully owned by the State Treasury, then a controlling stake was held by the Stelexport Group.



In 2003, the steelworks were bought by the Spanish Celsa group. The concern invested over 300 million zlotys in Ostrowiec Świętokrzyskie.

The plant, located in Ostrowiec Świętokrzyskie, employs over a thousand people and is included in the list of 500 largest companies in Central and Eastern Europe published by the daily Rzeczpospolita. The company is mainly engaged in the production of various types of bars, angles, and forgings.



Operating income of CELSA Huta Ostrowiec Sp. Z o.o.: USD 997,906,160.

The mill is made up of production halls:

- Steel Foundry
- Heat Treatment Shop
- Rolling Shop
- Blacksmith shop
- There is also a testing laboratory

Production

Steel production is based on scrap. There is a smelting shop. There are over 300 steel grades in the range with ingot weights from 4 to 130 tonnes.

The steelworks of the forging division have a 75 Mg electric arc furnace, a 65 Mg ladle furnace, a vacuum degassing system, and bottom casting.

Square, round, flat, and polygonal ingots are produced.

The company produces ribbed bars for concrete reinforcement, smooth bars, flat bars, angles, and forgings (e.g. shafts for marine engines).

It also provides services in mechanical and heat treatment of metal products, telecommunications, and railway transport.



The smelter also sells energy produced and processed at the smelter: electricity, natural gas, oxygen, and compressed air.

The plant's products are used in the metallurgical, mechanical engineering, shipbuilding, energy, construction, automotive, chemical, mining, oil, and rail industries.



Engines

Plant divisions produce monolithic crankshafts and components.



Energy production

Production of forged parts for power generation technology

Tool steel

Divisions of the plant produce a wide range of forged tool steels used for die casting and die forging production.

Metal processing

Various forged products for the steel and iron industry, including rolls and ingots: polygonal, flat, square, and round.

Contacts:

27-400 Ostrowiec Świętokrzyski, ul. Jan Samsonowicz 2

+48 41 249 22 22z

forgedproducts@celsaho.com

<http://www.celsaho.com/Home.mvc>

4.5. Liberty Czestochowa Sp. z oo



Liberty Czestochowa Sp. z oo is Poland's largest producer of GREENSTEEL low-carbon sheet metal. LIBERTY Steel Group leased the steel plant in Częstochowa in December 2020 and completed the takeover of the plant in May 2021.

Operating income Liberty Czestochowa Sp. z oo: \$293,571,356.



In the first year of operation under the name LIBERTY, production at Huta increased systematically, reaching the highest level since 2017 in March 2022, which means almost one million tons were produced by the plant in the last year: production of GREENSTEEL slabs in the steelworks exceeded 500,000 tons, while the heavy plate mill produced more than 400,000 tons of GREENSTEEL sheets.

The company adopted a production strategy of "55-65-85", assuming a final shipment of 85,000 tonnes of GREENSTEEL sheets per month.



It has the following units:

- **Heavy plate mill**

It is the largest steelwork with halls covering a total area of more than 20 hectares. Here, thick plates are produced from steel on a COS (steelmaking plant) machine.

The production program includes plates from 5 to 120 mm thick, including special plates.

- **Steelworks**

Steel is smelted in a CONEL electric furnace and subjected to homogenization, and refining in a 100-tonne ladle furnace and a vacuum degasser. Cast iron, scrap, and alloying additives are used to smelt many types of stainless steel, which are raw materials for the production of end products.



Product range:

- C-Mn steels with micro-additives
- Ship steels
- Carbon and alloy boiler steels
- Pressure vessel steels (Remax = 460 MPa)
- Wear steel
- Rust-resistant steel
- Alloy steels for thermal cracking



Steel quality parameters:

- Possibility to limit the sulfur content from 0.002% to 0.015%
- Ability to limit hydrogen content to 1.5 ppm
- Guaranteed steel cleanliness confirmed by ultrasonic testing
- **Assembly shop**



For the production of prefabricated elements, predominantly thick sheets from 5 to 120 mm are used, supplied by our thick plate mill.

The general assortment of prefabricated products includes profiled sheets, precision-cut sheets (with beveled edges for welding on request), and strips cut from sheets, including beveled edges.

Product range:

- Fastening elements for wind towers
- Cargi for large-capacity pressureless tanks
- Fixing elements for earth moving, road building, and construction machines
- Fixing elements for bridges, buildings, and other industrial structures
- Fixing elements for wheeled and naval vehicles
- Precisely cut sheet metal strips, including beveled edges
- Producing welded constructions by EN1090
- Coiling and welding pipe diameters from 1000 mm to 3000 mm
- **Railway siding**



Owned by Huta, it is connected to the railway network. The rolling stock for internal use and the metallurgical track network with a total length of 49 km enable the supply of raw materials and the export of products. Through them, Huta also provides services to external companies located in the nearby industrial area.



Contacts:

Headquarters, ul. Kuczelinska 22, Częstochowa; Silesian; Postcode: 42-207
+48 34 323 12 61

<https://libertysteelgroup.com/pl/>

4.6. Alchemia SA



Alchemia SA is a fast-growing group of companies in the steel industry. The

idea behind the company's activities is to develop an environmentally friendly steel group. The main focus is on the production of a wide range of pipes and other steel products. The product groups are used in the oil, mining, and gas industries, where there is a demand for higher-quality products. On September 1, 2005, 100 percent of Huta Batory from Chorzów was acquired and a strong group in the steel industry was established.



Operating income of Alchemia SA: \$315,659,151 USD



Products manufactured

- Seamless steel pipes: pipes for shipbuilding, threaded pipes, boiler pipes, line pipes, drill casing pipes, etc.
- Ingots: rolled square tubes, forging-rolling round tubes, roll-formed rectangular tubes, roll-formed ingots for the production of seamless pipes, etc.

In-house steel vacuum degasser (VAD) and ladle furnace (LF) for secondary metallurgical steel refining.

According to standards: PN, EN, DIN, ASME, ASTM, SEW, BS, DEF-STAN, JIS, qualification society regulations, and customer specifications.

Steel types:

- Carbon and alloy structural steels;
- boiler steels;
- ship steels;
- carbon and alloy tool steels;
- spring steels;
- steels with special physical properties, resistant to abrasion, and corrosion (heat resistant, stainless steels).

The minimum weight of ingots from a single casting is 25 to 27 mg, depending on the ingot format.

- Free forged forgings: discs, forged rings, bushings, forgings, round and square bars, press forged, flat bars, electro-slag reflex, etc.
- Sections, rings, and hoops: angles, steel flanges, railway and tramway hoops, billets and square bars, square bars, round bars, etc.



Branches:

The organizational structure of Alchemia SA highlights the following production units:

- Branch of the rolling mill of Walcownia Rur Batory in Chorzów,
- Branch of the steelworks Stalownia Batory in Chorzów,
- Rurexpol branch office in Częstochowa,
- Branch of the rolling mill Walcownia Rur Andrzej,
- Kuźnia Batory branch in Chorzów, where operations are concentrated in two subsidiaries: Huta Bankowa and Laboratoria Badań Batory.



Walcownia Rur Batory's Batory mill produces seamless pipes with diameters ranging from 219 mm to 508 mm of very high quality in all steel grades, including carbon, alloy, and heat-resistant, as well as smooth service, ship, boiler, and structural pipes intended for machining. These products are mainly used in the power, petrochemical, and drilling industries, as well as in the construction of oil and gas pipelines.

The Stalownia Batory branch is a major producer of steel in billets for the domestic market. Steel is smelted in electric arc furnaces. The in-house steel vacuum degassing (VAD) and secondary refining ladle furnace (SRF) ensure that steel ingots of high quality and metallurgical purity are produced. The ingots are semi-finished products that are used in further processing processes - processing into bars, flats, and forgings. They are mainly used in the shipbuilding, automotive, mining, mechanical engineering, and construction industries.

The Rurexpol branch produces specialized pipes in diameters from 121 mm to 273 mm.



The Division's products are used, among others, in the oil industry and for gas transportation in exploratory drilling for oil and gas and in field development. The Rurexpol branch also produces boiler pipes and aluminum pipes for the power industry. The range offered by Rurexpol is supplemented by structural pipes for further machining, including hydraulic cylinders and structural elements for workshops.



Walcownia Rur Andrzej branch specializes in the production of smaller diameter lines, boilers, and structural pipes from 21 mm to 114 mm. They are used in the construction, energy, chemical, petrochemical, mechanical engineering, shipbuilding, and gas industries.



Kuźnia Batory branch is engaged in the machining of high-quality and special steels. The main elements produced by the Branch are free-forged round, flat, square, and hexagonal bars with the weight from 100 kg to 10,5 tons. The Division's offer also includes slow forgings such as cylinders, forgings forged to drawing, ingots, cubes, disks, and rings.



Huta Bankowa is known for the production of semi-finished pipes, square rods for the production of gas cylinders, round rods, angle rods, flat-head profiles, and forged and rolled rings. It is the only producer of railway and tramway discs in Poland. Huta also offers rolled square billets.

Huta also offers rolled square billets.

Batory's research laboratories, part of Alchemia Capital Group, provide services in the field of preparation of samples for testing and heat treatment, metallurgical testing, non-destructive testing, mechanical properties testing, strength properties testing, and chemical composition testing.



4.6.1. Huta Bankowa Spółka z o.o.



Huta Bankowa Spółka z o.o. is a steelworks in Dąbrowa Górnicza, built-in 1834. As early as 1898, Huta Bankowa began to produce railway wheel rims. For almost 100 years rims for standard, narrow-gauge, and tram wheelsets have been produced in a traditional forging technique in the forge.

This workshop was closed in March 1996 and was replaced by a new forging shop for the production of forged rings and hoops. This shop is equipped with a fully automated Thyssen Wagner rolling mill line.

The computerization of the production process now makes it possible to produce high dimensional repeatability with low machining allowances.



The rolling line has been supplemented with a computerized ultrasonic disc inspection station. The plant currently operates as a limited liability company and is a subsidiary of Alchemy, controlled by Roman Karkosik.

Plant divisions

The Rings and Discs Workshop produces a wide range of railway discs, solid rolled forged rings with a rectangular or profiled cross-section, intended for both the Polish and foreign markets.



Rolling shop

In the 1990s, the pusher furnace of the medium section rolling mill was modernized and a modern step-up furnace for preheating the COC charge was built. Investments were also directed towards the product finishing process, especially for long products, made possible by modern straightening machines and heat treatment furnaces, an automatic line for inspection and nondestructive testing of round and square bars in the size range from 100 to 200 mm, and an automatic cutting and packaging line for sections.

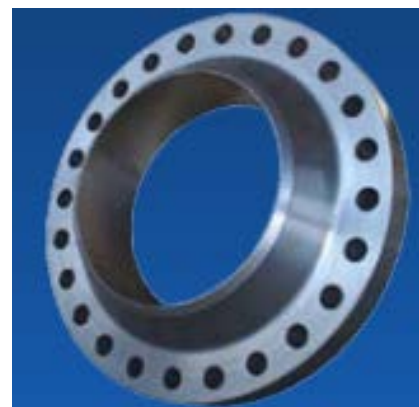
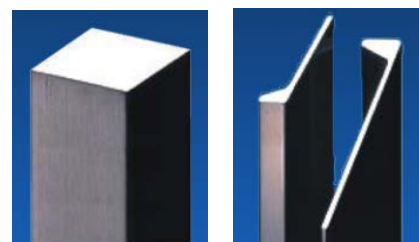
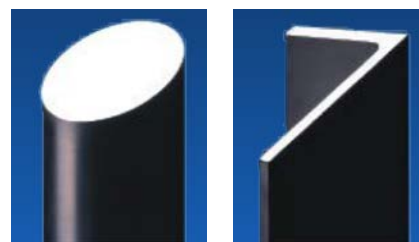
The main products of the hot-rolled sections shop are thick and medium-sized plates and sections, especially rounds in the size range of 90 - 250 mm, angles, bulb sections, and semi-finished products for the forge and tube shop.

Steel products testing laboratory

The Huta Bankowa laboratory is recognized by the Polish Maritime Register and the Office of Technical Inspection in the field of laboratory testing of steel products. It is also a member of the POLLAB Polish Research Laboratories Club.

Products

- Rings and hoops: railway hoops, tram hoops, seamless rolled rings
- Long products: billets and square bars, angles, square bars, round bars, flat head sections.
- Ingots. Steel melting in electric arc furnaces. An in-house vacuum degasser and ladle furnace for secondary metallurgical steel refining. The minimum weight of ingots from a single melting is 25 to 27 Mg, depending on the format of the ingot:
 - - square ingots
 - - round ingots (forging-rolling type)
 - - octagonal ingots (forging type)
 - - rectangular ingots (roll type)
 - - ingots intended for the production of seamless pipes (coil type)
 - - ingots intended for forging of LS type (forging type)
 - - ingots intended for forging of Q-type (forging type)
- Machined rings



Contacts:

Alchemia SA board office

ul. Aleje Jerozolimskie 92, 00-807 Warsaw, Masovian Voivodeship

+48 22 658 64 52

biuro@alchemiasa.pl

sekretariat@alchemiasa.pl

<http://www.alchemiasa.pl/>

Huta Bankowa Sp. z o.o.

ul. Sobieskiego 24, 41-300 Dąbrowa Górnicza

+48 32 295 74 05

sekretariat@hutabankowa.pl

Oddział Kuźnia Batory

ul. Stalowa 1, 41-506 Chorzów

Sekretariat tel.: 664 150 300

Dyrektor Technologiczno-Handlowy 664 150 297

sekretariat.kbt@alchemiasa.pl

Oddział Walcowani Rur Batory

ul. Dyrekcyjna 6, 41-506 Chorzów

+48 883 301 332

sekretariat.hbt@alchemiasa.pl

Oddział Stalownia Batory

ul. Dyrekcyjna 6, 41-506 Chorzów

+48 882 036 833

sekretariat.sta@alchemiasa.pl

Oddział Walcownia Rur Andrzej

ul. Lubliniecka 12, 47-120 Zawadzkie

+48 77 45 61 300

sekretariat.wra@alchemiasa.pl

4.7. Cmc Poland Sp. o.o.

Cmc Poland Sp. o.o. is a company producing hot-rolled long products from its electric arc furnace plant. It belongs to the Cmc group of companies (Commercial Steel Company), Texas, USA with hundreds of plants and more than 10,000 employees. The company has operations in the US, Europe, and Asia. CMC was the first steelmaker to introduce vertical integration in the US and then adapted the concept to Europe, combining scrap processing and recycling with the blending of recycled scrap into new steel and the production of finished steel products.

CMC Poland is the largest scrap metal recycler in Poland, accepting all classes of scrap metal for recycling and processing. The foundry's production capacity ensures uninterrupted processing of supplied scrap metal.



Operating income Cmc Poland Sp. o.o: USD 1,707,742,275.

Products

A wide range of varieties for each of the following:



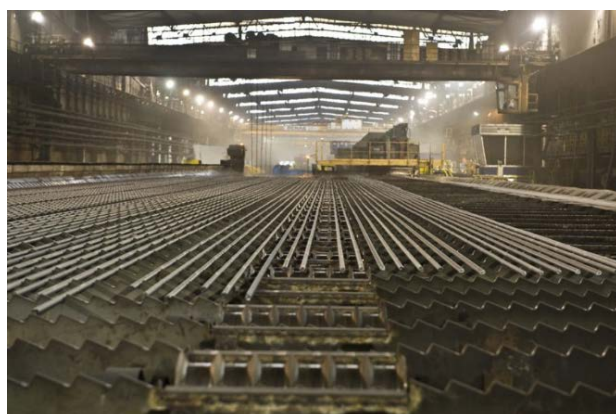
Ferrous Metals

- Heavy melt (HMS)
- Shredded
- Busheling
- Bundles
- Plate and structural
- Turning
- Cast iron

Nonferrous Metals

- Aluminum
- Copper and brass
- Stainless steel
- Nickel alloys
- Lead
- Tin
- Zinc

Industries served: agriculture, construction, energy, infrastructure, manufacturing, etc.:



- Robust and durable long steel products and structural products for the manufacturing industry
- rebar and bars are available directly from factories strategically located in the USA and Poland
- plate and flat-rolled products to withstand the impact required by heavy equipment such as railway wagons, trucks, flatbed trailers, scraper conveyors, oilfield rigs, snowplows, and more.

- Long products and structural products, which are key components of structures that store, transport, and produce energy

Contacts:

Headquarters

ul. Pilsudskiego 82 Zawiercie; Śląskie; Postcode: 42-400

[48 32 672 16 21](tel:+48326721621)

Mesh factory in Dąbrowa Górnicza

ул. Roździeńskiego 15 41-308 Dąbrowa Górnicza

[+48 32 735 54 01](tel:+48327355401)

<http://www.cmc.com/>

4.8. Ferrum SA



Ferrum SA Huta Ferrum Steelworks produces and sells pipes in Poland. It offers steel pipes welded by induction high-frequency welding; square, rectangular, and circular hollow sections; steel pipes spirally and longitudinally submerged arc welding. The company also offers extruded three-layer polyethylene and polypropylene coatings on steel pipes; internal protective cement linings for steel pipes and fittings; and internal epoxy resin coatings for steel pipes. It serves the gas, engineering, and construction industries, as well as district heating, water supply, and sewerage systems.

Operating income Ferrum SA: \$200,452,761 USD



Main activities: Production of cast iron and steel pipes and tubes, production of prefabricated pipes and fittings.

Products

- SAWH steel spiral-welded pipes (pipes with outside diameters ranging from 323.9 mm to 1828.8 mm, lengths from 8 m to 24 m (technical pipes up to 1220 mm), to 18 m (technical pipes over 1220 mm), and from 8 m to 36 m (structural pipes), available with straight or chamfered ends).



- FERRUM's submerged-arc welded steel pipes

Can be successfully used for the production of fittings for steel pipes, including tees, reducers, bends, and elbows. Fittings can be produced by cold or hot bending, depending on the strength parameters of the steel grade as well as the diameter and wall thickness. Pipe lengths from 8 m to 24 m (pipes up to 1220 mm), from 8 m to 18 m (pipes over 1220 mm), and 8-36 m (building pipes) Other diameters are possible by agreement.



- HFW/HFI/ERW steel pipes welded with high-frequency currents

The pipes are manufactured in a range of outside diameters from 114.3 mm to 406.4 mm and in lengths from 6 m to 18 m. Available with straight or beveled ends, after leakage test (pipework) and after automatic leakage test. destructive testing using ultrasound or eddy currents.



- SAWL longitudinally welded steel pipes

The pipes are manufactured in a range of outside diameters from 559 mm to 2032 mm, with straight or beveled ends. Pipes from 559 mm to 914 mm are manufactured as standard with one longitudinal seam, from 1016 mm to 1620 mm with two longitudinal seams, and the pipes with three longitudinal seams.



- Cold-welded profiles

Cold-welded hollow sections made of unalloyed and fine-grained structural steels. Square sections are produced in the size range from 100 mm x 100 mm to 300 mm x 300 mm and with wall thicknesses from 3.0 mm to 14.3 mm. Rectangular sections are produced in the size range from 100 mm x 80 mm to 300 mm x 200 mm and with wall thicknesses from 3.0 mm to 14.3 mm.



Contacts:

Headquarters Porcelanowa 11, Katowice; Silesian; Zip code: 40-246

ferrum@ferrum.com.pl

<http://www.ferrum.com.pl/>

4.9. KGHM Zanam SA

KGHM ZANAM

KGHM Zanam SA is one of Poland's largest manufacturers of machinery and equipment for the mining industry and a major producer of steel and iron castings. The company also produces equipment used in transshipment and quarrying complexes. The company was formed in 2003 as a result of the merger of the Lower Silesian Machinery Works Zanam Ltd. and Legmet Mashinostroitelnye Zavod Sp. z o.o. At that time, it was called

Lower Silesian Machinery Works Zanam-Legmet Ltd, in 2013 KGHM Zanam Ltd, and on 17.04.15 it was transformed into KGHM Zanam SA. The company currently employs around 2,400 people.

Operating income KGHM Zanam SA: USD 1,232,397,911.

The production foundry produces castings in a wide range of weights, single or series production. KGHM ZANAM produces steel and iron castings for a wide range of trucks, offering small and medium batch production as well as one-off production. Steel and cast-iron castings from fifty types of metal alloys.

The iron and steel foundry of KGHM ZANAM also heats treated castings in modern and fully automatic furnaces.

The production of machine parts using grey and ductile iron castings in electric arc furnaces. KGHM ductile iron, as well as the iron castings themselves, are characterized by the best technical parameters.

Products

- Castings for crushers, mills, scrap shredders, castings for structural parts and drive systems, castings in steel and cast iron, wear-resistant castings, and, other products according to individual designs
- Steel constructions

Contacts:

Headquarters

ul. Kopalnian 7, Polkowice; Lower Silesia; Postal Code: 59-101

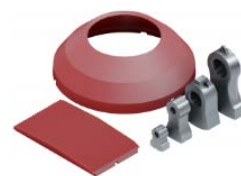
[+48 76 847 09 05](tel:+48768470905)

<https://www.kghmzanam.com/>

Dyrektor Działu Sprzedaży Stanisław Miętki

[+48 76 74 68 479](tel:+48767468479)

stanislaw.mietki@kghmzanam.com



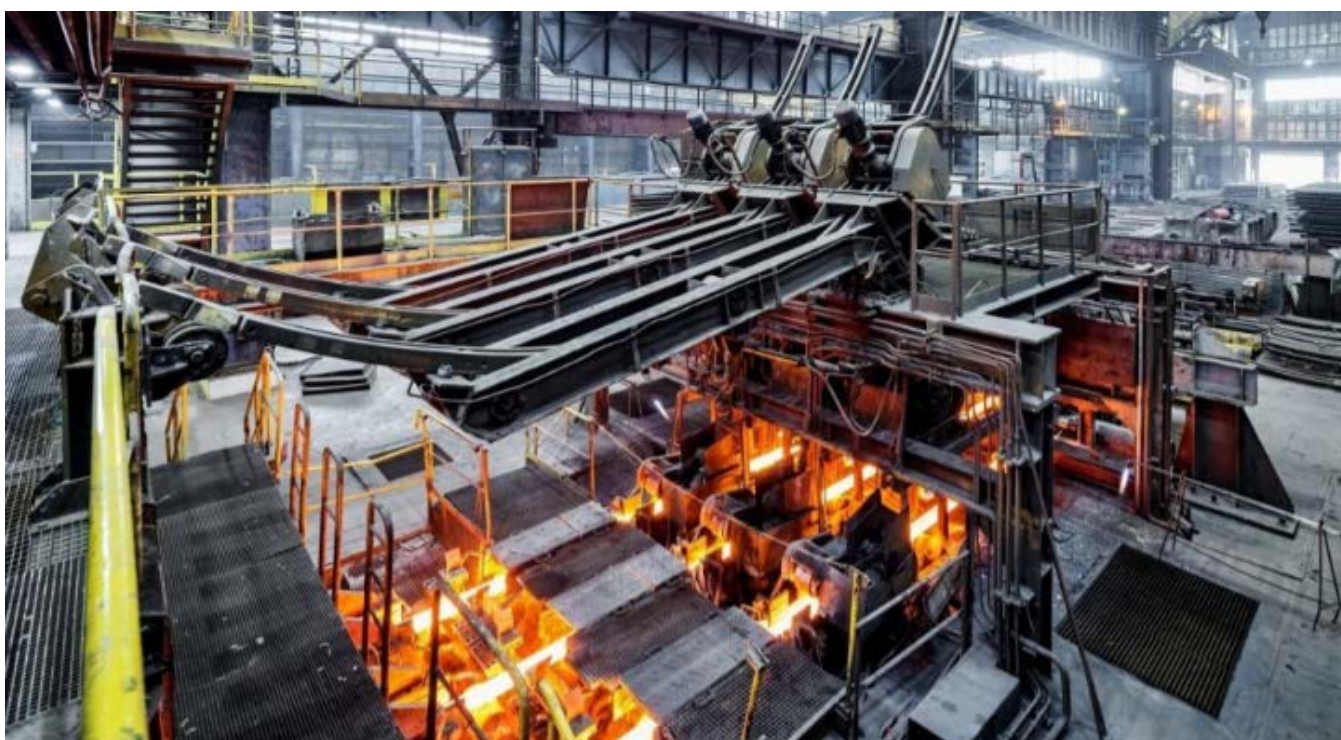
4.10. Cognor S.A.



Cognor S.A. — is a Polish industrial company producing steel and metallurgical products, mainly hot-rolled steel. Exports account for about 1/3 of total revenues, mainly to the European Union market.

Operating income of Cognor S.A.: US\$736,474,265.

The company's tradition goes back to the early 1990s and its experience in steel production spans 23 years. Dynamic development has placed the company among the largest plants in Poland listed on the Warsaw Stock Exchange. The staff of over two thousand employees.



Product applications

Construction, automotive; others include the defense sector, where armor plates are supplied.

Products

- Slabs (Square 100-160 mm, Rectangle 165x40 mm, Circle 170 mm. Product manufactured by Cognor Ferrostal Łąbędy branch in Gliwincze)
- Flat bars (From 20x4 mm to 150x40 mm, standard length 6 m. Product of Cognor Ferrostal Łąbędy branch in Zawierc)
- Round bars (10-32mm, standard length 6m and 12m. Product of Cognor Ferrostal Łąbędy branch in Zawierc)
- Square bars (10-20mm, standard length 6m. Product of Cognor Ferrostal Łąbędy branch in Zawierc)
- Ribbed rods (8-16 mm. Product of Cognor Blachy Dachowe S.A. Krakow branch)
- Round rods (10-30 mm. Product of Cognor Blachy Dachowe S.A. Kraków branch)

- Flat rods (50-7 mm, 20x4 to 50x10 mm. Product of Cognor Blachy Dachowe S.A. Krakow branch)
- Square rods (10-20 mm. A product of Cognor Blachy Dachowe S.A. Krakow branch)
- T-rods. Product of Cognor Blachy Dachowe S.A. Krakow branch.
- Equilateral and unequal angles Product of Cognor Blachy Dachowe S.A. Kraków Branch.
- Slabs. Cognor SA HSJ branch in Stalowa Wola.
- Billet forgings with rounded edges. Cognor SA HSJ subsidiary in Stalewa Wola.
- Rods. Cognor SA HSJ subsidiary in Staljova-Volja.
- Sheets. Cognor SA HSJ branch in Staljova-Volja.
- Carbon and medium-alloy steels. Branches in Gliwice and Zawierc.
- High-alloy and special steels. Cognor SA HSJ branch in Stalowa Wola.



The Group operates on the Polish market and exports its products abroad (mainly to other European countries, mainly to the German market where in 2016 the Group realized about 18% of sales volume).

The company's activities are divided into four business segments: scrap metal, production, distribution, and others.

Cognor Group operates in the following areas:

- Raw materials division - including purchase, processing, cleaning, and sale of steel scrap;
- Production Division - processing steel scrap into steel billets and steel billets into steel products; selling these products; processing nonferrous scrap into finished products and selling these products;
- Commercial division - including sales of products (steel products, steel scrap, steel billets, non-ferrous scrap, non-ferrous products, etc.);
- Other - including but not limited to material recycling. The company's product range includes metal bars, sheet steel, plates, pipes, and rods, as well as zinc and tin plate, among others.



Cognor Holding Companies

- Cognor Holding Spółka Komandytowa
- Cognor Oddział HSJ w Stalowej Woli
- Cognor Oddział Ferrostal Łąbędy w Krakowie
- Cognor Oddział Ferrostal Łąbędy w Zawierciu
- Cognor Oddział Ferrostal Łąbędy w Gliwicach
- Cognor Oddział BSS w Poraju
- Cognor International Finance PLC
- Cognor Oddział PTS w Krakowie
- Cognor Oddział OM Szopienice w Katowicach
- Cognor Oddział Złomrex we Wrocławiu

Operates through several subsidiaries, such as Cognor Blachy Dachowe SA, Zlomrex Metal Sp zoo, and Huta Stali Jakosciowych SA. The company is managed by PS Holdco Sp zo o.





4.10.1. HSJ Steelworks in Stalowa Wola is one of the leading private producers of steel products and the leader in the Polish market of quality steel of improved grades. Cognor Spółka Akcyjna Branch HSJ Stalewa Wola (formerly Huta Stali Jakościowych) was created as a result of organizational and property transformations. The company is part of the Polish capital group COGNOR SA.

The plant produces around 250 different steel grades and modifications per year, cast on a continuous casting machine and in pots. The share of steel cast on the KOC unit is about 95%. The company supplies its alloyed and high-alloyed steel products to domestic and foreign customers in the automotive, mining, engineering, and energy industries. Exports account for almost half of the company's sales revenues.

Contacts:

HSJ branch in Stalowa Wola

+48 510 223 527 +48 508 032 786

hsj@hsj sa.pl <https://www.hsjsa.pl/strona-glowna>

ul. Kwiatkowskiego 1, 37-450 Stalowa Wola



4.10.2. Cognor SA Ferrostal Łabędy branches in Gliwice, Kraków, Zawierc



"Ferrostal is a steel plant with the highest quality parameters, confirmed by several industry certificates. Its main products are steel in square, rectangular, and round billets made of carbon steel, low-alloy steel, and steel with micro-additives.

The products are used, in particular, in the automotive and mining industries, as well as in the manufacture of pipes and forgings. A large part of the steel produced by Ferrostal in Gliwice is further processed into finished products at the rolling mills in Zawierc and Krakow. The company's laboratory is active in the field of testing raw steel, steel products, raw materials, and metallurgical waste, as well as water and wastewater.

Contacts:

Ferrostal Łabędy branch in Gliwice

(+48) 32 234 76 00

biuro@ferro stal.com.pl

ul. 47 44-109 Gliwice Anna Jagiellonka Street

Ferrostal Łabędy branch in Krakow

(+48) 12 680 24 00

info.pr@ferro stal.com. p Uaszczek 1, 31-752 Krakow

Ferrostal Łabędy branch in Zawierc

(+48) 32 671 00 10 ext. 101

sekretariat.wb@ferro stal.com.pl

Okólna 10, 42-400 Zawiercie



4.10.3. Cognor Złomrex's Wrocław branch specialises in trading scrap steel, non-ferrous metals, copper, and copper alloy products. Supplier of raw materials for Polish and foreign steelworks.

Contacts:

ул. Piłsudskiego 49-57, 50-032 Wrocław

Tel: +48 (34) 316 01 25

uszablowska@złomrex.pl

www.złomrex.pl

Cognor aims to consolidate its leading market position and achieve so-called "green steel" status well ahead of the climate goals of Poland and the European Union.

*629 thousand tonnes of crude steel produced in 2016 Cognor
revenue of PLN 1.4 billion*

Contacts:

ul. Zelena 26, 42-360 Poraj

tel. +48 (34) 316 01 10

cognor@cognor.eu

<https://cognorholding.eu/>

**4.11. Huta Małapanew Spółka z o.o.**

Huta Małapanew Spółka z o.o. has been in existence since 1 July 2001 and continues the activities of the company with the same name and its 250-year foundry tradition.

Huta is one of the largest manufacturers in Poland and a valuable supplier of castings (mainly steel, but also cast iron). The main product range includes raw and machined castings, metallurgical rolls, industrial fittings (valves and valves), machine parts, including support rollers, and rolling equipment.



The plant produces castings from about 200 steel and iron grades according to the following standards: PN/EN, DIN, ASTM, GOST, BS, or according to customer requirements. The weight of a single raw casting can vary from 5kg to 12,000kg. We also offer industrial fittings manufactured by the Pressure Directive in a range of diameters: DN 40 ÷ 1000 and operating pressures of PN 6 ÷ 25 and PN 40 (depending on the drawing).

The mill supplies raw and machined castings to domestic and foreign markets for industries such as mining, metallurgy, cement and lime, machinery, energy, shipbuilding, and others. Also produces industrial valves for pipeline transport for the needs of many industries. Castings are made according to customer documentation, as well as according to the supplied model or sample, in piece or batch quantities, and are supplied on customer request in raw form or after machining (roughing or finishing).



Foundry products

Casting using the traditional method into disposable sand molds using sturdy wood, metal, and plastic models.

Maximum weight and dimensions of castings:

- raw casting weight: min. 5 kg, max. 12,000 kg
- minimum wall thickness of castings: steel - 8 mm, cast iron - 5 mm
- dimensions of the hand-formed castings: max. 4000 x 3800 x 1500 mm
- Machine casting dimensions: max. 1000 x 500 x 250 mm

Manufacture of precision castings from iron and aluminum alloys by the full mould method using disposable foam models.

Maximum weight and dimensions of castings:

- raw casting weight: min. 0.3 kg, max. 100 kg
- casting dimensions: max. 1000 x 600 x 600 mm

The company's laboratory tests castings made of steel and iron, castings as well as materials and molding sand used by Huta Małapanew Sp. z o. o.



Contacts:

46-040 Ozymek, ul. Kolejowa 1

+48 77 401 85 10

sekretariat@malapanew.pl

<https://malapanew.pl/>



4.12. Hydro-Vacuum Group

Hydro-Vacuum SA is a former steelworks in Grudziądz, Mniszek, now specializing in the production of pumps in Poland, Central, and Eastern Europe. In addition to the pump production plant, Hydro-Vacuum SA operates a foundry that produces iron, steel, and non-ferrous castings. The in-house foundry allows the production of pumps from a wide range of materials, individually tailored to the customer's needs. Expenditure on equipment upgrades in recent years has amounted to around €5 million.



Hydro-Vacuum SA meets more than 70% of the needs of the Polish industrial submersible pumps market and supplies 50% of all sewage pumping stations with solids separation purchased by Polish customers, 90% of the gas pumps used in CIS countries are manufactured by Hydro-Vacuum SA.

Iron Foundry Hydro-Vacuum SA Iron Foundry Hydro-

Vacuum SA has a tradition going back to 1862 when the foundry "Józef Herzfeld and Karol Wiktorius, iron and enamel foundry in Grudziądz" (later "Pomeranian foundry and enamel foundry") was established. The Foundry is one of the most modern foundries of Hydro-Vacuum SA. Our iron foundry produces a wide range of products. Activities are carried out both by the foundry's own needs and by a broad and fast-growing group of customers. The customers served by the foundry include Polish and foreign companies from more than 30 countries, including companies from the European Union. The foundry is equipped with modern and environmentally friendly equipment. Melting processes are performed in induction furnaces, while moulding sand is prepared in an electronically controlled automatic sand preparation station equipped with a vibration-boiling bed and a cooler. Cores are produced using the following technologies: oil-base, cold-bar method using Novanol 140 binding agent, CO₂ hardening, hot-bar method, COLD-BOX with amine curing, both manual and machine methods.



The foundry is based on automatic vertical or horizontal dividing plane moulding lines and percussion moulding machines.

Production consists mainly of high-grade grey iron, spheroidal, high-chromium, and copper-molybdenum iron, as well as non-ferrous castings, including brass MK 80 and bronze B 101, B555.

Products



Cast iron castings, alloyed iron castings up to 300kg, and non-ferrous castings up to 100kg.



The plant has a production capacity of about 6,000 tonnes of castings per year. Castings are supplied to many countries, including the European Union, mainly to manufacturers of pumps, valves, electromechanical devices, power hydraulics, energy, and heating appliances. The foundry exports 70% of its castings.

Contacts:

ul. Droga Jezierna 8, 86-303 Grudziądz
tel.: 56 45 07 415 a.domagalska@hv.pl
www.hydro-vacuum.com.pl



4.13. Baildon Steelworks, Katowice (BGH Polska Sp. z o.o.)

BGH Polska Sp. z o.o one of Poland's most famous steelworks was founded in 1823 by the Scottish pioneer of European metallurgy, John Baildon, invited by Friedrich Wilhelm von Reden.

At the time of its construction, Baildon was the most modern mill in Poland. This leadership was maintained by



increasing the technological capacity even after World War II, during which production was oriented only toward military needs.

The most extensive modernization of the mill was carried out in 1996 when a new 16-stand continuous rolling line was built on the site of the former mill.

The dramatic post-revolutionary events did not spare Huta Baildon, which went bankrupt in 2011.

For several years the steel mill was maintained by Gonar but later closed down. In April 2004, BGH, a German holding company, bought the rolling mill from Huta Baildon in Katowice. BGH Polska is now owned by the German BGH Edelmetall Group.

*Briefly about **BGH Edelmetall**: Founded in 1466.*

2,000 employees. 500 million € turnover (2020), 170,000 t sales, approx. 50% of which are in Germany, 6 production sites, 8 BGH Steel service centers, and other trading partners worldwide.

The factory covers an area of 13 hectares. On this site, there is a charge warehouse, which is equipped with two grinding machines. The shops include a flat-rolling mill, consisting of a double reversing mill, a 5-stand flat-rolling unit, and a 16-stand continuous line, as well as a heat treatment and finishing shop. The rolling line rolls square and flat products from 15x15 to 250x70 mm.

Production: A fully integrated manufacturing process is used - from melt to finished wire, bar, or free forging.

Certification: according to standards ISO 9001, ISO 14001 и ISO 50001, IATF 16949 или ISO 17025.



Manufactured products

Stainless steels, nickel, and special alloys, from less than a tenth of a millimeter to over a meter in diameter.

- Stainless steels

Austenitic, ferritic, martensitic, duplex/ super duplex steel.

Used in automotive, medical, machinery and equipment, chemical and petrochemical, power generation, and turbine construction.

Applications: Shafts, drives, screws, knives, surgical tools, valves, fittings, and much more.

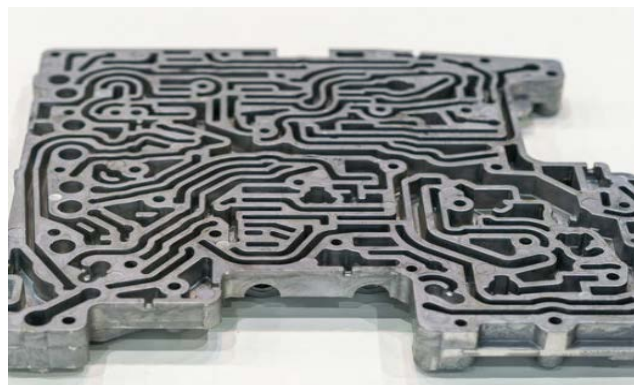


- Tool steels

List of applications: Forging die, a tool holder or industrial knife, extrusion mould, plastic or glass mould, ejector pin or saw blade

Materials: tool steels for hot and cold work, steel moulds for plastics, high-speed steels

Materials: tool steels for hot and cold work, steel moulds for plastics, high-speed steels



- Special structural steels

Hardened and tempered steels-alloyed stainless steels from BGH, characterized by high strength combined with good impact toughness, are used wherever maximum fatigue strength, wear resistance, and surface hardness are required.



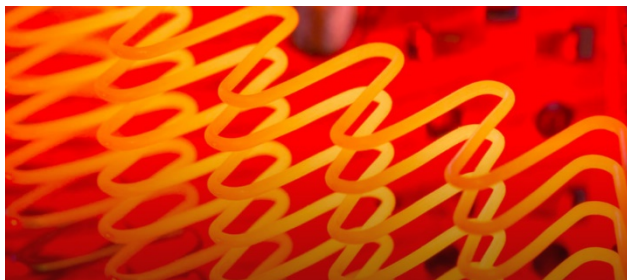
Materials and applications: qt steels, case-hardening steels, nitriding steels, heat-resistant steels

- Nickel-based alloys and special alloys

They are used in a wide variety of applications due to their unique combination of properties.

Their thermal and corrosion resistance is essential for components in the electrical power industry, chemical and petrochemical industry, domestic applications, measuring technology, instrumentation, and electrical engineering.

Special grades are smelted in a vacuum induction furnace (VIM) or an electric arc furnace. Subsequent electroslag remelting (ESR, PESR) or vacuum-assisted remelting (VAR) specifically increases the purity of the material.



Materials and applications: Iron-nickel compensating and glass sealing alloys, heating conductor materials, heat and corrosion resistant alloys, pure nickel.

- Fine wire and wire

round: 0,08 mm - 25 mm

- **Bright bars**

Round: 1 mm - 610 mm

- Bar steel

Round: 15 mm - 950 mm

Flat (W x H): 15 - 250 mm x 5 - 89 mm (rolled)/90 -
1 300 mm x 55 - 800 mm (forged)

Square: 17 mm - 800 mm



- Forgings

Open die forgings: \varnothing max. 950 mm, L max. 17,5 m, weight
max. 30 t; Flanged shafts: \varnothing max. 1 400 mm

Disks: \varnothing max. 2 000 mm

Rings: \varnothing max. 2 000 mm, H max. 500 mm, weight max. 8 t



Contacts:

BGH Polska Sp. z o.o

ul. Żelazna 9, 40-851 Katowice, Poland

[+48 32 609 34 10](tel:+48326093410)

info.polska@bgh.pl

<https://bgh.de/en/company/contact/how-to-find-us/>



4.14. Mangata Holding SA

Mangata Holding SA is one of the largest and most dynamically developing corporations in the Polish steel industry. It focuses on industrial companies, manages and implements investments, expanding its product portfolio as well as the scale and territory of its operations.

Operating income of Mangata Holding SA: USD 236,914,856.



KUŹNIA POLSKA
Rok założenia 1772

4.14.1. KUŹNIA POLSKA S.A., Skoczów is a steelworks producing top quality forgings with heat treatment and machining for the automotive industry as well as for fittings, automation, aviation, and construction, producing forgings for pressure equipment that meet the requirements of Directive 2014/68/EC.

The factory has a 250-year history. The company is now 95.8% owned by **Mangata Holding SA**.



Technological equipment: Maxi forging presses, screw presses, forging machines, forging hammers, and specialized devices, which enable the production of a very wide range of forgings weighing from 0.05 to 25 kg.

The plant has its tool shop where 100% of the tools used in the forging process are manufactured.

Production departments and processes

- Forging and finishing process

The basic technology of forgings production used in Kuźnia Polska is the hot forging of forgings within the weight range of 0.05 kg to 25 kg on modern forging presses, DIRECT DRIVE forging presses, TRANSFER forging machines, pneumatic hammers, and forging machines.

1. Steel warehouse

High-quality carbon, alloy, and stainless steels of over 100 grades are used in the production of forgings in a warehouse area of around 4000 m².

2. Cutting chamber and steel heating

Heating of steel pieces cut with shears, i.e. heating to about 1200 °C in electric induction furnaces or gas furnaces followed by a plastic treatment consisting of forging the desired part in a matrix shape.

3. Forging

For forging forgings, crank forging presses with a force of 10 to 25 MN, pneumatic hammers with an impact energy of 1600 to 10 000 KGm, and vertical forging machines with a force of 2 to 12 MN are used. It is also possible to produce small weight forgings, i.e. up to 0.25 kg, using PS screw presses.

4. Trimming

Deburring on a crank or eccentric press

5. Heat treatment

For carbon and alloy steel forgings, heat treatment in the form of heat treatment (water, oil, or polymer hardening with subsequent tempering), normalizing, or isothermal annealing is used. The strength properties are also obtained by controlled cooling after forging.

6. Shot Blasting

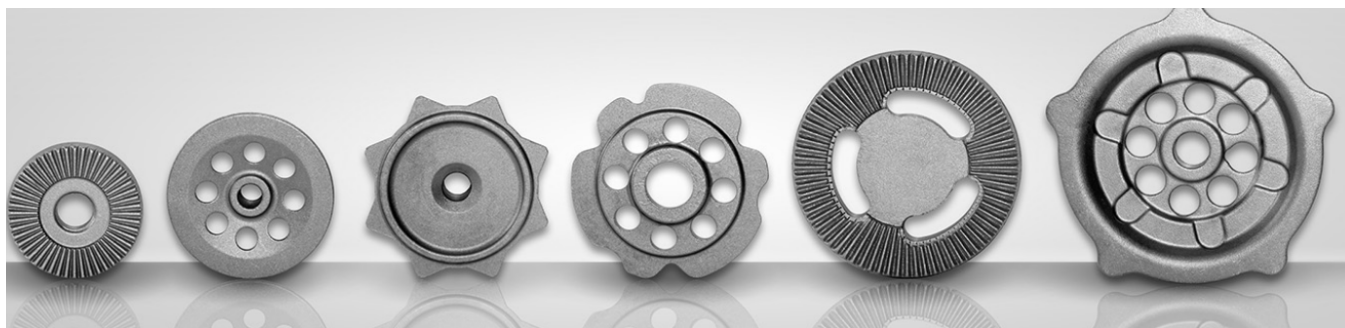
Cleaning the surface of the forgings from scale (hard patina on the surface caused by oxidation of steel at high temperatures). The operation is performed on special machines called shot blasting machines, using steel shot and steel balls of high hardness with a diameter between 0.8 and 1.2mm.

7. Calibration, marking, and blasting

8. Visual inspection

9. Final inspection

Kuźnia Polska has its tool shop. Designing, engineering, and programming of CNC machines is carried out on advanced CAD/CAM stations, with CATIA as the leading system.



Products

- Forgings for the automotive industry

75% of forgings produced by Kuźnia Polska are intended for large batches and repetitive production for the automotive industry. They are characterized by large batch sizes, low specific weight of 0.05 ÷ 5 kg, and high-quality requirements. The production process is based almost exclusively on forging press technology. For most products, 100% defectoscopy is required.

- Forgings for agriculture

15% of raw materials and processed products work in specialized agricultural vehicles such as tractors, combines, and agricultural machinery.

- Forgings for mechanical engineering

5% are various parts for modern engines, transmissions, and road vehicles.

- Forging for the power industry, railways

3% of the forgings we produce are supplied by the renewable energy sector and the railways.

- Forgings for the aerospace industry

2% of products are advanced technologies that meet the highest quality requirements for the aviation industry.

- Sales of raw materials

Sections, rolled bars, rounds, sheets, bars



Contacts:

Kuźnia Polska Spółka Akcyjna
43-430 Skoczow, Horecka str. 32,
+48 (33) 85 48 283
leszek.targosz@kuzniapolska.com
<https://kuzniapolska.com/>



4.14.4. Zetkama Sp. o.o.

Zetkama is a company with 75 years of experience and a presence in more than 75 foreign markets, with its iron foundry.

The company manufactures and sells cast iron castings and industrial valves, i.e. shut-off valves, bellows valves, control valves, check valves, safety valves, strainers, gate valves, ball valves, anti-seize valves, static and dynamic balancing valves, dampers, compensators, float valves, ventilation valves, suction cages, liquid manometers.

Zetkama is part of the MANGATA Capital Group. It has its ironworks.



The Zetkama iron foundry has been operating in Klodzko since 1946 and in 1979 it was moved to the buildings of the former Kraftbahnwerk Mittelsteine power station in Ścinawka Middle and still operates there today. The foundry has its pattern shop, thanks to which it can adapt the modeling carried out by the customer and make new foundry equipment from which cast iron castings can be produced based on 2D or 3D documentation. The foundry has a modern machine park.

Products

Specialises in the production of grey iron castings as well as various types of malleable iron.

The annual production capacity is around 10,000 tonnes.

Contacts:

Casting Sales Manager Mateusz Machalica

+48 696 003 477

m.machalica@zetkama.com.pl

Zetkama Sp. o.o.

ул. 3 Maja 12, 57-410 Ścinawka Średnia

+48 74 865 21 11

biuro@zetkama.com

<https://www.zetkama.pl/>

<https://mangata.com.pl/>





4.15. Re Alloys Sp. o.o. Huta Łaziska

Re Alloys Sp. o.o. is Huta Łaziska steelworks.



Re Alloys is part of the capital group Luma Holding, which brings together in its portfolio companies from the metals industry, Ventures, and the automotive industry. Luma Holding invests in the Polish and CEE region in companies with global ambitions.



Its head office is located in Łaziska Górne. It operates in the metallurgical and ferroalloys sectors. The company was founded on July 17, 2001. The total number of employees is currently 457 (2022).

The company's core business is the production of silicon-based ferroalloys, mainly different grades of ferrosilicon. Re Alloys produces up to 80,000 tonnes of this product annually, which is about 10% of total European production. Its share of the German, Czech, and Slovak markets is as high as 30%. The company's products are sold in almost all European markets.

Operating income Re Alloys Sp. o.o.: USD 217,589,446.

The main recipients of Re Alloy's alloys are steel manufacturers, and the automotive, armaments, and aviation industries.

Re Alloys is focused on the use of modern technologies, implementation of innovative projects, and constant search for effective methods and technological improvements, which is why it cooperates with research centers with which it jointly implements the presented investment objectives. Especially the cooperation with the Silesian University of Technology and AGH University of Science and Technology should be emphasized. Stanisław Staszic in Kraków, the Czestochowa University of Technology, the Opole University of Technology, the Institute of Ferrous Metallurgy in Gliwice and the Central Mining Institute in Katowice.

Products

The main product offered by Re Alloys is ferrosilicon, used in the steel and foundry industries. In addition to ferrosilicon, Re Alloys can also produce other silicon-based alloys on existing furnaces.

The technology is used to produce ultra-pure ferrosilicon chrome with a controlled content of carbon, nitrogen, oxygen, and hydrogen. The alloy, which is unique in the world, can be used in the space industry. Ferrosilicon is delivered to the recipient's ground for granulation by the requirements specified by individual customers. The most popular fraction of the finished product is 10-50 mm. Crushing to less standard sizes, e.g. 3-10 mm or 50-150 mm, is also possible.

Alloys that can be produced in existing facilities:

- Ferrosilicium - FeSi75/65/LC
- Ferrosilicochrome - FeSiCr
- Ferromanganese – FeMnHC
- Ferrosilicomanganese - FeSiMn
- High-carbon ferrochrome - FeCrHC
- Carbide - CaC₂

and for the foundry industry:

- FeSoMgCeCa cast iron spheroidizers
- Complex modifiers for cast iron KOMO-BaSr.

Contacts:

Headquarters

ul. Cieszynska 23, Laziska Gornie; Silesian; Postcode: 43-170

[+48 32 324 71 06](tel:+48323247106)

biuro@realloys.pl

<http://www.realloys.pl/>





4.16. Huta Zabrze SA

Huta Zabrze SA is a company with more than 200 years of tradition. Since 2007 it has been owned by BSK Return of Zawiercie. The company is sold in two plants: a foundry and a mechanical plant, which makes it possible to supply castings with complete machining and heat treatment, as well as highly machined steels and engineering structures of various purposes, intended for many industries.

The plant manufactures foundry equipment, pipe fittings for gas and coke ovens as well as: cranes, self-propelled carts, hoists, grabbers, loading carts, drive-through carts, hoppers, coke pushers and compactors, elements of coal towers and coke. batteries, tippers, dump trucks and loaders, storage, waste combustors, various types of metal structures, and elements of machinery and equipment.

The foundry in its structure has an iron foundry with a specialization in spheroidization and steel foundry. In addition, the department has its model shop

Metal melting



The metal melting process and its most important parameters are constantly monitored using electronic devices. The plant produces many types of iron and steel castings by European standards for chemical composition and mechanical properties.

In addition, the company specializes in the spheroidization of cast iron - the introduction of magnesium additives into the casting along with other elements that change the structure of iron and crystallization of spheroidal graphite. Due to its properties, ductile

iron has been used for the production of engine crankshafts, parts with high hardness and dynamic operation requirements, safety devices, and many others.

In 2010 the foundry introduced the technology of Hadfield steel production. Austenitic manganese steel with 11% Mn and high carbon content (Hadfield steel) is wear-resistant cast steel. These steel castings play an important role in various industries such as metallurgy, petrochemical, chemical industries, and ceramics. Austenitic manganese steels with an Mn content of 11-21% are used for parts operating under high pressures, bending stresses, and areas subjected to dynamic stresses. Under the action of local pressures and impacts the casting surface hardens more than 500 HV, which results in high flow resistance. They are mainly used for parts subjected to high-pressure grinding, such as:

- Baskets, digger teeth,
- Board crushers, hammer crushers,
- Caterpillars of tractors, tanks, and tracked vehicles,
- Railroad interchanges or streetcar
- Prison bars.

Molding castings

The casting line includes all operations related to the preparation of molds, molding sand, and cores. At present, castings in Huta Zabrze are produced using furan resin molding mixes. To a limited extent, molding in cement and synthetic masses is also used.



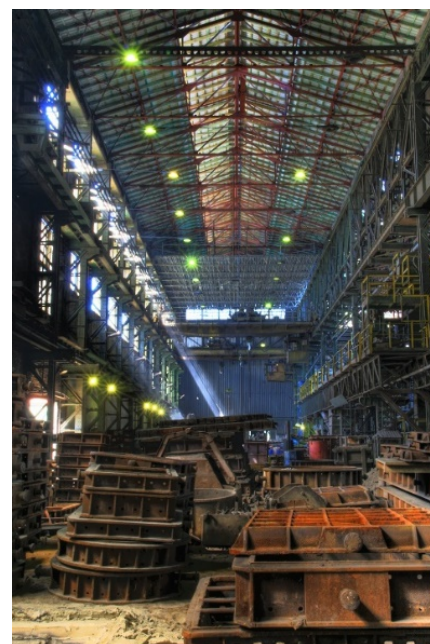
Disassembly of molds and cleaning of castings

The castings are knocked out of the molds onto a percussion grid, after which the spent mass is fed to the belt conveyor regeneration system. and castings are cleaned of casting residue by hand and by two OWD metal pellet cleaners, which ensure high surface quality.



Thermal processing

Thermal treatment of castings is performed in computer-controlled furnaces. The maximum dimensions of the heat-treated elements are 5m x 2.40m x 1.8m. For machining, normalization or soft annealing can be performed, resulting in a structure with lower hardness and strength, but quite significant impact toughness, which facilitates chip machining.



The finished products, when subjected to significant loads, do not have sufficient strength and hardness. To improve these properties while obtaining good ductility and toughness, thermal improvement consisting of hardening and tempering at high temperatures is used.

The foundry also has a special place for surface hardening of treadplates to obtain high hardness and strength of the wheels.

Machining

The foundry department can carry out comprehensive machining of its castings according to customer requirements in the machine shop equipped with a wide range of machine tools.

Basic range of products

- frames, armored, coke oven doors
- Industrial fittings (bodies and parts of fittings)
- transmission housing
- rope pulleys
- wheels
- brake discs and drums
- dies for car body stamping
- tees, elbows, straight sockets
- steelmaking equipment (ladles, sub-crystallizers, hoppers, vats, permanent crystallizers)
- cooling plate for blast furnace
- spare parts



Contacts:

Huta Zabrze S.A.

ul. Mikulczycka 13, 41-800 Zabrze

+48 32 376 30 40

zarzad@hutazabrze.com.pl

<https://www.hutazabrze.com.pl/>