

BORYSZEW GROUP

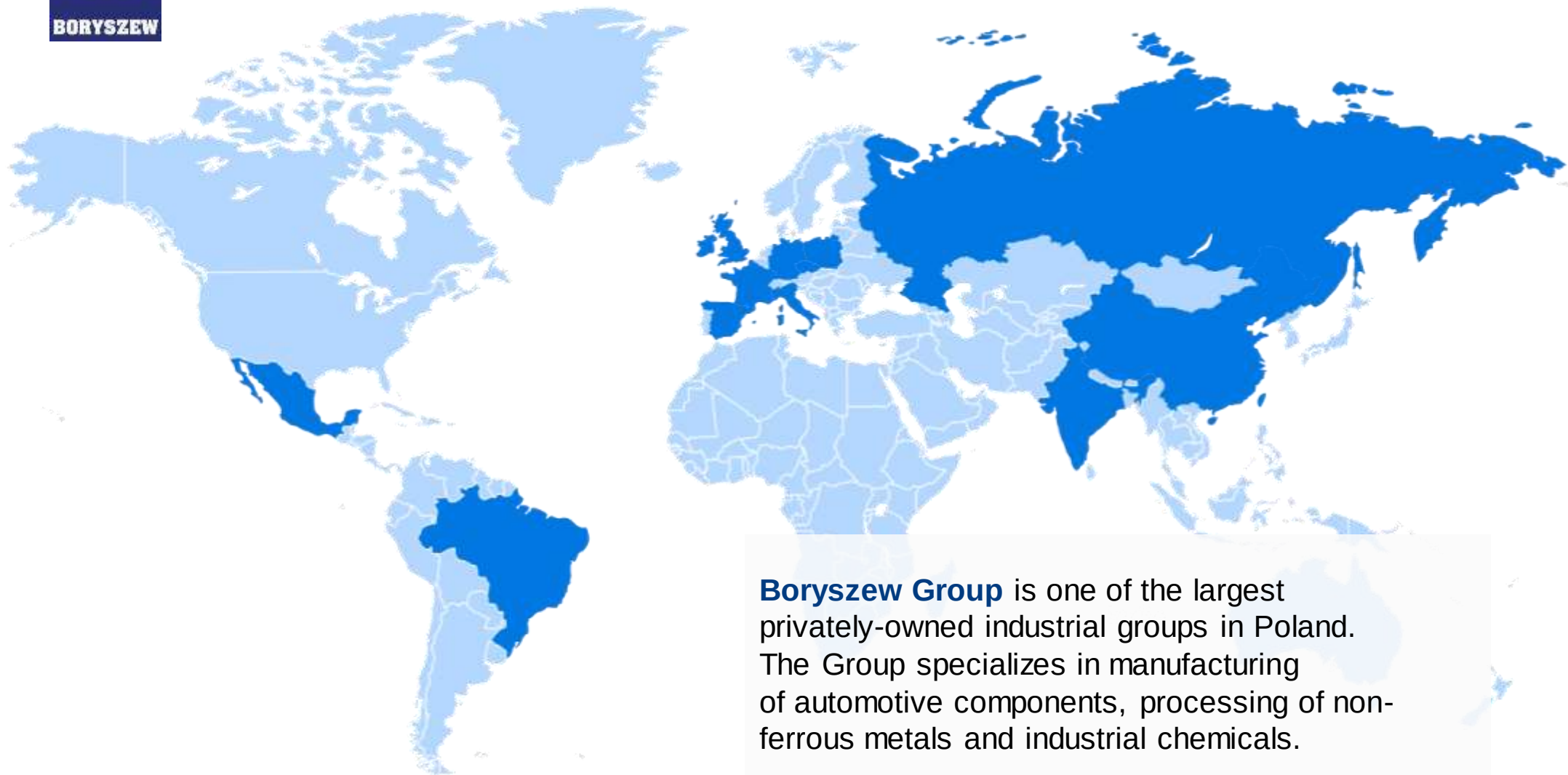


BORYSZEW





BORYSZEW GROUP



Boryszew Group is one of the largest privately-owned industrial groups in Poland. The Group specializes in manufacturing of automotive components, processing of non-ferrous metals and industrial chemicals.

MILESTONES

1911



Incorporation of the company in Sochaczew, Poland

1996



Listing on the Warsaw Stock Exchange

1999

Roman Karkosik acquires majority in Boryszew



2001-2003



Acquisition of Elana and Huta Oława

2010



Acquisition of Maflow Group

2005

Acquisition of Impexmetal Group



2011



Acquisition of AKT, Theysohn and WEDO. SOP of Maflow plant in Pune, India

2012

Acquisition of YMOS Group



2014

SOP of BAP plant in Dzierzhinsk, Russia



2017

SOP of the BAP plant in Prenzlau, Germany
SOP of Maflow plant in Toruń, Poland



SOP of Maflow plant in Guanajuato, Mexico



2016

BORYSZEW GROUP: KEY FIGURES



106

years of tradition



21

years on the Warsaw Stock Exchange



4

continents,

12

countries,
Centrally located in Europe



100m EUR

value of innovation projects under execution or preparation, including EU subsidies

7

innovation projects started in 2016

11

innovation projects started in 2017



33

production plants

2

tool shops

7

R&D centers for automotive and non-ferrous metal



No. 1

the largest Polish Tier-1 auto parts producer



No. 1

the largest Polish non-ferrous metals processor

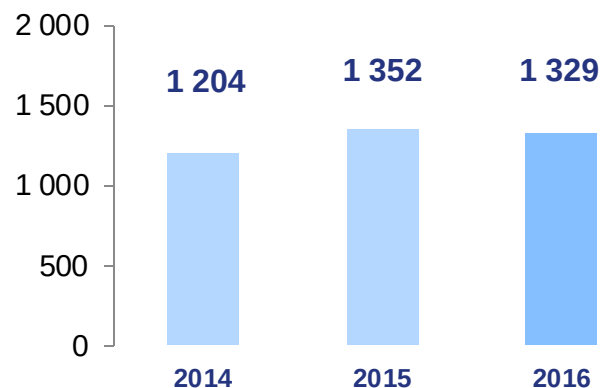


Every 5th

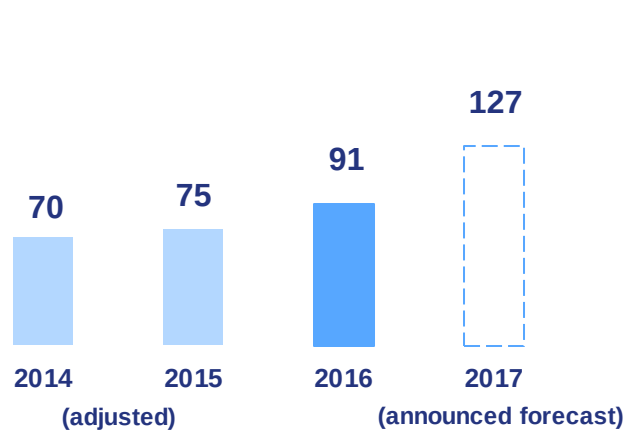
car in Europe with components from Maflow Group

FINANCIAL STANDING

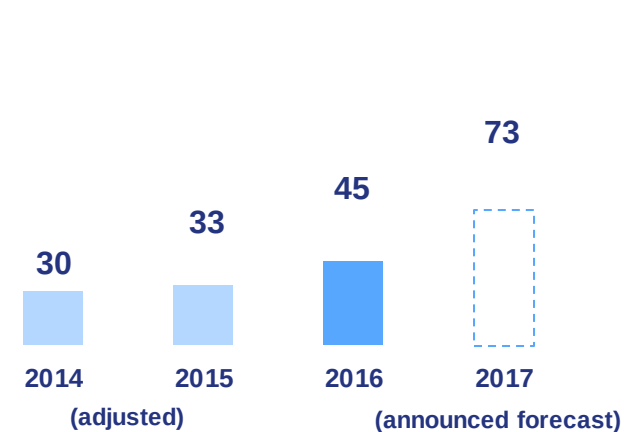
Revenues (EUR, million)



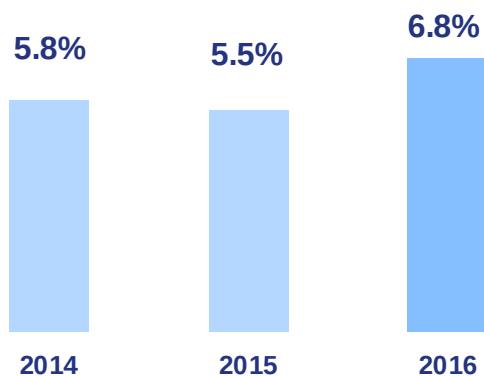
EBITDA (EUR, million)



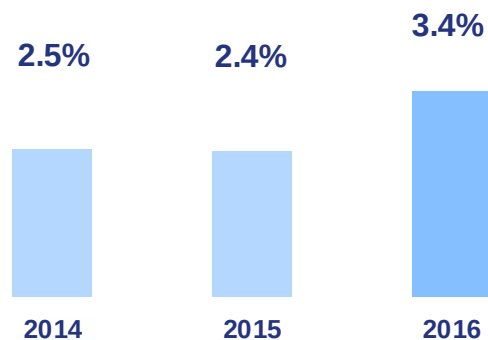
Net profit (EUR, million)



EBITDA margin (%)



Net margin (%)



BORYSZEW GROUP ON STOCK EXCHANGE



585 EURm

Market capitalization



7.1

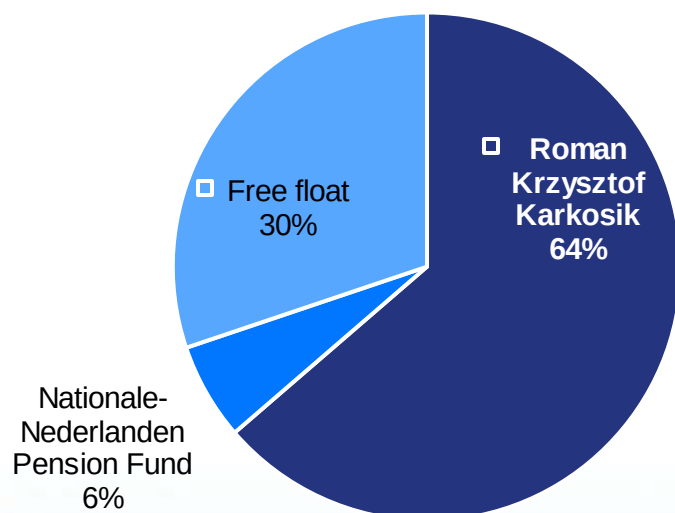
P/E ratio



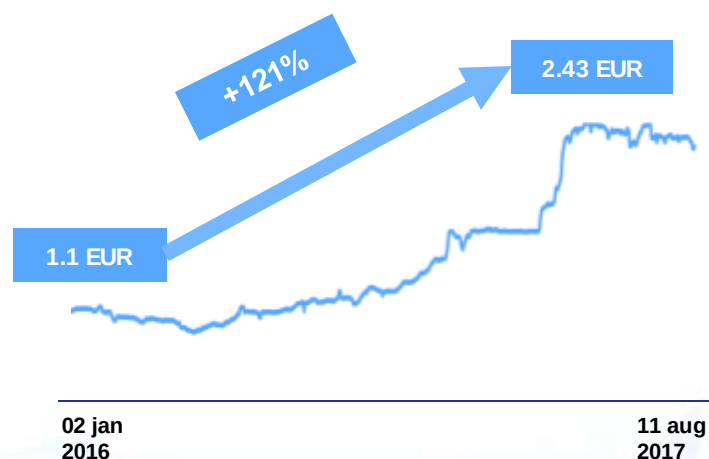
5.4

EV/EBITDA ratio

Shareholders



Share price of Boryszew S.A. on the WSE



ROMAN KRZYSZTOF KARKOSIK – THE MAJORITY SHAREHOLDER



Business Profile

Mr. Roman Karkosik has been building his business profile for 30 years. Having begun with small enterprises, such as merchandising companies, later, takeovers of stock exchange listed companies, he has created an industry group of significant importance on the global market, employing over 14,000 people.

Thanks to his own experience as well as a trustworthy team of managers, he has succeeded in both restructuring of the taken over enterprises and increasing their value. He considers philanthropy to be one of the key parts of his life.

Key figures

Over 33 plants located on 4 continents and 12 countries

20 merchandising and service companies

6 companies listed on a stock exchange

14 thousand employees

SEGMENTS

	Automotive 	Metals 	Chemicals 
Main entities	Maflow Group  Boryszew Automotive Plastics 	Aluminium Konin  NPA Skawina  WM „Dziedzice”  FŁT Group 	Boryszew ERG  Elana / Elana PET  
Main products	Automotive fluid transportation systems including: A/C lines, high pressure rubber hoses R&D centers in Tychy and Ascoli Sales center in Tychy Exterior and interior plastic parts including: galvanised parts, large dimensions parts, kinetic parts R&D center in Toruń Sales centers in Toruń, Braunschweig	Aluminum and aluminum alloys products, zinc and lead products, lead recycling, cooper and cooper alloys products, bearings R&D centers in Konin and Skawina	Coolant fluid, deicing fluid, synthetic fiber, plasticizers, packages Innovation centers in Sochaczew and Toruń
Customers	Original car manufacturers (OEMs)	Automotive, packaging, electro-technical, construction industries	Automotive, packaging, and construction industries
Localisation			

ORGANIZATIONAL STRUCTURE

BORYSZEW GROUP

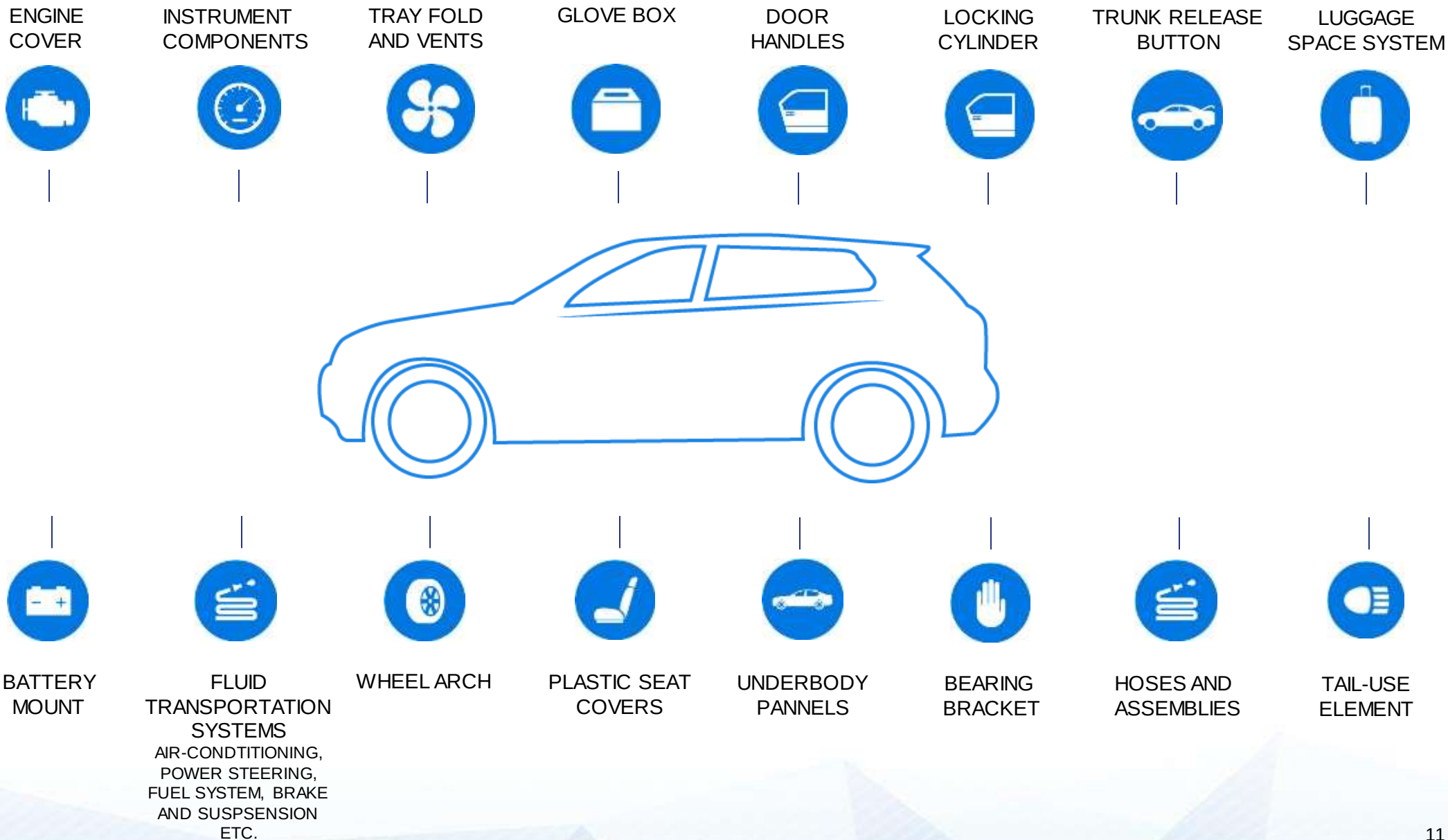




STRONG MARKET POSITION

- The largest privately-owned industrial group in Poland with global operations
- The largest non-ferrous metals processor in Poland
- The largest Tier-1 automotive components manufacturer headquartered in Poland
- The largest engine coolant producer – Borygo brand
- One of the biggest Polish investor and employer in Germany

AUTOMOTIVE SEGMENT



AUTOMOTIVE SEGMENT, SELECTED PRODUCTS

LARGE DIMENSION PARTS



KINETIC PARTS



ZN/AL PARTS



TOOLS



GALVANISED PARTS



IHX AC LINES
INTERNAL
HEAT EXCHANGE



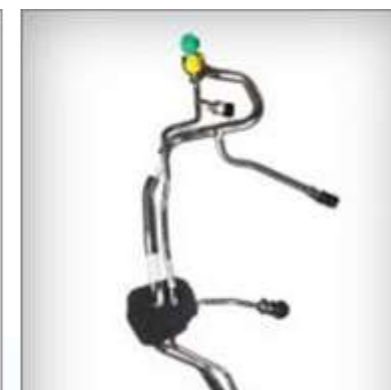
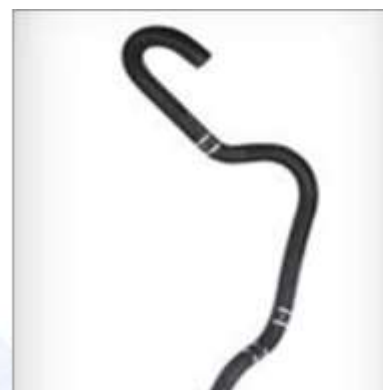
AC LINES
LIQUID LINE
EXAMPLE



AC LINES
SUCTION LINE
EXAMPLE



FUEL AND COOLANT HOSES STEEL AC LINE – SMBR
(PL + PS SET)



METAL SEGMENT

Aluminum



SHEETS



STRIPS



WIRE ROD



WIRES

Copper



TUBES



CONDENSER
PIPES



BARS



COIN BLANKS

Zinc & Lead



Zn-oxides
Pb-oxides



SHEETS



STRIPS



WIRES



METAL ALLOYS

Bearing



BEARINGS

METAL SEGMENT

Aluminum

STRIPS



SHEETS



WIRE ROD



WIRES



Copper

TUBES



CONDENSERS



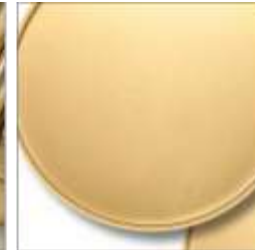
ALLOYS



BARS



COIN BLANKS



Zinc & Lead

SHEETS



WIRE ROD



ZINC-OXIDE



LEAD-OXIDE



MINIUM



Bearings

BEARINGS



CHEMICAL SEGMENT



POLYESTER
FIBERS



COOLANT FLUIDS



DEICING FLUIDS



FILAMENT YARN



PET RECYCLING



PE/PP/EPS
PACKAGES



NON-FREEZING
LIQUIDS



PLASTICIZER

CHEMICAL SEGMENT, SELECTED PRODUCTS

POLYESTER FIBERS



COOLANT FLUIDS



DEICING FLUIDS



FILAMENT YARN



PET RECYCLING



PE/PP/EPS PACKAGES



NON-FREEZING LIQUIDS



PLASTICIZER



BORYSZEW AUTOMOTIVE PLASTICS



BORYSZEW





BAP – KEY FIGURES



7 Production plants
2 Tool shops
3 R&D centers
2 Sale offices



2750
 Employees



125 617
 m² combined production
 surface



228
 Machines, 30 – 3,500 tons



270 EURm
 Revenues in 2016



12
 Key customers

CORE COMPETENCIES

● Plastic injection molding



● Painting



● Gas-assisted injection



● Testing

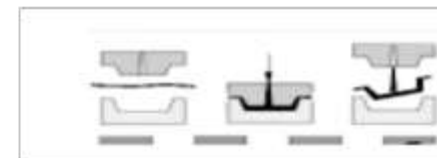
● Galvanic chrome plated
ABS and PC-ABS



● Welding

● Assembly

● Over-injection of foils



● Prototyping



● Physical
foaming

● Over-injection of fabric



● Automatisisation



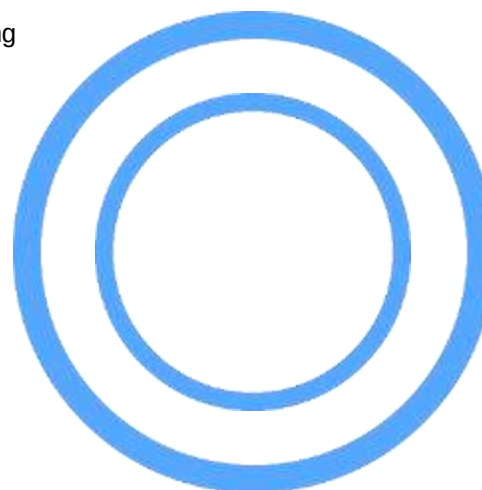
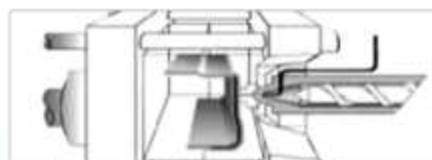
● Printing

● Punching

● Multicomponent



● Tool construction



MAFLOW GROUP



BORYSZEW



Tychy, **Poland**



Chelmek1, **Poland**



Chelmek2, **Poland**



Toruń, **Poland**



Guanajuato, **Mexico**



Dalian, **China**



Pune, **India**



Curitiba, **Brazil**



Santander, **Spain**



Chartres, **France**



Ascoli Piceno, **Italy**

MAFLOW – KEY FIGURES



11

Production plants

2

R&D centers

1

Sales office



4200

Employees



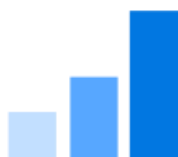
122 000

m² combined production
surface



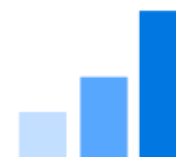
Vertical Integration
of processes:

- Design
- Rubber
- Aluminum
- Assembly



7%

Global A/C hoses market
share



20%

Europe A/C hoses market
share

MAFLOW – MAIN PRODUCTS



High pressure rubber hoses



Pre-Shaped hoses



Air Co



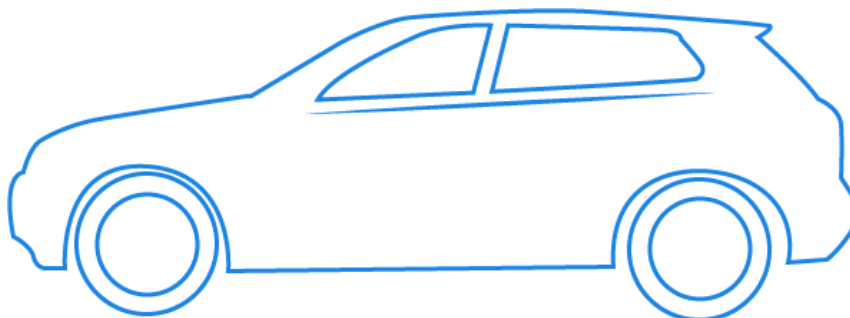
Engine Oil



Fuel System



Turbo Charger



Maflow Group offers diversified products range for multiple vehicle applications.

Water Cooling



Clutch



Brake Hoses



Power Steering
LP



Active Suspension



PLANTS' OVERVIEW



BORYSZEW

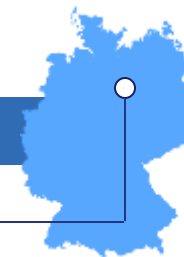


 54,000 m² Surface area	 727 Employees	 30 – 2,200t Machines size
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Deutschland

Gardelegen



- Main activities: **plastic injection, assembly, painting**
- Number of machines: **93**





30,250 m²
Surface area



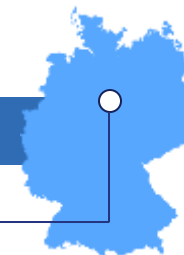
343
Employees



25 – 2,300t
Machines size

Deutschland

Salzgitter



- Main activities: **plastic injection, painting, assembly**
- Number of machines: **28**





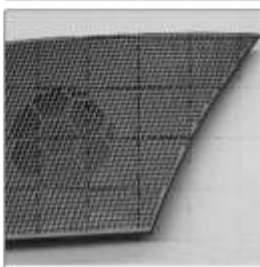
15,900 m²
Surface area



330
Employees

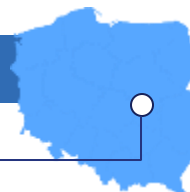


45 – 3,500t
Machines size



Poland

Ostaszewo



- Main activities: **plastic injection, painting, assembly**
- Number of machines: **23** with plans to increase number of machines up to **33** in near future





9,441 m²
Surface area



182
Employees



35 – 350t
Machines size



Deutschland

Idar – Oberstein



- Main activities: **zinc and plastic injection, assembly, luggage net systems**
- Number of machines: **11**

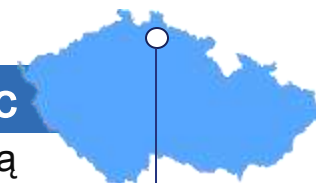


 42,763 m² Surface area	 424 Employees	 35 – 1,500t Machines size
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Czech Republic

Jablonec nad Nysą



- Main activities: **injection molding, painting, assembly**
- Number of machines: **38**



 8,200 m² Surface area	 122 Employees	 35 – 2,000t Machines size
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- Main activities: **injection molding, assembly**
- Number of machines: **15**



Boryszew Oberflächentechnik Deutschland



13,632 m²
Surface area



336
Employees



40 – 700t
Machines size

Deutschland

Prenzlau



- Main activities: **plastics electroplating, injection molding, assembly**
- Number of machines: **25**
- Electroplating capacity: **400,000 m²**
- New Atotech line started in **April 2017**



Boryszew Components Poland (under construction)



20,000 m²
Surface area



330
Employees

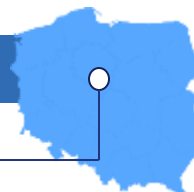


40 – 1,000t
Machines size



Poland

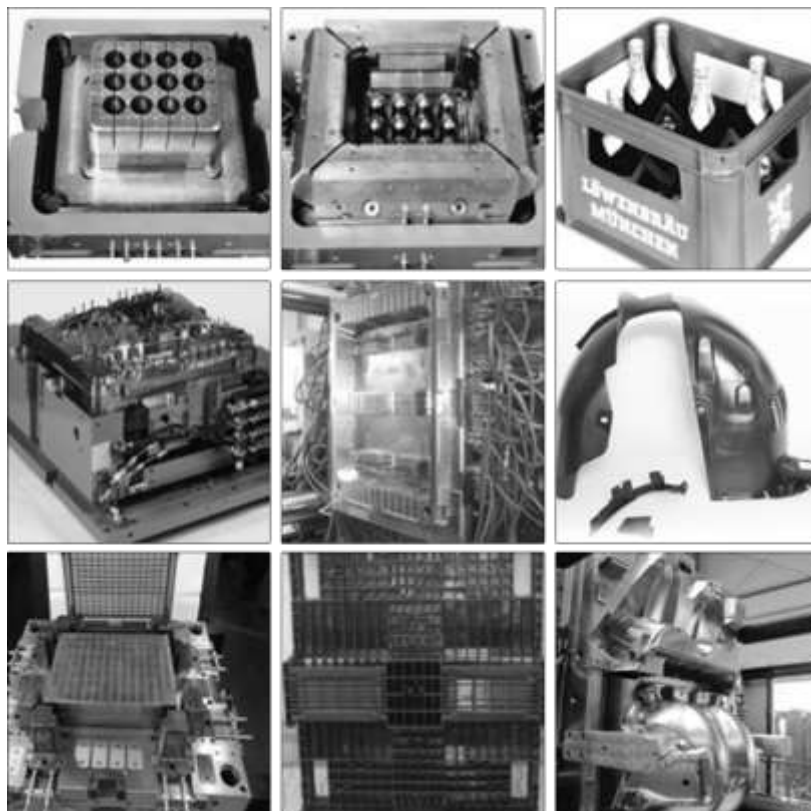
Toruń



- Main activities: **plastics electroplating, injection molding, assembly**
- Number of machines: **30**
- Electroplating capacity: **400,000 m²**
- Expected SOP – Q1 2019

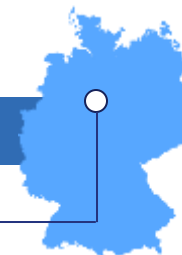


 1,770 m2 Surface area	 107 Employees	 60 tools per year cap
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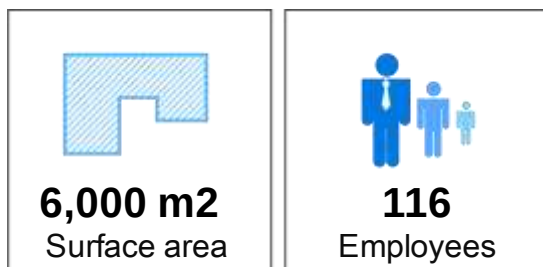
Deutschland

Langenhagen



• Tool Shop

- Main activities: **engineering, tooling**
- Up to 25t tools
- Machinery:
 - 6x 3-axis Milling machining center (DMG)
 - 2x 5-axis Milling machining center (DMG)
 - 3x 3-axis High speed Cutting milling machining center (Röders)
 - 1x 3-axis Milling machining center (Depo)
 - 2x 4-axis Deep hole drilling machine (Ixion)
 - 1x Grinding machines (Favretto)
 - 3x wire cutting machine (Chamilles, Mitsubishi)
 - 2x Vertical eroding machines (Ingersoll)
 - 2x Injection molding machine 660 + 1.100 (Engel, Windsor)
 - 1x Spotting and try-out presses (Reis)
 - 1x 5-axis High speed Cutting milling machining center (Röders)
 - 1x 6-axis Milling machining center (Trimill)
 - 1x 5-axis Deep hole drilling machine (Samag)



Deutschland

• Tool Shop

Doberschau



- Main activities: **engineering, tooling, injection molding**
- Number of machines: **7**
- Machinery:
 - 3x 3-axis milling machining center (Hermie, covers)
 - 4x 5-axis universal milling and drilling machines (DMG)
 - 3x Turbo milling machines (OPS-HSC, Kuhlmann, Matra)
 - 2x Deep drilling machine (Buck, Auerbach)
 - 4x Grinding machines (Giebel & Hotz, ABA)
 - 1x Laser welding machine (Trumpf)
 - 3x Wire cutting machines (Charmilles, AGIE)
 - 7x Vertical eroding machines EDM (AGIE, MAHO)
 - 6x Injection molding machines 50- 420t (DEMAG)
 - 1x CNC-Measurement machine (Zeiss)
 - 2x Spotting and try-out presses (Reis)

Maflow - Tychy



12,000 m²
Surface area

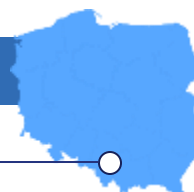


1,174
Employees



Poland

Tychy



- Main activities: **fittings and assemblies production, Laboratory & Testing**
- Technical & commercial center



Maflow - Chelmek 1



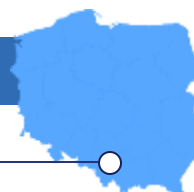
9,700 m2
Surface area



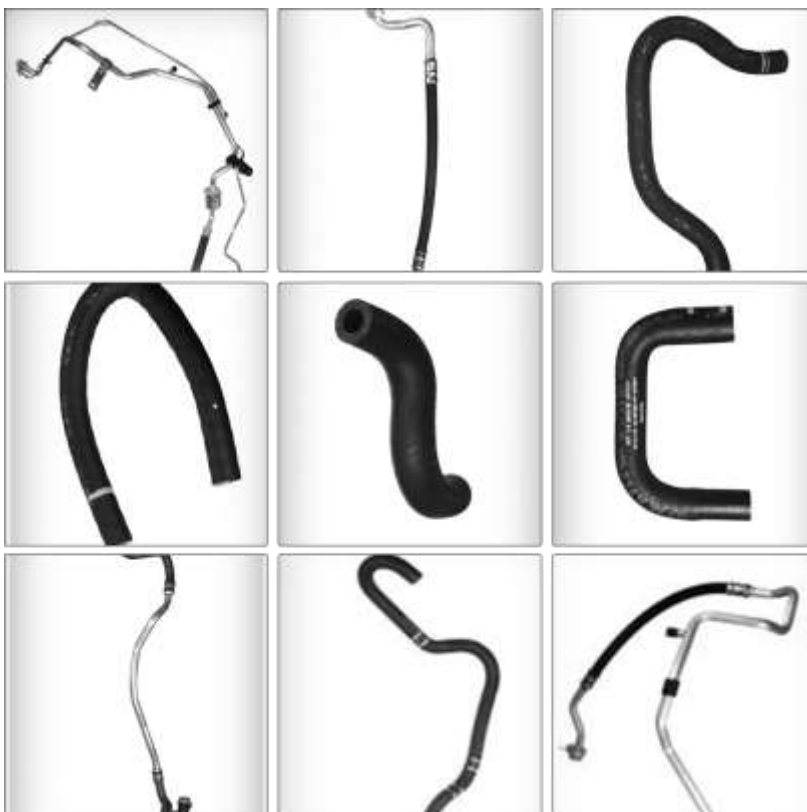
1,041
Employees

Poland

Chelmek



- Main activities: **Fittings and assemblies production, Laboratory & Testing**





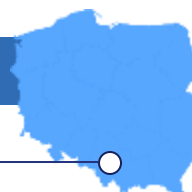
5,400 m²
Surface area



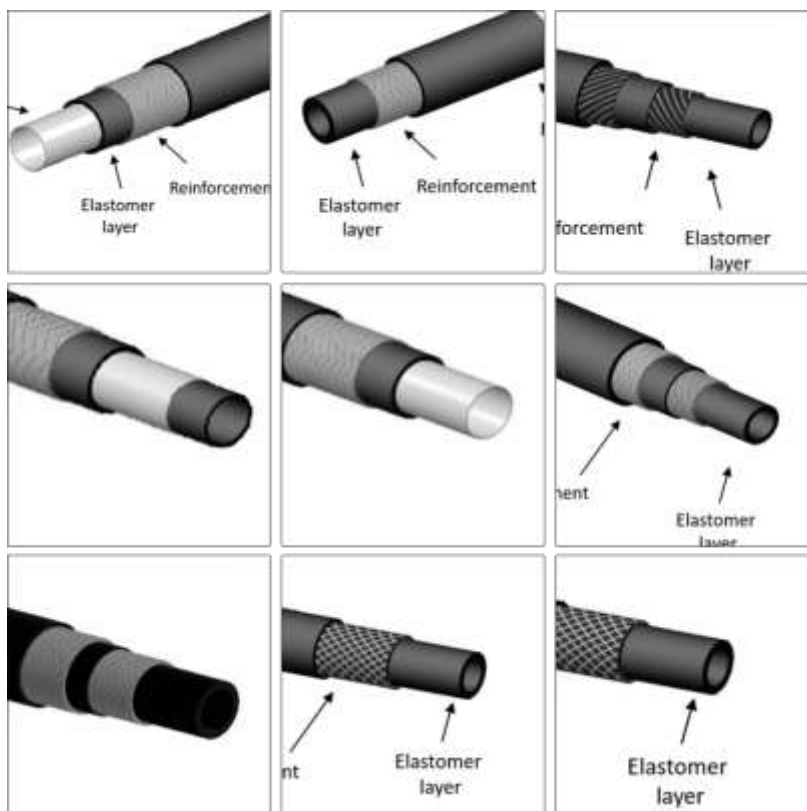
173
Employees

Poland

Chelmek



- Main activities: Hoses Shaping, Laboratory & Testing



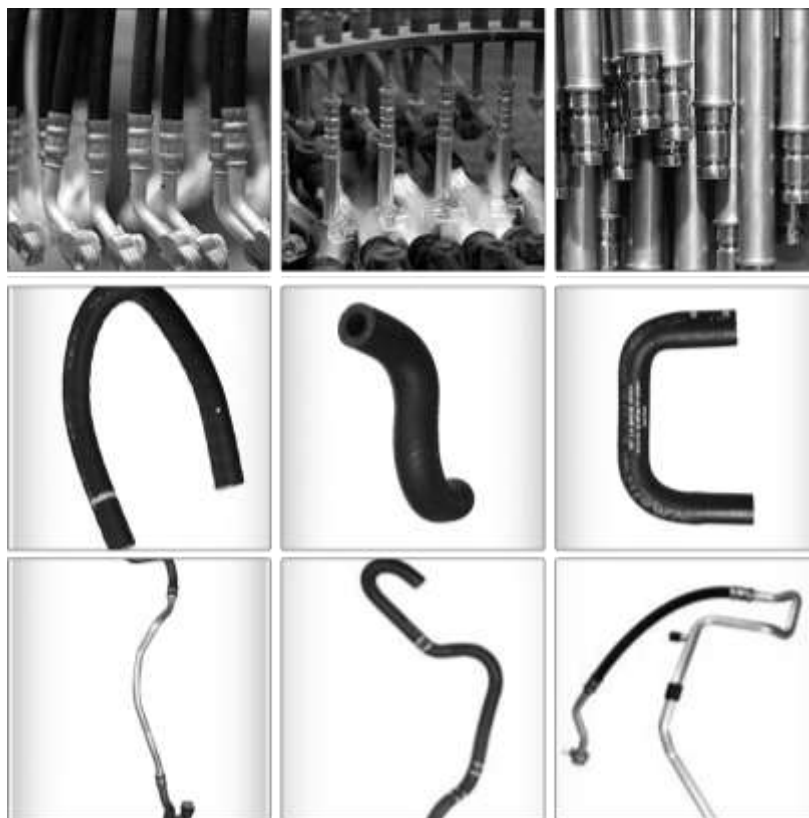
Maflow - Toruń



20,000 m²
Surface area



72
Employees



Poland

Toruń

- Main activities: **fittings and assemblies production**
- SOP: **06.2017**





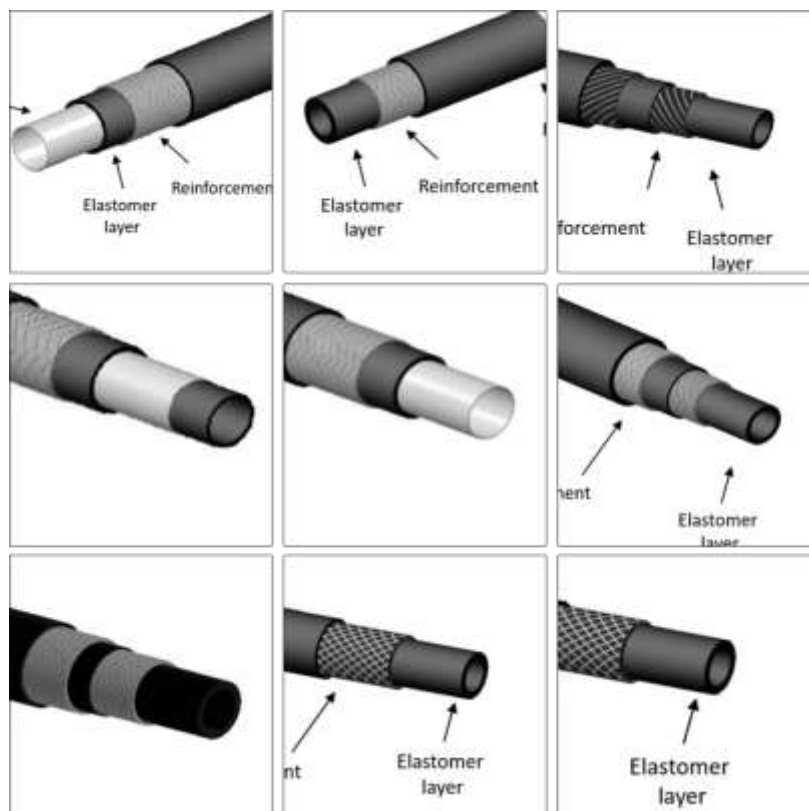
12,000 m²
Surface area



173
Employees

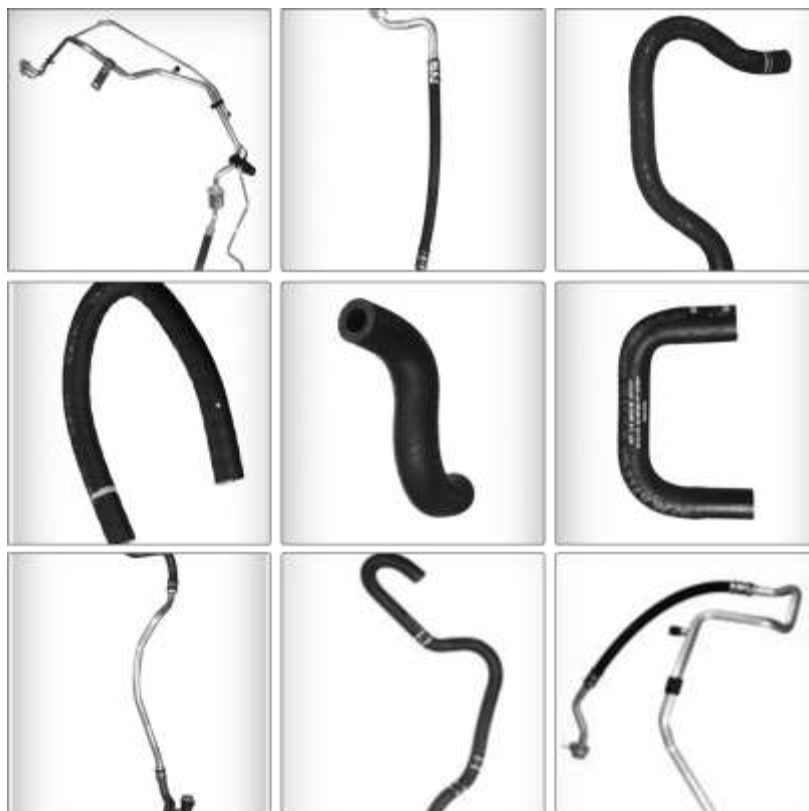


- Main activities: R&D, Rubber Hose Production, Laboratory & Testing



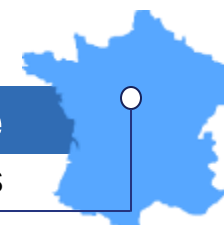
Maflow - Chartres

 10,000 m² Surface area	 145 Employees
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France

Chartres



- Main activities: **Air conditioning, Power Steering, Active Suspension, Laboratory & Testing**
- Technical & commercial centre



Maflow - Santander



4,600 m²
Surface area



190
Employees

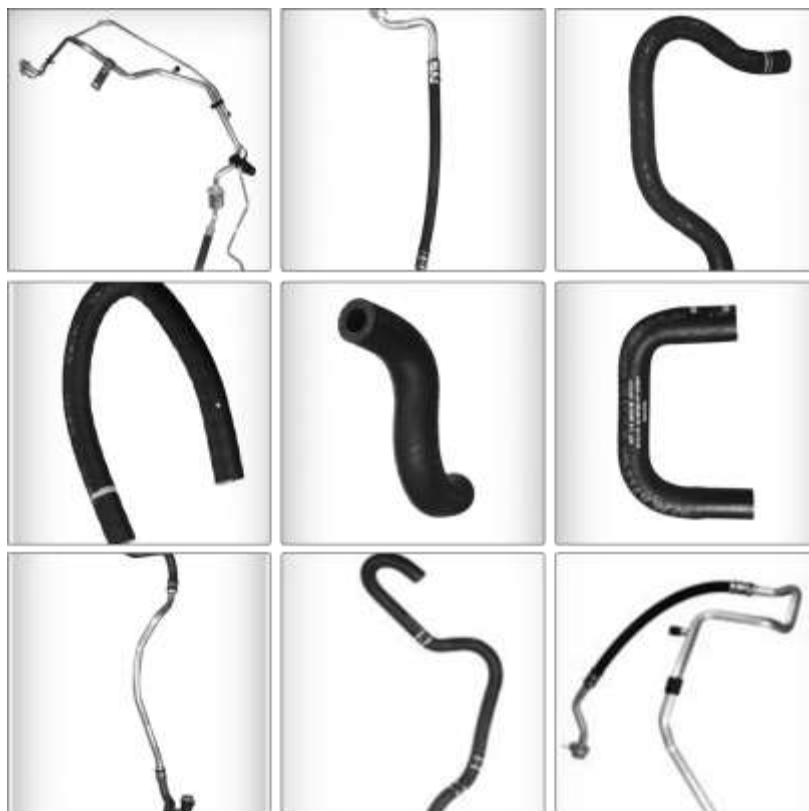
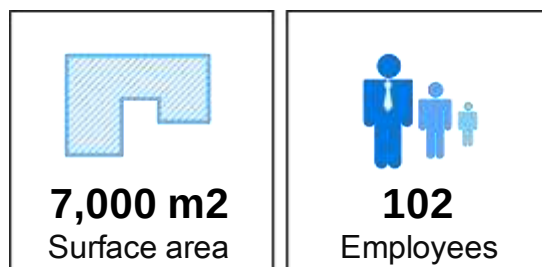
Spain

Santander

- Main activities: **Assembly of air conditioning and power steering hoses, Laboratory & Testing**

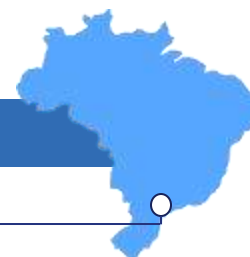


Maflow – Curitiba



Brazil

Curitiba



- Main activities: **Fittings and assemblies production – air condition, Power steering hoses, Receiver dryer, Laboratory & Testing**
- Technical & commercial centre



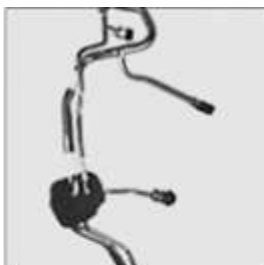
Maflow – Pune



3,600 m²
Surface area



183
Employees



India

Pune



- Main activities: **Assembly, Laboratory & Testing**
- Technical & commercial centre



Maflow – Dalian



17,000 m²
Surface area

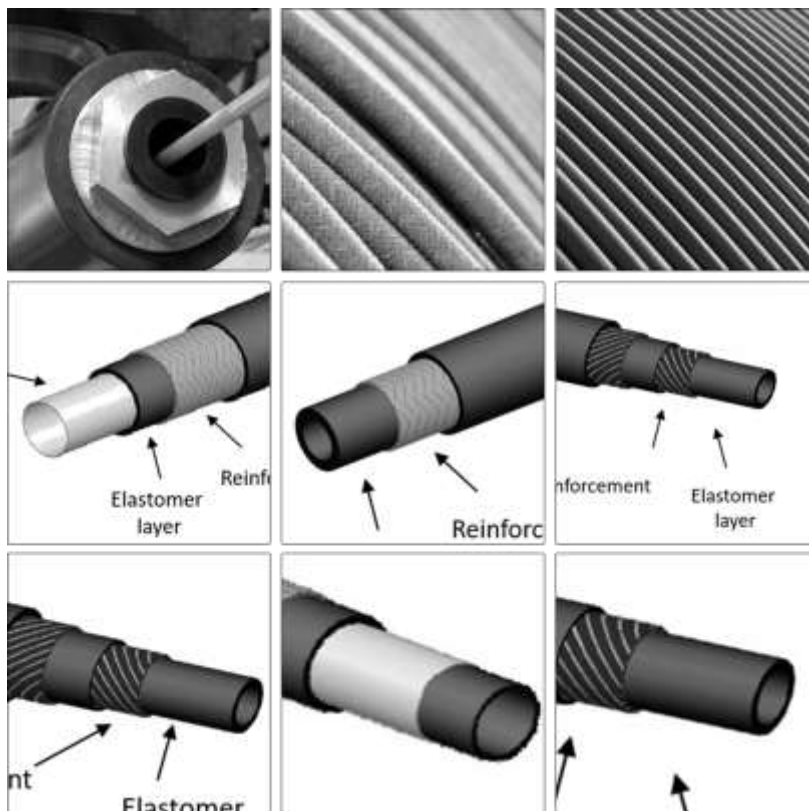


359
Employees

China

Dalian

- Main activities: **Fittings and rubber hose production, Assembly, Laboratory & Testing**
- Technical & commercial centre



Maflow - Guanajuato



4,700 m²
Surface area



153
Employees



- Main activities: **Assembly and fittings production, Laboratory & Testing**
- Production SOP: **Q1 2016**



Business description

- Aluminium Konin is the largest Polish manufacturer of rolled aluminium products in form of sheets and strips.
- Involved in recycling - aluminum scrap processor.
- The company started its activities in 1966 from production of primary aluminium. After opening the rolling mill in 1972, the enterprise focused on semis production.
- Implemented ISO 9001, 14001, ISO/TS 16949, OHSAS 18001 standards.

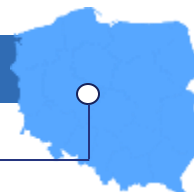
Latest developments

- New investment program of substantial capacity increase.
- Focus on highly innovative high-strength materials for automotive and electronics.
- Growing sales to automotive and packaging industries.



Poland

Konin



Products

- Impexmetal is the producer of a wide range of aluminium products in 1xxx, 3xxx, 5xxx, 8xxx alloy series.
- Flat rolled products (hot and cold rolled sheets and strips) are dedicated to various applications such as- automotive, packaging, electrotechnics, construction and others.

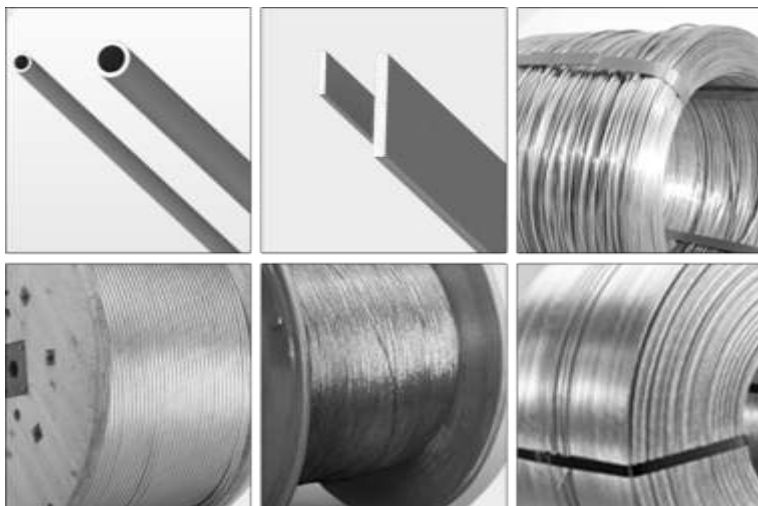


Business description

- The only manufacturer of aluminum wire rod and one of the largest manufacturers of wires and aluminum conductors in Poland.
- NPA's market share in aluminum wire rod production is ca. 4.5% in Europe and ca. 7% in the EU.
- Established in 1954, based in Skawina.

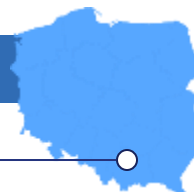
Latest developments

- Continued development of the automotive cable products.
- Development of wire rod production.
- Production increase of aluminum conductors and cables as a key subcontractor for the largest final manufacturers.
- Involved in R&D projects subsidised by the EU funds related to the energy market products.



Poland

Skawina



Products

- Aluminum wire rod EC Grade – used in electroenergetic and cable industries.
- Aluminum alloy wire rod – used in electroenergetic, cable and mechanic industries.
- Wire rod – used in steel processing industry.
- Aluminum and aluminum alloy wires – dedicated to cable, automotive and mechanic industries.
- Conductors – used in lightning rods, electroenergetic and cable industries.

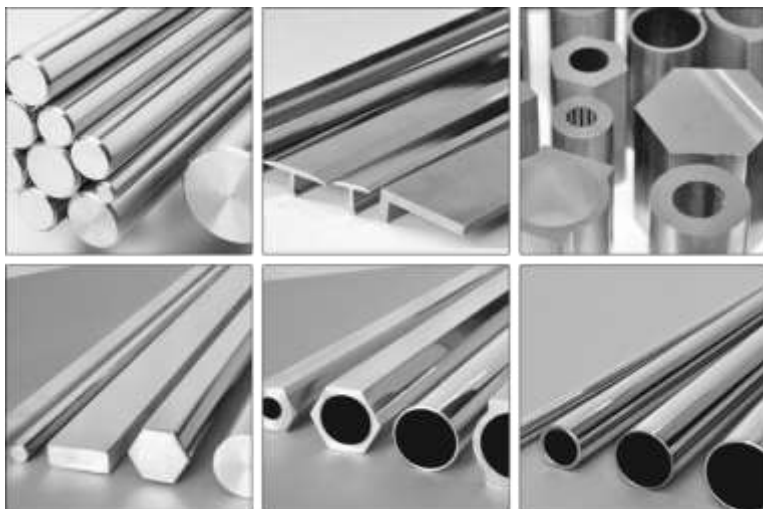


Business description

- The only Polish producer of semi-finished brass long products.
- Involved in recycling: copper and brass scrap.
- Established in 1896, based in Czechowice-Dziedzice.

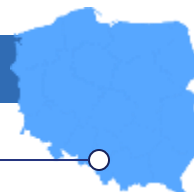
Latest developments

- New investment program of EUR 15m (subsidised by the EU) in progress; capacity increase by 8 th tonnes.
- Focus on improved-quality, high-tolerance drawn rods.



Poland

Czechowice-Dziedzice



Products

- Drawn and extruded rods, hollow rods, profiles – used for gas and water fittings, automotive, electronics and lock industries.
- Condenser tubes – used for heat exchangers.
- Brass strips and stainless steel strips – used in electric, electronic and building industries.
- Coin blanks - used by mints.

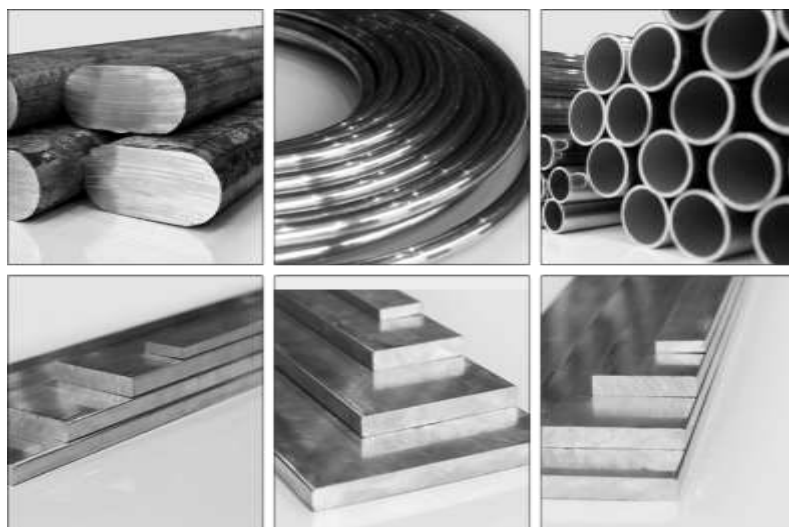


Business description

- Company engaged in copper processing for semi-finished products and copper alloys. The only producer of copper pipes in Poland.
- The biggest producer of copper tubes in Poland
- Founded in 1918, headquartered in Wrocław.
- Over 220 employees.

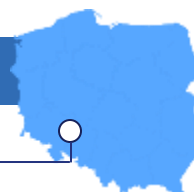
Latest developments

- Production shift towards high-yield, low-cost, continuous casting technologies. R&D and investment program subsidized by the EU.



Poland

Wrocław



Products

- Cast alloys – used for construction, metallurgy, mechanical engineering purposes.
- Wires, rods and copper profiles and copper alloy – used in electronics, energy and construction industries.
- Pipes made of copper – for construction and for "general" use.
- Copper rods and tubes – for industrial machinery, industrial fittings and metallurgy.



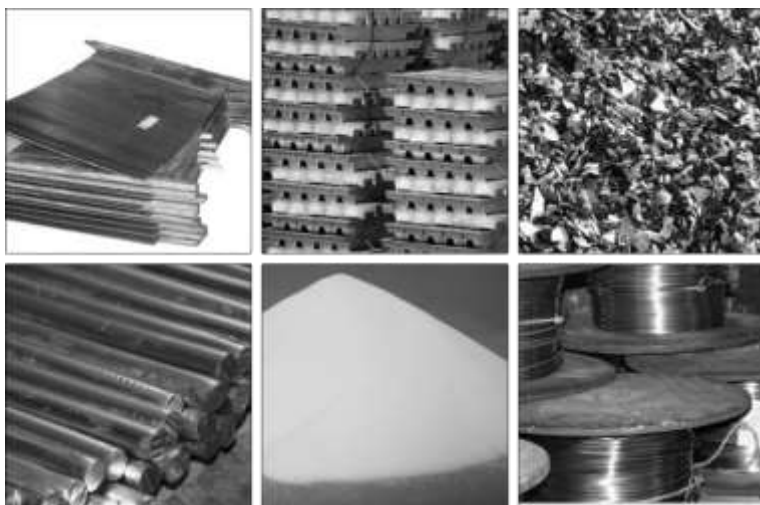


Business description

- Company involved in recycling of used car batteries and lead scrap, production and processing of refined lead and lead alloys.
- Probably No 1 in recycling yield in Europe.
- Top position on the lead and alloy sales market as well as on the used battery buyback market in Poland.
- Two plants: in Katowice and in Swietochlowice.
- History dating back to 1864, headquartered in Katowice.

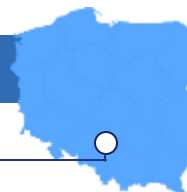
Latest developments

- Unique alloys being implemented.
- Implementation of cost & environmental effective technologies.



Poland

Katowice



Products

- Refined lead - dedicated to rolling press products, used mainly for the production of batteries.
- Lead alloys with antimony (Sb), selenium (Se), calcium (Ca) and tin (Sn), acid-lead batteries, electricity conducting elements in the batteries.
- Lead products – strips, sheets, rods, pipes wires. Dedicated to construction sector, radiology and sulphuric acid installations.
- Anodes – used in zinc electrolysis processes.
- Recycled Polypropylene – used in plastics industry by manufacturers of battery boxes.



Business description

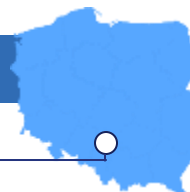
- The only Polish manufacturer of zinc-titanium sheets and strips, zinc and zinc alloy wire, zinc anodes and die-casting zinc alloys.
- History dating back to 1847, based in Katowice.

Latest developments

- Newly implemented pre-aged ZnTi sheets: Carbon Black and Nuance Grey.
- R&D project for new alloy wires started last quarter.

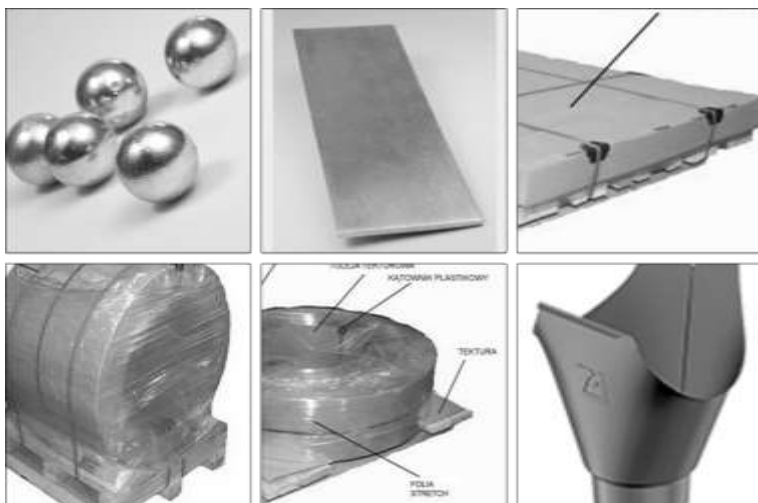
Poland

Katowice



Products

- Sheets – used in roofing, siding, flashing, gutter systems.
- Anodes - used in steel components electroplating.
- Wires - applying a zinc coating by spraying in order to prevent corrosion of steel structures and components, used in the electric industry.
- Cast alloys - used for the pressure casting in the automotive, furniture and construction industries.

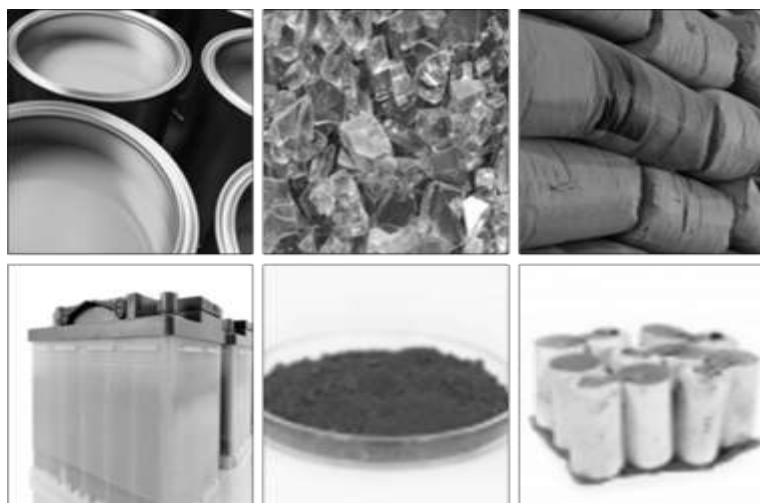


Business description

- The largest producer of zinc oxides, lead oxides and cadmium oxide in Poland.
- Involved in recycling - nickel-cadmium scrap processor.
- Approximately 20% market share of European lead oxides (by production volume).
- History dating back to 1845, based in Oława.

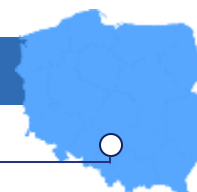
Latest developments

- Two top-notch furnaces installed in 1H2017 – improved quality and energy effectiveness
- R&D oriented on substantial increase of scrap material in production process



Poland

Oława



Products

- Zinc white – used in rubber industry as vulcanization activator, in the pharmaceutical industry, for ceramic and in animal feed.
- Red lead oxide – used in production of lead batteries and crystal glass.
- Cadmium oxide – used in production of nickel-cadmium batteries, production of dyes and pigments.



Design&Sales Company

- Trading company (B2B) dealing with different types of bearings for industrial customers, active automotive, agricultural, mechanical, steel and mine industries.
- Subsidiaries located in target markets (Italy, Germany, France, England, China).
- Operating in the bearings market since the 1950s, based in Warsaw.

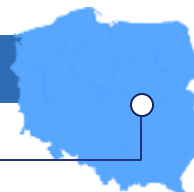
Latest developments

- Substantial increase of turnover.
- New bearing lines implemented.



Poland

Warszawa



Products

- Automotive sector - bearings to wheels of passengers cars, driving shafts supports, differential gearboxes, axle shafts supports, main wheels of trailers and semitrailers.
- Agriculture sector - self aligning and Y-bearings, tapered roller bearings, deep groove ball bearings.
- Electric motors' manufacturers – ball bearings with low noise level.
- Iron, steel and heavy industry – bearings used in all applications requiring high load carrying capacity.



Business description

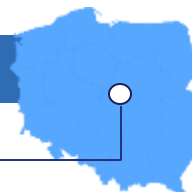
- Company involved in the chemicals production, especially for automotive, construction, packaging, aviation and chemical sectors' purposes.
- The only Polish manufacturer of car's radiator anti-freeze liquid – famous Borygo brand.
- Established in 1911, based in Sochaczew.

Latest developments

- Further product range expansion, development of new environmental friendly plasticizers.
- Launching to the market new de-icers, their certification on new geographical markets within new segments.



Poland
Sochaczew



Products

- Chemistry sector – plasticizers, stabilizers, auxiliaries used in plastics processing.
- Automotive sector – anti-freeze Borygo liquid, brake fluids, Adblue, windscreen sprayers.
- Installation sector - antifreeze liquids based on ethylene glycol for cooling, air conditioning, solar heating and heat pumps. Ergolid liquids.
- Construction sector – façade sidings, roof soffits, PVC gutters, steel doors (exterior, intraframe, technical and domestic), panels, rosettes and polystyrene moldings.
- Packaging sector - expanded polystyrene and polypropylene safety packaging, punnets, buckets, barrels.
- Aviation sector - de-icing and icing prevention fluids.



Business description

- Group of entities located in Toruń.
- The only one Polish producer of filament yarn, producer of staple fiber, large recycler of PET bottles and real estate portfolio management company.

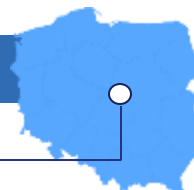
Latest developments

- Further development under consideration - increase of product portfolio and production capacities.
- R&D – new types of fibre e.g. graphene.



Poland

Toruń



Products

- Staple fibre: to be processed into yarn in a cotton, woollen or worsted system; used at production of non-woven, filling, synthetic fur, special applications.
- Filament yarn – used for production of lace curtains, woven, knitted fabrics, haberdashery, yarn for coated fabrics, yarn for automotive and industrial fabrics.
- PET bottle recycling – PET flakes used in production staple fibres.
- Services – mechanical engineering, spare parts production, maintenance, machinery relocation.
- Real estates in Toruń – 70 ha of plots for sale.



Business description

- Alchemia - company listed on Warsaw Stock Exchange
- Operating in sector of niche steel products, seamless pipes and tubes, rolled and forged elements
- 5 production plants (Huta Batory, Walcownia Rur Andrzej, Rurexpol, Huta Bankowa, Kuźnia Batory) and lab (Laboratoria Badań Batory)
- Total employee – 2 235

Latest developments

- Investment process of the total value of 67 mEUR in Huta Bankowa and Walcownia Rur Andrzej (with the support of EU funds).



Poland

Chorzów, Zawadzkie, Częstochowa,
Dąbrowa Górnicza



Products by manufacturer

- Huta Batory: hot-rolled seamless steel pipes in a range of 219 mm – 508 mm as well as conventional ingots of more than 400 types of regular and high-quality steel
- Walcownia Rur Andrzej - hot-rolled seamless steel pipes with specialization in boiler tubes in range of 21,3 mm – 114,3mm
- Rurexpol: hot-rolled seamless steel pipes in range of 21,3 mm – 114,3mm. Specialization in OCTG pipes and special purpose pipes for the chemical and shipbuilding industries
- Huta Bankowa: rolled and forged-rolled products: bars and structural steels, angles and semi products for forging and pipe rolling mills, tyres for wheel sets, round or profiled seamless forged and rolled rings
- Kuźnia Batory: forged products from 170 steel types ranging from structural, carbon and alloy steel, through tool steel designed to work in cold and hot conditions, to stainless steel (acid- and heat resistant) and other alloys.





BORYSZEW

