presentation 2013

WELCOME TO MOTOR JIKOV

MOTOR JIKOV GROUP is a group of four companies focused on engineering and foundry industries.

> MOTOR JIKOV Slévárna MOTOR JIKOV Strojírenská MOTOR JIKOV Fostron MOTOR JIKOV GREEN













COMPANY **PROFILE**

The mutual link of the production programmes enables the implementation of synergies and achieving competitive production effectiveness.

The tradition of MOTOR JIKOV Group goes back to 1899. For 114 years it has gone through many stages of development and currently this genuinely Czech company associates four stock companies focused on the engineering and foundry industries.

MOTOR JIKOV

The main line of business is the foundry industry, machining, assemblies and support processes (production of tools and single-purpose machines, hardening in a protective atmosphere, galvanization, blacking, annealing etc.) focused especially on the automotive and consumer industries.

The company's proprietary product range includes e.g. compressed natural gas vehicle refuelling appliances, garden and agricultural equipment, riveting tools, twostroke JIKOV engines, tools and singlepurpose machines.

The production portfolio also includes filtration and hydraulic system components, handling technology, assembly devices, special machining units, cardan shafts, aluminium and zinc alloy pressure castings, ductile and grey iron castings, other accessories and components.





HISTORICAL MILESTONES

We are Czech company with the tradition of metallurgical and engineering production since 1899.

1899	9	JULIUS ŠKRLANDT and co. The foundations of engineering and foundry production established.
1911		UNION, the engineering factory and foundry in České Budějovice Production of water turbines, assemblies and repairs of engines.
1948		MOTOR UNION, national company Production of components for automotive industry. Production of two-stroke and four-stroke engines.
1954	0	MOTOR, national company Production focused on automotive industry under the "JIKOV" trade mark – fuel and air-pressure systems.
1980		Start of production of fuel system components and carburettors for Škoda 105, Škoda 120 and consequently for Škoda Favorit. Start of production of high-pressure compressors.
1989	\rightarrow	MOTOR JIKOV, state company Establishment of AutoSAP, Automotive Industry Association.
1991	\rightarrow	MOTOR JIKOV, stock company
1992	9	Joint venture with Robert Bosch.













HISTORICAL MILESTONES

The company belongs among the most important employers in the region.

1995	0	Incorporation of MOTOR JIKOV to M.I.C.B., the engineering group. Production of MOTOR JIKOV brand obtains international certification. Start of production of airbag components for TRW Aschau. Acquisition of Lada Soběslav.
1996		Start of licence production of four-stroke engines Fichtel & Sachs. Establishment of the Fostron company by merger of MOTOR JIKOV tool shop and Lada JH.
1997	\rightarrow	Establishment of subsidiary companies.
1998	\rightarrow	Start of production of die-cast products for the Brose company.
2000	\rightarrow	Joint venture with Tecumseh Products Company. Start of production of pressure tools for MAGNA.
2001	\rightarrow	Start of production of riveting tools for Textron Fastening Systems (Infastech).
2003	9	Start of production of TENNANT cleaning machines.













HISTORICAL MILESTONES

Since the very beginning we have been focused on production of metallurgical and engineering products with high added value.

2004	0	Production extension of parts and other components for main customers – TELEFLEX, AUTOMOTIVE, TEXTRON E-Z-GO and ELECTROLUX.
2006	0	Start of production and machining of aluminium alloy castings for Briggs & Stratton.
2008	\rightarrow	Start of production for SCANIA AB.
2009		Production of the first domestic CNG vehicle refuelling appliance in the Czech Republic and introduction to market.
2010		Start of the Green Power Drive project. Establishment of NGVA. Development of production of vehicle refuelling appliance for companies and households.
2011		Winning the 1st place of E.ON Energy Globe Award in the category "Air" for a compressed natural gas refuelling appliance. Acquisition of KURTZ AL machine and start of low-pressure casting.
2012	0	Establishment of MOTOR JIKOV GREEN trade company, vendor of garden equipment and exclusive distributor of world-known brands.













ORGANISATIONAL STRUCTURE

MOTOR JIKOV GROUP has a strong potential for innovation and a wide scope of production and services.

It employs about 800 employees and last year it achieved sales in the amount of EUR 51 mil.

SPECIAL MACHINING AND PRODUCTION Division compressed natural gas (CNG) vehicle refuelling appliances and stations, JIKOV air brake systems, custom machining and assemblies MOTOR JIKOV INDUSTRIAL PRODUCTS Division Strojírenská riveting tools, pedal assemblies, golf cart components and systems, machining and assemblies 303 employees turnover 22 mil. EUR MECHANISATION Division long grass mowers, short grass mowers, SKODA AUTO fuel system elements IRON FOUNDRY Division MOTOR JIKOV ductile and grey iron casting production Slévárna MOTOR JIKOV DIE-CASTING Division 331 employees Group aluminium alloy pressure casting production, zinc casting (from that 65 agency production, machining and assemblies of castings employees) turnover 24 mil. EUR MOTOR JIKOV **TOOL SHOP Division** tools, trimming equipment Fostron SINGLE-PURSPOSE MACHINES Division 99 employees assembly lines, machining lines and devices, testing equipment turnover 5 mil. EUR Trading Company MOTOR JIKOV distribution of Briggs & Stratton products, SNAPPER, MURRAY and SIMPLICITY GREEN brands, FISKARS, WORLD, AGAMA products and products 16 employees of MECHANISATION Division



PRODUCTION AND BUSINESS STRATEGIES

Complex engineering projects

Main line of business of MOTOR JIKOV GROUP is foundry industry, machining, assemblies and support processes focused especially on automotive and consumer industries.

Foundry industry

DIE-CASTING

Al die-casting machinery 320-1,000 t Zn die-casting machinery 20 – 815 t material: Al226, Al231, Z400, Z410 weight of castings up to 6.5 kg optimal series from 20,000 to 1 mil. Pcs

IRON FOUNDRY

Disamatic frameless moulding line material: grey and ductile iron weight of castings up to 20 kg optimal series from 1,000 to 500,000 Pcs

Machining

CNC, NC turning, milling, grinding material: metallurgical, Al, carbon steel, iron castings, forgings, work-pieces up to weight of max. 20 kg optimal series from 50 to 1 mil. Pcs

Assemblies

Subassemblies or assemblies, including testing.

Assemblies of riveting tools, lawn mowers, compressors, CNG vehicle refuelling appliances, pressure regulators, tools and single-purpose machines.

Support processes

TOOLING, SINGLE-PURPOSE MACHINES, FIXTURES

Al/Zn die-casting tooling up to weight of 7 t, single-purpose assembly, testing and machining machines, fixtures, blacking, galvanization, annealing, hardening in protective atmosphere.

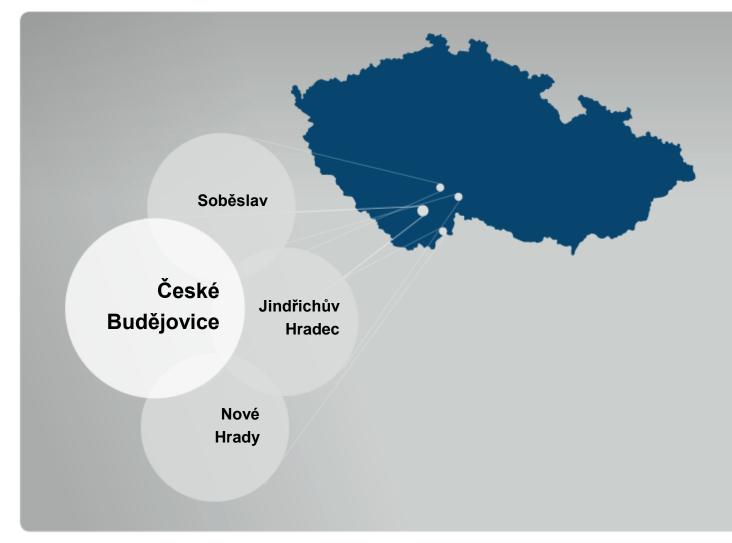




CZECH REPUBLIC

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> T: +420 389 016 111 F: +420 389 016 330 motorjikov@mjgroup.cz www.motorjikov.com







CUSTOMERSWORLDWIDE

Two thirds of production are exported.

Main customers are global and multinational automotive and consumer corporations on five continents.







OUR PARTNERS









































































































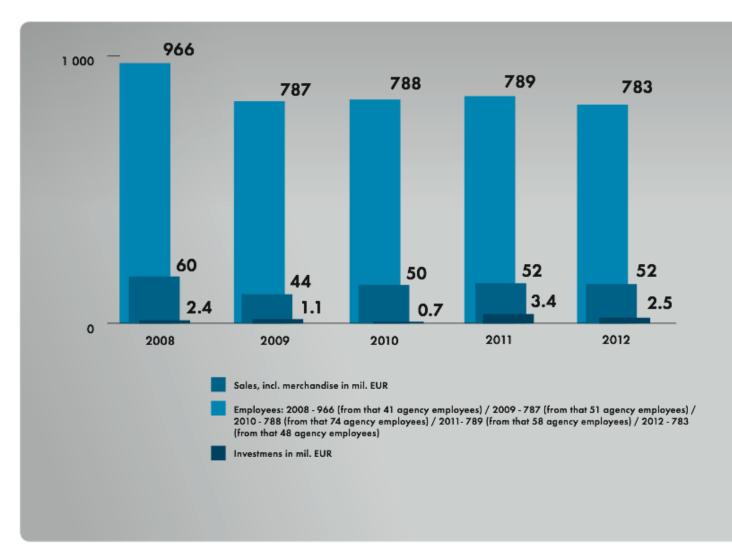




MAIN ECONOMIC INDICATORS

We lay focuses on customer satisfaction, quality, development of new products and education of employees.

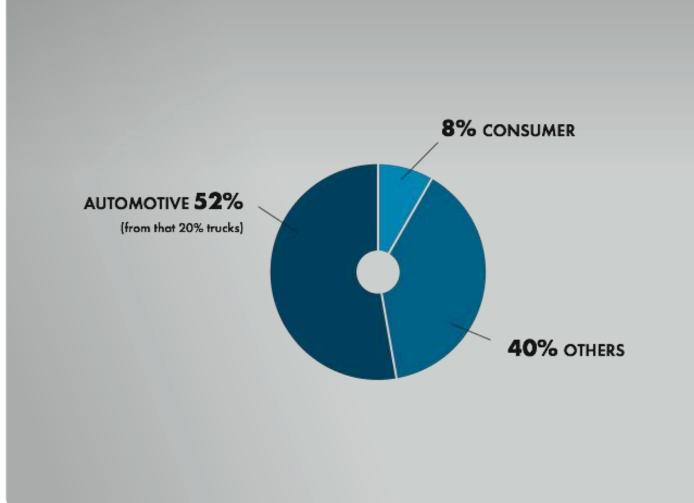
Annually we invest significant figures in development.





SALES BY INDUSTRY

Sales in 2012 – EUR 52 mil.

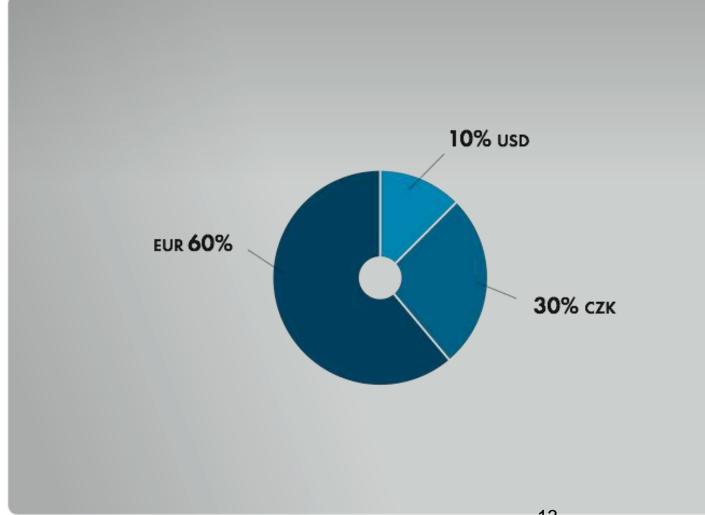






SALES BY CURRENCY

Sales in 2012 – EUR 52 mil.

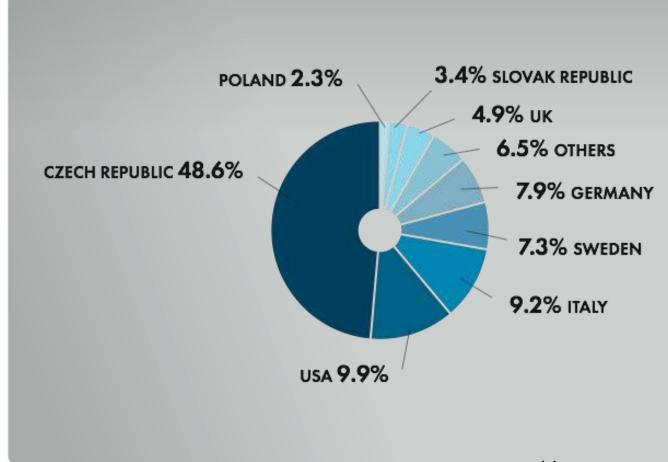






SALES BY TERRITORIES

Sales in 2012 – EUR 52 mil.







CERTIFICATION

MOTOR JIKOV Strojírenská a.s.

The company is certified according to internationally accepted standards by TÜV NORD CERT GmbH



EN ISO 9001 : 2008 České Budějovice



EN ISO 9001 : 2008 České Budějovice



EN ISO 9001 : 2008 Soběslav



ISO TS 16949 : 2009 České Budějovice



ISO/TS 16949: 2009



EN ISO 9001 : 2008





CERTIFICATION

MOTOR JIKOV Slévárna a.s.

The company is certified according to internationally accepted standards by TÜV NORD CERT GmbH



EN ISO 14001: 2004



ISO TS 16949: 2009



ISO TS 16949 : 2009 amendment





CERTIFICATION

MOTOR JIKOV Fostron a.s.

The company is certified according to internationally accepted standards by TÜV NORD CERT GmbH



EN ISO 9001: 2008





AWARDS AND MEMBERSHIP IN ORGANISATIONS

Membership:



NGV Association



Chamber of Commerce of the Czech Republic



Confederation of Industry of the Czech Republic



Czech Biogas Association



NGV Europe Association



South-Bohemian Chamber of Commerce



Automobile Industry Association



Association of Engineering Technology

MOTOR JIKOV Slévárna

MOTOR JIKOV Slévárna is focused both on serial production of grey and ductile iron castings for important industrial companies all over the world and on die-casting of top quality and technologically demanding Al and Zn castings for automotive, textile and consumer industry. Products are delivered in any stage of treatment according to customer requirements.











DIVIZE SLÉVÁRNA LITINY

Production possibilities

Grey and ductile iron castings

Weight from 0.5 to 20 kg Optimal series from 1,000 to 500,000 Pcs Annual technical capacity max. 10,000 t

Material

EN GJL 150, 200, 250, 300 EN GJL 400 – 12, 500 – 7, 600 – 3, 700 – 2

Melting

Two EGES 3 MW medium frequency induction MELT & HOLD melting furnaces of the volume 2 x 4 t and melting output 6.1 t/hour

Moulding

Frameless moulding line DISAMATIC 2013 LP/PLC-B, vertical dividing plane, size of sand moulds 535 x 650 x 120–360 mm

Production of cores

4 "Schalco" (hot box) machines, we purchase the core mixture







IRON FOUNDRY DIVISION

The Iron Foundry is equipped to produce castings of the weight from 0.5 to 20 kg



Portfolio of castings



Portfolio of castings



Gearbox hubs



Axle components



Golf cart axle elements



Fender holders





DIE-CASTING DIVISION

High-pressure die-casting

Production possibilities

TVC - Technological Development Centre

Development of technological procedures and automated workplace concepts for the production of high-pressure aluminium castings with automatic operation and minimum production times.

Al and Zn high-pressure die-casting

Al castings up to the weight of 7 kg and Zn castings up to the weight of 3.5 kg

Machined materials Aluminium alloys

Al 226 (EN 1706 EN AC-46000, DIN 1725-226 AlSi9Cu3, AA A380.0, JIS H 5302 ADC12) Al 231 (EN 1706 AC-47100, DIN 1725-231 AlSi12Cu1, JIS H 5302 ADC1C) Al 230 (EN AC 44300, DIN EN AC – AlSi12)

Aluminium high-pressure die-casting machinery

1x Bühler B 320

1x Bühler SD/42C

1x Müller Weingarten 550

2x COLOSIO PFO 560

1x Bühler SC 66

1x Müller Weingarten 1000

Zinc high-pressure die-casting machinery

1x Frech DAW 20t

1x Frech DAW 63t

1x Frech DAW 80t

1x Frech DAW 125t

1x Frech DAW 160t

1x Frech DAW 200t

1x Frech DAW 315t







DIE-CASTING DIVISION

The essential part of production is intended for the international automotive and consumer industries.



cylinder H560



bracket of LED headlight



flange pipe assembly



rocker cover up assembly



flange assembly



cover of engine cylinder for garden equipment





DIE-CASTING DIVISION

The essential part of production is intended for the international automotive and consumer industries



ALPS component



engine cylinder for garden equipment



rocker cover up oil fill



bracket of LED headlight



side cover assembly



engine oil pump cover





DIE-CASTING DIVISION

Low-pressure die-casting

Production possibilities

Al low-pressure die-casting

Castings from 0.1 to 20 kg, max. dimension of ingot moulds 1600x1200x1000 mm

Furnace volume max. 800 kg

Average time of casting cycle 4-6 minutes

Material Aluminium Currently used: EN AB 42100 - AlSi7Mg0.3

For new projects we can process:

Silumin – aluminium and silicon alloys (AlSi, AlSi7Mg, AlSi10Mg) Aluminium and copper alloys (AlSi9Cu)

Low-pressure die-casting machine KURTZ AL16-12SR











DIE-CASTING DIVISION

Low-pressure die-casting

Production is intended for international automotive industry.



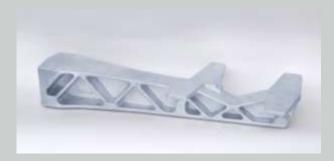
Spacer 18 for truck tanks



Spacer 17 for truck tanks



Stroke cylinder



Support arm





DIE-CASTING DIVISION

Assembly shop in Nové Hrady

The company extended its production capacities by passenger car window control assemblies for foreign customers.







DIE-CASTING DIVISION

We specialize in production of very demanding castings – assemblies for automotive industry.



Daimler



Lamborghini



Audi



Audi



Daimler



VW

MOTOR JIKOV Strojírenská

The company focuses on the production of components for golf carts and trucks, handling technology, consumer technology, printing and textile industry, woodworking machines and machining tools, hydraulic systems and filtration systems and newly compressed natural gas vehicle refuelling appliances. MOTOR JIKOV Strojírenská continues in the 80-year tradition of Soběslav engineering production and it was established by the merger of UNI CZ and ADACO Jindřichův Hradec.











INDUSTRIAL PRODUCTS DIVISION

We produce professional riveting tools, which are used in the electrotechnical, automotive, aviation and shipping industries.

These products are intended exclusively for export to EU countries, America, Asia and Australia.



fully equipped Genesis nG3



74200 type for nutserts



07537 repetition tool



battery tool TX 2000



riveting tool 7220



07530 repetition tool





INDUSTRIAL PRODUCTS DIVISION

We produce components for pedal systems of golf carts and other commercial vehicles, consumer technology, air brake systems and small combustion engines.

Important activity is machining of castings for global markets.



golf cart spindle assembly



drilling equipment stator – work-piece



07220 riveting tool head – work-piece



golf cart brake drum



golf cart brake pedal Electric



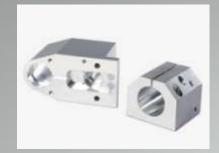
washing-machine hub





SPECIAL MACHINING AND PRODUCTION DIVISION

Production of filtration and hydraulic systems and components for manufacturers of trucks and handling technology.



gear box housing and bearing housing



spindle head



filter head



wheel hub and brake disc for fork-lift trucks



worm gear box case



filter tank cover





SPECIAL MACHINING AND PRODUCTION DIVISION

Air brake system elements, compressors, spring brake cylinders, air-pressure regulators and newly also CNG vehicle refuelling appliances complete the product portfolio.

The products are used also in textile and printing machines or special tennis racquet stringing machine.



truck air compressor



CNG high-pressure compressor



JIKOV universal air compressor



associated air pressure regulator, tyres blower



condensation reservoir and associated air pressure regulator



detail of tennis racquet stringing machine





SPECIAL MACHINING AND PRODUCTION DIVISION

Scania

We produce components for Swedish Scania trucks.



valve housing for retarder



valve housing detail



bracket belt tensioner



stroke cylinder for gearbox



spacers, tank holders



retarder housing for retarder





SPECIAL MACHINING AND PRODUCTION DIVISION

CNG vehicle refuelling appliance and filling stations

Development and production of compressed natural gas (CNG) vehicle refuelling appliances and filling stations intended both for individuals and companies.

CNG is ecological alternative fuel for motor vehicles.

The project brings significant fuel cost savings and contributes to environmental protection.

The appliances meet high safety standards and are characterised by simple operation and low operating costs.













SPECIAL MACHINING AND PRODUCTION DIVISION

CNG public filling stations

Building of public filling stations

Technology by Schwelm Anlagentechnik, GmbH, the prestigious German producer.

MOTOR JIKOV Strojírenská in Soběslav is an exclusive supplier of the appliance in the Czech Republic, providing also a complex service.













MECHANISATION DIVISION

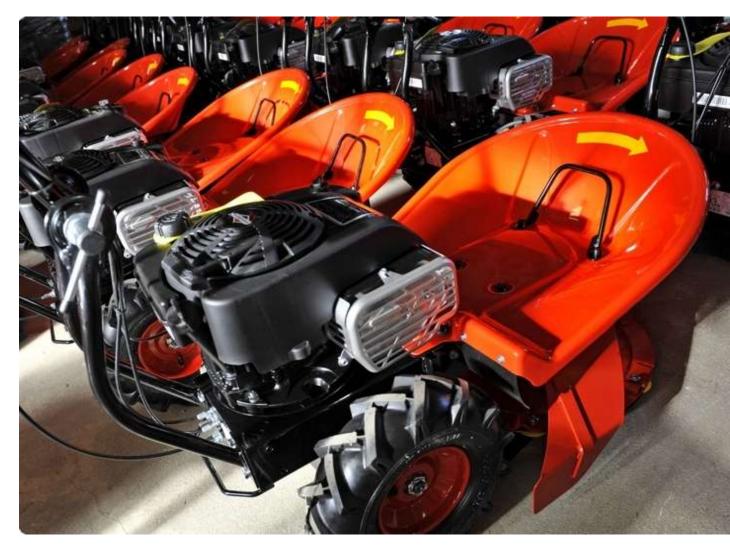
Variable-speed mower STELLA 5316SLEV

Elegant and smooth cutting

Superior utility, accessories, elegant design and good quality design

Technical parameters:

Cutting width 64 cm
Cutting heights 3.5 cm
Wheel size 338mm/91mm
Smooth ride
Briggs & Stratton drive 950
Travel speed 2.0-3.7 km/hour
Engine capacity:
223 cm3
Output:1.28-2.37 ar/hour
Torque: 12.88 Nm
Note: side sheet







MECHANISATION DIVISION

The main production programme is engine garden equipment for domestic and professional use.



STELLA 53116SP trimmer



STELLA trimmer



BRAVO mulcher



double drum lawn mower BDR - 700



single-drum lawn mower BDR - 550



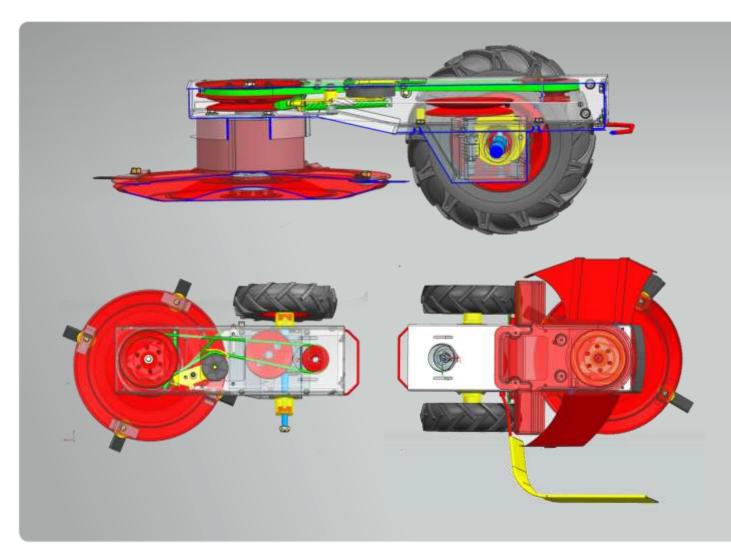
VIVA header adapter with centrifugal clutch





MECHANISATION DIVISION

We dispose of own development department, where we implement technology innovations due to which products of the Mechanisation Division are ahead of competitors.



MOTOR JIKOV Fostron

The company is a partner dealing with the complex specific requirements of customers from automotive and other industrial sectors.

It focuses on development, design and production of moulds, tools, devices, single-purpose machines and automated production lines.









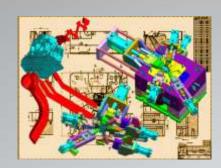


TOOL SHOP DIVISION

The production program is focused on single- and multi-cavity pressure tools for production of aluminium or zinc alloy castings, and trimming tools.

For the development and production of die-casting tools we process own 3D technical documentation, including simulation of the filling process.

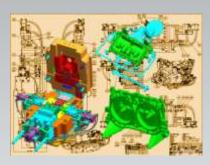
We also offer production according to customer documentation.



tooling design



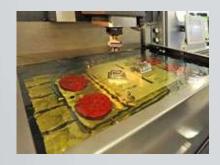
tooling design



konstrukce formy



insert



EDM sinking with pallet system



die-casting tool with 4 sliders





SINGLE-PURPOSE MACHINES DIVISION

We specialise in development, design and production of singlepurpose machines and automated production lines.



single-purpose machine



robot applying sealing to cover



automated single-purpose machine – robotic line



assembly machine



fixture



fixture





SINGLE-PURPOSE MACHINES DIVISION

Every machine is uniquely produced according to customer using the latest technologies and considering effectiveness and productivity.



construction of single-purpose machine



assembly single-purpose machine with rotary table



commissioning of singlepurpose machine



testing line



assembly line



quality department

MOTOR JIKOV GREEN

MOTOR JIKOV GREEN is the exclusive distributor of Briggs & Stratton products under the trademarks SNAPPER, MURRAY and SIMPLICITY and the exclusive distributor of the 3rd largest global producer, YAMABIKO, the Japanese company, under the trademarks ECHO and SHINDAIWA as well as FISKARS, WORLD, AGAMA and products of the Mechanisation Division of MOTOR JIKOV Strojírenská.











GARDEN EQUIPMENT

We dispose of wide distributor network with service background.

Key partners are domestic as well as foreign companies.



STELLA SLEV



MM691150



ELT2440RD



ERDV 19675



ECHO saw



FISKARS ax

PRODUCT APPLICATION

passenger cars and trucks





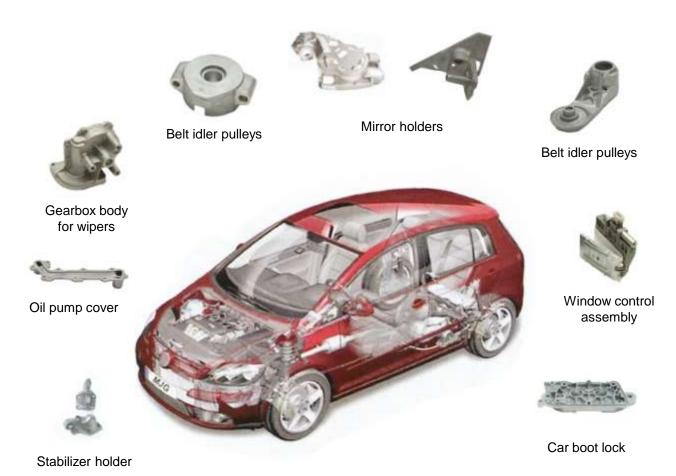






PASSENGER CAR

We produce a wide range of components for passenger cars of leading global brands.







TRUCK

We produce a wide range of components for trucks and commercial vehicles of global brands.



Air compressor JIKOV 4192



Gear box component



Spring brake cylinder JIKOV 4463



Tank holder



Cardan shafts



Hydraulic casing



Retarder housing



Valve housing



THANK YOU FOR ATTENTION

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