

## Company profile

History of the company Fragokov – export, výrobné družstvo started in 1949 when company Východoslovenské ľudové autodružstvo (VĽAD) in Prešov was founded. It was engineering company focused on production of components for tractors, automotive and service. VĽAD produced brake and clutch cylinders, hydraulic systems and also cabins for tractors. Components was mainly for final assembly of companies like ZETOR Brno, URSUS Poland, ŠKODA Mladá Boleslav, TAZ Trnava, LIAZ a KAROSA. By the end of nineties had the company around 2000 employees.

In 1996 there were transformation of the company and six successional factories have arisen. The main part of the production took over the new subject Fragokov which was until then the main factory of the VLAD. VLAD consisted of seven factories in total before.

Nowadays is Fragokov – export one of the biggest engineering companies in Prešov region. Complete production is located in four production halls and one warehouse with total area more than 9 000 m2.

We have quality certificates ISO 9001:2015, ISO14001:2015.

Fragokov – export also owns several utility models for different types of brake and clutch hydraulic cylinders which are valid in Slovakia, Czech Republic and Poland.



# Company profile

Basis of the production in company Fragokov - export are three different production programmes covered by three production centres.

#### **HYDRAULICS** centre

is focused on development and production of brake, clutch and hydraulic systems for tractors, passenger cars, trucks, forklifts etc. These products we supply for final assembly and also for aftermarket. One of important customers in this area is company ZETOR TRACTORS, which we cooperate with since 1959. Hydraulics centre also offers production and assembly of various products according to customer's requirements, where, in addition to production, we ensure also technological development of the products. It is especially very precise machining of the products for railway, engineering industry and electrical engineering. The main elements of subcontracting production are the production of components for packaging machines and the production of brake controls and brake calipers for trains and metro. This subcontracting production nowadays creates 45% of the production.

#### **TOOLMAKING** centre

is focused on development and production of injection moulds for injection moulding machines and production of tools for square and volume forming up to 5 000 kg. We are one of the most experienced tool shop in this area in Slovak Republic.

#### INJECTION MOULDING centre

is focused on injection of plastic parts according to customer's requirements. Machinery consists of injection moulding machines with clamping forces from 63 to 670 tons.

Fragokov – export disposes of modern CNC technologies (turning machines, horizontal and vertical machining centres, injection moulding machines, electro erosion wire cutting and boring machines and washing machine). We enlarge these CNC technologies each year. Company is also equipped with NC and classical technologies as turning automatic and semi-automatic machines, grinding machines, milling machines etc. Inspection of the products is ensured by modern 3D measuring machine.

### Contacts and where we are

### Marketing and Sale

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HYDRAULICS centre is the largest production centre of Fragokov – export. The production is located in 2 production halls and creates more than 70% of total turnover of the company











Principal activity of the centre is development, production and sale of brake and clutch cylinders, hydraulics systems and other components for final assembly of tractors (ZETOR) and aftermarket (ZETOR, ZTS, URSUS), passenger cars (ŠKODA), trucks (TATRA, LIAZ) and forklifts (DESTA).



Additional activity which offers the centre is precise machining and assembly of the products based on customer's documentation for engineering industry and electrical engineering. This activity creates more than 45% of the production.



















Manufacturing activities of the centre are realized by classical and modern CNC technologies (turning machines, horizontal and vertical machining centres).

#### **CNC turning machines**

(max. dimensions of turning: d 500 mm x 850 mm)



OKUMA ESL 10 - 2x



LEADWELL T8 – 2x



CITIZEN A32 Cincom



SPINNER TC 77



DMG CTX 410



CITIZEN L32 Cincom

#### **CNC** horizontal and vertical machining centres

(max. dimensions of milling: 800 x 700 x 750 mm)



OKUMA MF 46 VA – 2x



OKUMA MA 400 HA



DMG DMC 50 H



SPINNER MC 650



OKUMA MB 5000 H

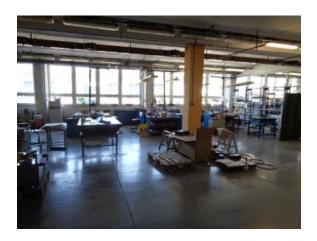


**DOOSAN NHP 5500 - 2x** 



# Toolmaking centre

TOOLMAKING centre is the second largest production centre of Fragokov - export.













### Toolmaking centre

Principal activity of the centre is development and production of injection moulds 1K, 2K and also 3K for injection moulding machines, production of tools for square and volume forming and production of moulds for foundries.

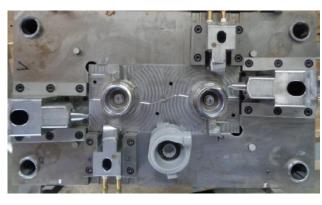
Maximal weight of the moulds and tools: 5 000 kg.

Maximal dimensions of the moulds and tools: 1 650 x 810 x 810 mm.















## Toolmaking centre

Manufacturing activities of the centre are realized by classical and modern CNC technologies (machining centres, electro erosion boring and wire cutting machines etc.).

#### **CNC** machining centres









MCFV ZPS TAJMAC

DMG DMC 103 V

HERMLE C 40 U (5-osé)

MIKRON MILL S500

#### **CNC** electro erosion wire cutting and boring machines



FANUC Robocut C600iA



Charmilles FORM 300



Charmilles FORM 35 P



Charmilles ROBOFORM 400



Charmilles ROBOFIL 4000



# Injection moulding centre

Injection moulding centre is the smallest production centre of Fragokov - export.











# Injection moulding centre

Principal activity of the centre is production of plastic parts according to customer's requirements from different industries: automotive, electrical, household etc.

Maximal weight of the plastic parts: 2,1 kg.

Used materials: ABS, PA, PBT, PC, PE, PP, PS, SAN, TPE...





















### Injection moulding centre

Manufacturing activities are realized by hydraulic and all-electric injection moulding machines. Maximal clamping forces: 63 – 670 tons.



**ZHAFIR VENUS 2300** 



**BATTENFELD 670** 



MET 100 MITSUBISHI



**ZHAFIR ZERES 2300** 



2-components injection moulding machine

WITTMANN BATTENFELD

SmartPower 350



MET 180 MITSUBISHI



# Quality department

Quality department controls the highest quality of our products. Part of this department is also measuring department. Company uses circa 2 500 different gauges with different precisions:

- Callipers, micrometres, parameters, depth gauges, height gauges, two and three-points micrometres
- Gauges: screw, snap, pitch, cylindrical, air, setting rings and cylindrical gauges, rotameters
- Bevel protractors and set squares
- Gauge: blocks, gap, radius
- Granite surface plates, sinusoidal and knife edge straight edges
- Hardness testing machines RB1
- Testing stands and pressure gauges
- Working microscope
- Scales and humidity analyser
- Thermometers (contact and contactless)
- Surface roughness tester (SJ 400 a SJ 201)
- Universal length machine ULM 02-600











For high levels of precision we use special measuring devices:

- CMM DEA Global Status 07.07.07
- 3D measuring machine Mitutoyo 198-501
- Contour measuring station MarSurf XC20, MAHR





### **Markets**

### 63% of the production goes for export

### **Hydraulics centre**

Annual production: more than 500 000 pcs of products

#### References:

Faiveley Transport a Wabtec company (Germany, France, Italy, Czech, Switzerland)

Toyota Material Handling Sweden

**Zetor Tractors** 

ZF Group - TRW Automotive Czech

Windmöller & Hölscher

### Injection moulding centre

Annual production: more than 3,2 mill. pcs of products

#### References:

**BSH Drives and Pumps** 

SaarGummi (Slovakia, Czech, Russia)

**Plastiflex** 

Gutmann



### **Toolmaking centre**

Annual production: 30 – 40 pcs of moulds/tools

#### References:

SaarGummi (Germany, Slovakia, Czech, Russia)

**Ehlebracht** 

Uniplast

Gutmann



# Quality systems







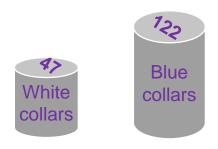
- 1998 Start of the QMS building-up by STN EN ISO 9000
- 1999 Certificate ISO 9001:94
- 2000 Certificate VDA 6.1
- 2003 Certificate ISO 9001:2000 and VDA 6.1
- 2010 Certificate ISO 9001:2008 and VDA 6.1
- 2015 Certification ISO 14001:2004
- 2017 Certification ISO 9001\_2015 and VDA 6.1
- 2018 Certification ISO 14001:2015
- Regularly performed customer's audits



## Fragokov – export, v. d. in numbers

• Average number in 2020:

169 employees



#### Number of employees 2010 - 2020



#### Investments 2010 - 2020 in thousands €



#### Revenue 2010 - 2020 in mil. €

