What are the Success Factors and Competitive Strategies of Lithuanian Manufacturing Companies?

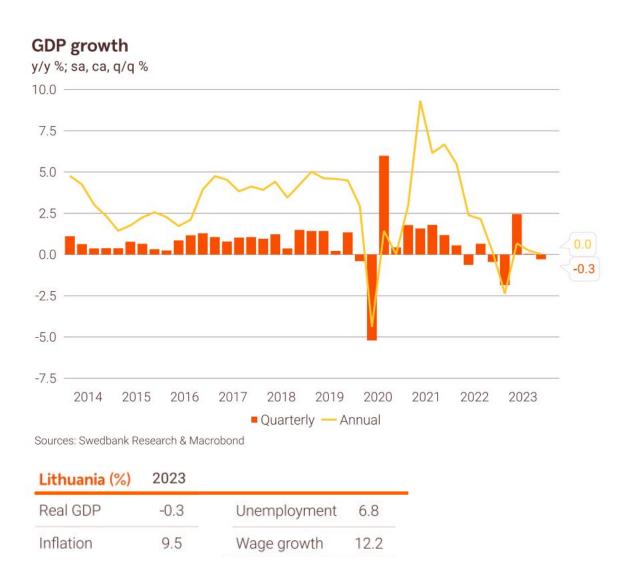
VYTAUTAS TUMINAS

CEO / Board Member at Bod Lenses

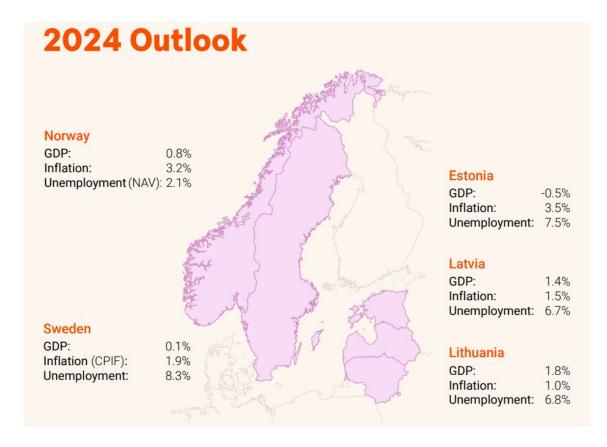


LITHUANIAN ECONOMY 2023

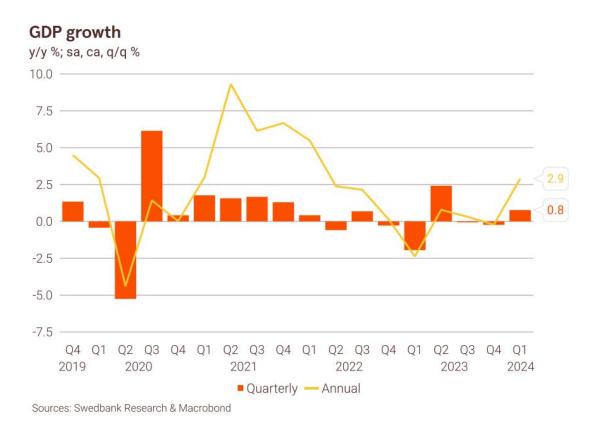
- The economy contracted by 0.3%
- Industry, retail trade, and transport and storage companies negative influence on the GDP change.
- Rapid investment growth. EU funds for investments in infrastructure, energy generation, defence, R&D, and ICT development.
- Employment increased by 0.6%
- Annual inflation moderated to 9.5 %



LITHUANIAN ECONOMY OUTLOOK FOR 2024



The Lithuanian economy is expected to rebound this year with annual GDP growing by 1.8%. Growth is expected to accelerate to 2.8% in 2025.



The economy increased by 0.8% quarterly (2024 Q1), while annually it accelerated to 2.9%. The performance of industry, retail trade, and transport and storage companies had the biggest positive influence on the GDP change.

LITHUANIAN MANUFACTURING **INDUSTRY PROFILE**

INDUSTRY PRODUCTION 2023



7,05* Billion

-7%

Total manufacturing Industry

+3,4%

Growth

TURNOVER

2022 > 6.8 BN. EUR 2007 > 2,23 BN. EUR **NUMBER OF EMPLOYEES 2022**



60.000

NUMBER OF EMPLOYEES

2021 > 57.000

2007 > 50.354

NUMBER OF COMPANIES 2022



~2.100

NUMBER OF COMPANIES

2021 > ~ 2005 2007 > 1201

EXPORT 2023*



5,2* Billion

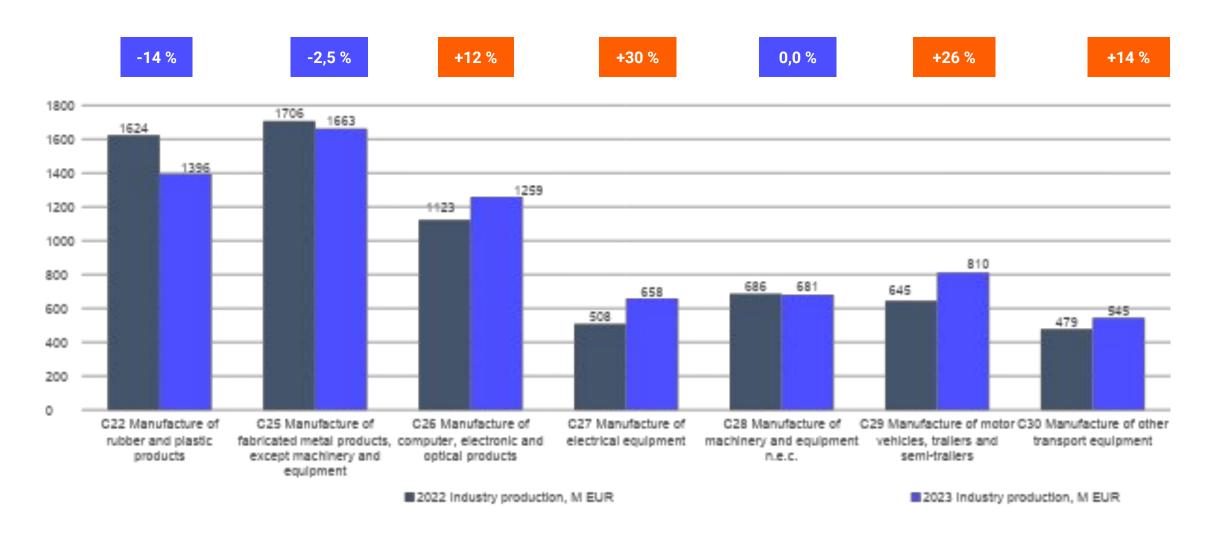
20% **Of Total LT production**

EXPORT

2022 > 5 BN. EUR

2007 > 1.6 BN. EUR

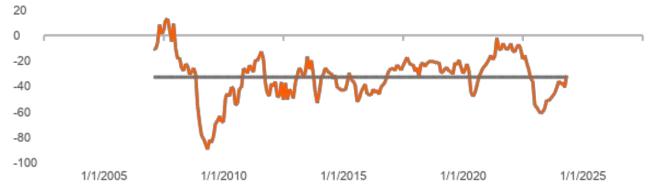
ENGINEERING AND TECHNOLOGY INDUSTRY SECTOR IN LITHUANIA 2023



^{*} Forecast

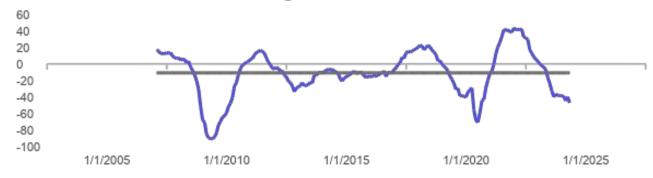
LITHUANIAN MANUFACTURING INDUSTRY STATUS

LT manufacturing: orders minus inventories



- Assessment of order-book levels minus inventories
- Assessment of order-book levels minus inventories (long-term average)

DE manufacturing: orders minus inventories



- Assessment of order-book levels minus inventories
- Assessment of order-book levels minus inventories (long-term average)

_atvia	Netnerlands	Belarus	France	NOIW	ay	, illian	III	шу
		4.4%	2.6%	2.5	% 2	.3%	2.:	2%
11%	Estonia	Sweden	Finland	Kazakhstar	Spa	in ^{Tur}	key E	Belgium
Poland		4.0%	1.9%					
	Russia	United	1.2%	Romania 0.68% Hungary				
9.3%		Kingdom	Kyrgyzstan	0.65%	0.34% Oman	Saudi Arabia 0.28% 0.289		
Germany		3.8%	0.99% Austria	Switzerland 0.59%	Armenia	Japan Egypt 0.23% 0.21% Slovenia Indones		3
	United States	Ukraine	0.81% Uzbekistan	Slovakia 0.55%	Israel 0.30%	Azerbaijan Ghana		
7.8%		3.1%	0.78% Nigeria 0.73%	Morocco 0.48% Ireland 0.40%	0.30% Portugal	Mexico Algeni Malaysi Heng Kong Chille Serbia Moldov		

LITHUANIAN INNOVATION INDEX – 19 POSITION

THE RATIO OF THE TOTAL INNOVATION INDEX IN 2023, PERCENT TO 2016 EU AVERAGE, PERCENT



LITHUANIA AMONG MODERATE INNOVATORS



- Denmark is the new top innovator with the best performance in the EU, overtaking Sweden after a few years in leading position. Other Innovation Leaders are Sweden, Finland, the Netherlands, and Belgium.
- Austria, Germany, Luxembourg, Ireland, Cyprus, and France are Strong innovators, performing above the EU average.
- Estonia, Slovenia, Czechia, Italy, Spain, Malta, Portugal, Lithuania, Greece and Hungary are **Moderate innovators**.
- Croatia, Slovakia, Poland, Latvia, Bulgaria and Romania are Emerging Innovators.



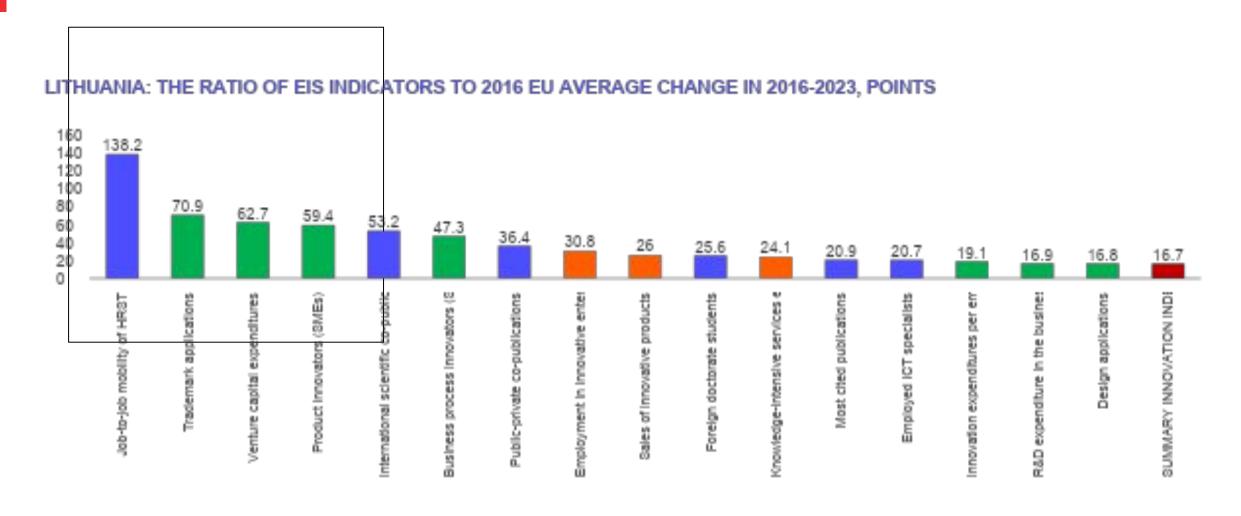
Relative strengths

Population with tertiary education
Job-to-job mobility of HRST
Non-R&D Innovation expenditures
Trademark applications
Innovative SMEs collaborating with others

Strong increases since 2016

Job-to-job mobility of HRST Trademark applications Venture capital expenditures

LONG-TERM PROGRESS OF LT ON THE EU INNOVATION SCOREBOARD IS DRIVEN BY BUSINESS

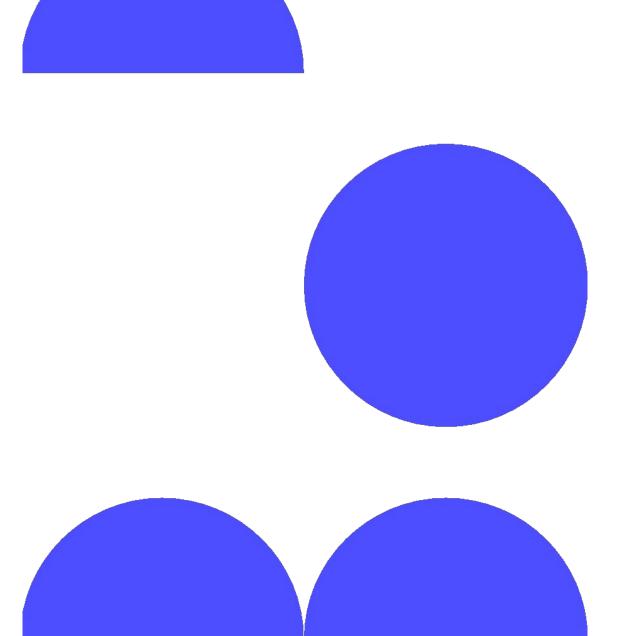




INDEPENDENT RX LABORATORY

in Europe 24/7

One life - see it well.

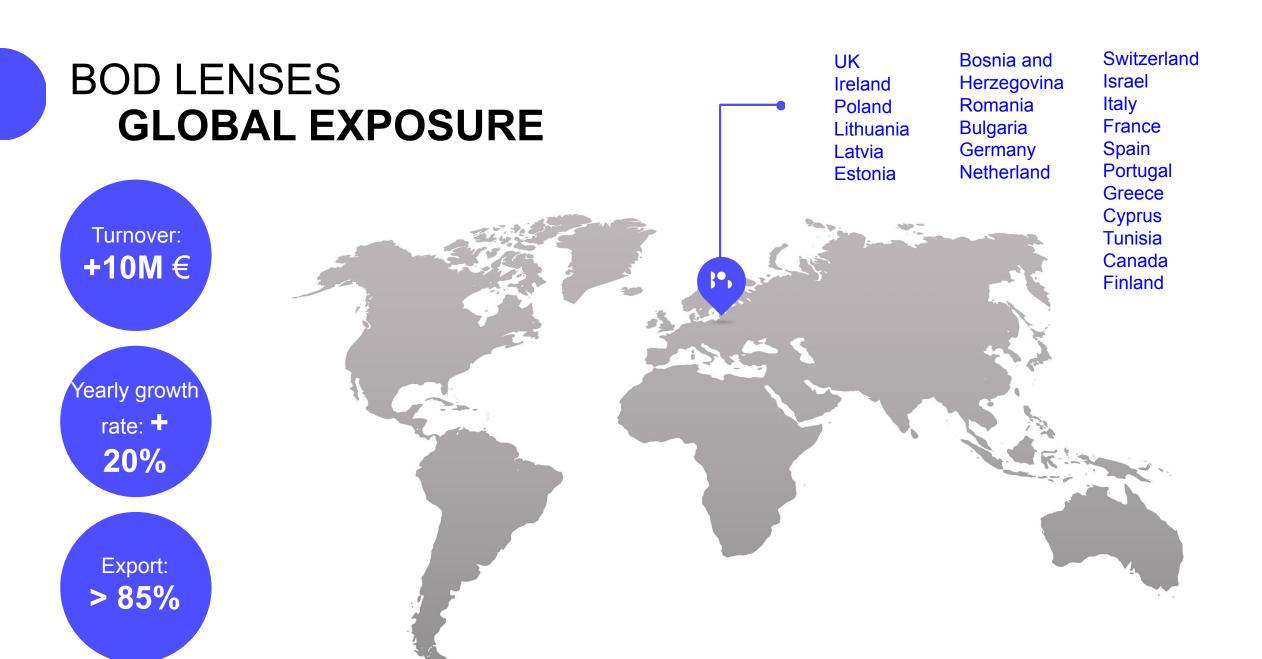




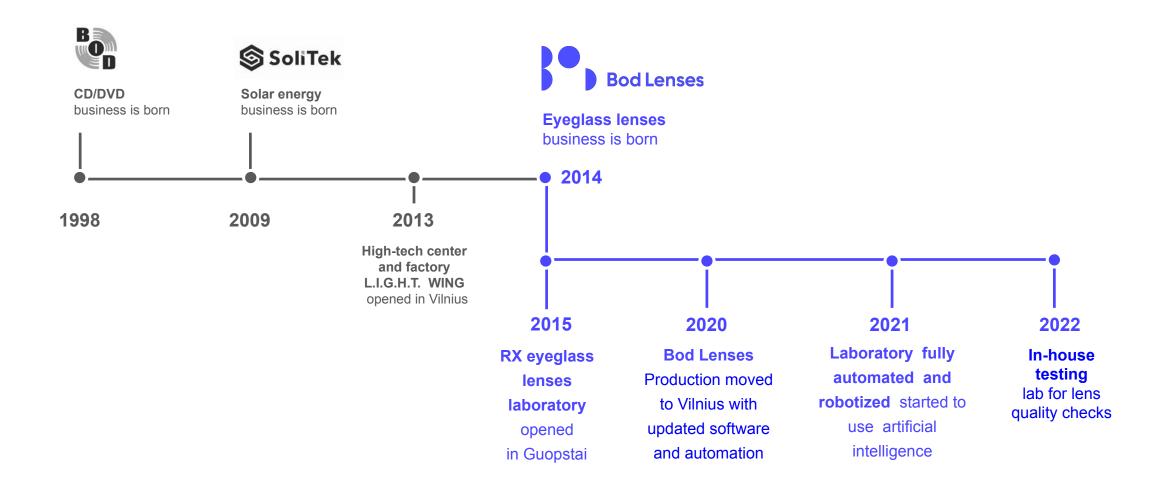
BOD LENSES, NUMBER ONE LENS MANUFACTURER IN BALTICS AND ACROSS EASTERN EUROPE

- Made in Europe Union (EU)
- Established in 2014
- Prescription Eyewear lenses
- Only individualized lenses are developed and manufactured by high trained staff at our headquarters in Vilnius, Lithuania.
- Highest Engineering / Quality
- Developing New lens designs and Coatings
- State of the art machinery
- Reliability and on-time delivery at almost 98%.
- Production 24/7
- Export (>85%, +25 countries)
- Trained personnel in all areas: 100





ROADMAP



REVIEW OF THE 2020 – 2023 YEAR TOWARDS INNOVATIONS

INSTALLED STOCK MANAGEMENT

solution that helps manage stock levels in the company's warehouses and the supply chain.

INSTALLED MONK

a modern conveyor system that connects all production units and is integrated into the production management program.

TRANSITION FROM MANUAL TO AUTOMATED PROCESSES

Brush cleaning, auto lens mapping, auto inking, auto packaging, new high volume vacuum box coater for AR & mirror coatings.

LMS

Installed new generation information system LMS (Lab Management system).

USING "FLOW ENGINEERING" TO MANAGE ORDERS

Production process planning and organization according to LEAN and TOC methodologies and principles.

EFFICIENCY AND PRODUCTIVITY

have increased - the total lead time of product production has decreased by 48%.

PRODUCTION

working hours were extended from 24/5 to 24/7

MAINTAINING

the same costs and number of employees we have moved from 3 shifts to 4 shifts.

COMPASS LENS

started to use artificial intelligence (AI) calculation algorithms to personalize our products.

BOD LENSES USES GREEN ENERGY

to manufacture lenses, utilising solar energy generated by our own facilities.

ANNUAL SUSTAINABIL REPORTING

KEY POINTS:

- 100% "green" energy (solar and wind) used for production
- Automation and LEAN practice
 - optimal quantity of employees
 - reduced waste and recycling
 - o better customer experience through quick and on time delivery
- Investment in testing laboratory and focus on quality
 - Extended product lifespan (3 year AR warranty)
- Investments in technology
- Focus on employee health and safety (trainings and testing)



CERTIFICATES

Bod Lenses adheres to the following ISO standards:



ISO 9001:2015

(quality management system)



ISO 14001:2015

(environmental management system)



ISO 45001:2018

(occupational health and safety management system)



ISO 13485:2016

(medical device quality management system)



OUR **SUCCESS FACTORS**



STATE OF THE ART TECHNOLOGIES

Hi-tech Schneider GmbH & Co Kg



SUSTAINABILITY

Started reporting from 2022



DIGITALIZATION

Real-time tracking of production flow



EXTREME QUALITY CONTROL

In-House lab for periodic quality check



INNOVATIVE PRODUCTS

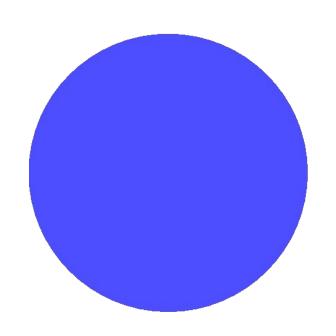
New lens designs, new materials



SPEED

48 hours in production





"EVERY DETAIL MATTERS"

- is the core principle of our work and our promise to every client.

