

# TECOS - Slovenian Tool and Die Development Centre

GENERAL PRESENTATION

January 2017



# Who we are - what we do?



We help our clients **design optimised products** and **troubleshoot problems** in production!

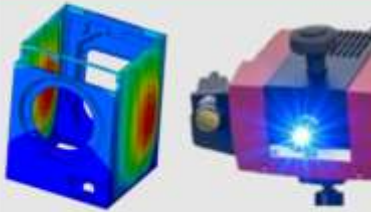
# Our Vision



To be a longterm strategic development partner to companies in Slovenia and wider region and to become an European renowned technology center in the fields of development of new products, industrial tools and technologies.

# Our Activities

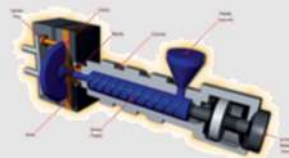
## ENGINEERING SERVICES



Your key to optimised products and stable production processes

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## APPLIED RESEARCH



A strong partner in small or large scale R&D projects

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## SPECIALIZED TRAINING



We place knowledge in our customers' environment

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ju onl cztowmz,

## INDUSTRIAL ASSOCIATION



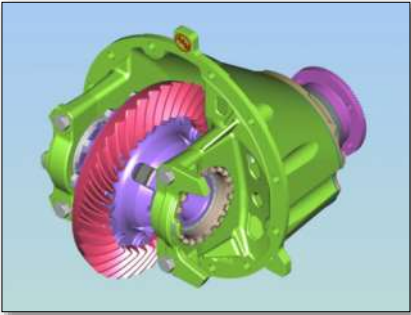
Link to Slovenian toolmaking at home and abroad

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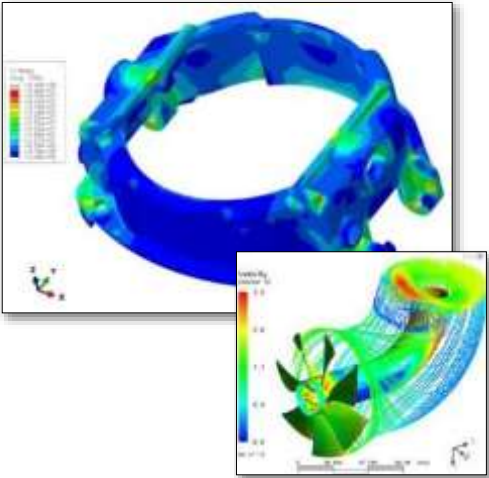


# Engineering Services

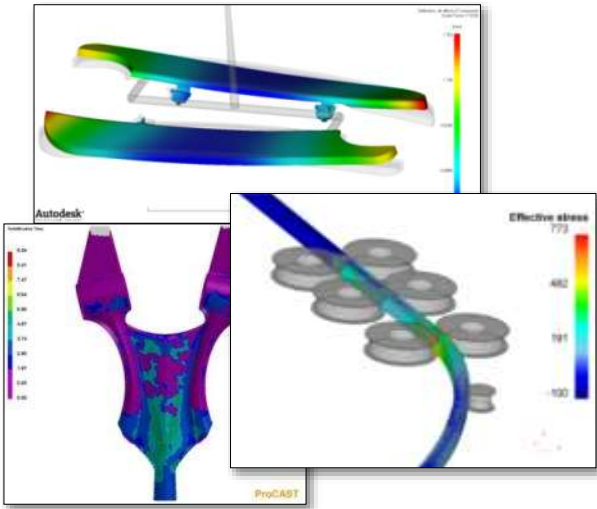
## Turnkey Product Design



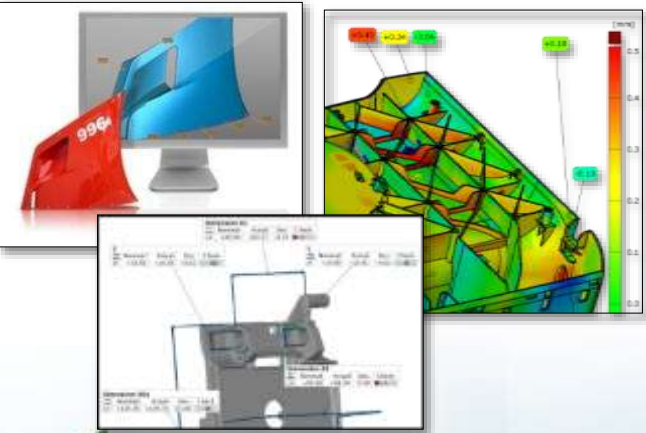
## Advanced Structural FEM analyses



## Simulations of Material Processing (injection moulding, casting, metal forming)



## 3D scanning & Inspection



## Rapid Tooling and Prototyping



# Industrial Association

- Representation of Slovenian toolmakers and material processors



Member of International Special Tooling  
and Machining Association

**Your link to  
Slovenian market!**

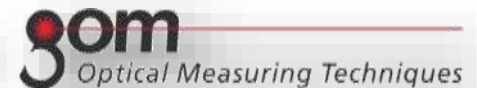
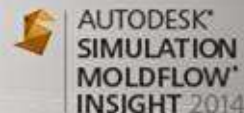
# A Reliable Partner

20+ years of helping our clients minimising their risks in product development and industrialization



Team of dedicated experts with passion for delivering optimised solutions

State of the art technological equipment from market leading suppliers



# **IND4.0 - Expectations and opportunities for SMEs**



## What is IND 4.0

- The most comprehensive definition of IND4.0 is introduction of ICT technologies on **massive scale** into production processes in order to achieve 30 % productivity improvement
- IND4.0 main purpose is to improve the existing level of production automation with the digitalization of production and integration of all production sites in the total value chain.

# What SME think of IND 4.0

I will significantly benefit from the implementation of specific solution, which will enable:

- efficient and low cost production,
- short production cycle,
- lower consumption of energy and materials.

# Not thinking about

- to establish mutual communication between machines, devices and future end products (barcode, RFID, etc.).
- Incoming equipment, machinery and raw materials are connected to industrial IoT (modular way) in early stage.
- Ensure highly flexible and individualized mass production.

## Reasons not to go

- **Courage** to carry out serious changes?
- Coordination within the company?
- **Lack** of proper staff competencies
- Questionable **security and data protection**
- The reasonableness of the eligibility of investments for the modernization of the entire IT architecture

## Reasons not to go

The biggest manufacturing challenges:

- What data (or information) to collect?
- Who or what will get the information derived from the data?
- How will we use the information?
- Were the correct decisions taken?



## Reasons not to go

That's why small companies need solutions:

- Step by step introduction the digitalisation
- Even small digitalisation is a start (one mould, machine, process...)
- Custom made solutions
- Examples of best practice
- Slowly progressing towards improved: **accuracy, productivity efficiency and production flexibility!**

# CONTACTS

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