

# DIE CASTING CONCEPTS

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## COST REDUCTIONS

We reduce the production costs of aluminium casting. Over the many years we have been working with companies in the field, we have managed to achieve a reduction in production costs for all our customers. We have also succeeded in appreciably lowering energy and melting costs.

## PARTNERING FOR SUCCESS

Based on the data your company provides and our analysis of it, we work together with your staff team to develop a concept for reducing costs in the production process. In our workshops the team act under our supervision to come up with creative ideas for optimizing the production process. These ideas are used to generate a package of measures, which are then quickly implemented in consultation with senior management.

## YOUR SAVINGS ARE HIGHER THAN THE ONE-OFF COSTS

The costs of our work are far less than your potential savings

## DISCRETION IS OUR WATCHWORD

Since we tend to work with sensitive company information, we enter a confidentiality agreement with you at the time we begin working together. Our thirty-year company history is grounded in our customers' faith in us. This is built among other things on our offering complete third-party confidentiality.

## FULL SERVICE

We work together with partners to keep everything under one roof all the way from the design phase to the final serial product. This means you will have a competent primary contact person and enjoy DTC's renowned level of quality.

## YOUR ADVANTAGES

- Reduction in production costs
- Reduction in energy and melting costs
- Increase in productivity
- Optimized usage of existing resources
- Full service with DTC's renowned quality



# DIE CASTING CONCEPTS



## Die Casting Concepts Kft.

Detlev Prexl

Managing Director

**Nationality** German

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## PROFESSIONAL QUALIFICATIONS

- Precision engineer
- Master founder
- Further training with a focus on the area of aluminium casting, conducted via specialized courses and seminars at well-known institutes and universities
- Ongoing practical training in Europe and overseas

## PROFESSIONAL CAREER

- 1973–1977** Training as a precision engineer at Siemens in Munich
- 1978–1979** National service
- 1979** A. Mössner GmbH, Aluminium High-Pressure Die-Casting in Munich – head of automated aluminium die-casting
- 1988** Awarded designation of inventor from the European Patent Office for spraying of die separating agents (Teleskop – Sprüh – Anlage)
- 1988–1991** Training and qualification as master founder
- 1992** Alu-Druckguss-Berlin, head of casting and die construction
- 1996** Operations manager for Alu-Druckguss-Berlin
- 2002** Technical works manager, authorized representative, and member of management team Alu-Druckguss-Berlin, Alu-Druckguss-Brandenburg, and Alu-Druckguss-Poland, with a total of 500 employees.
- 2007** Founded the company **DTC GmbH**  
DIE CASTING TECHNOLOGY CONCEPTS

# DIE CASTING CONCEPTS

## AREAS OF PROFESSIONAL SPECIALIZATION

- Creation of a Europe-wide network for the field of aluminium die casting, aimed at offering a full consulting service to clients
- Member of group promoting research into die-casting processes at the Technical University Braunschweig\*
- Founding member of project group focused on calculation of die-casting moulds at the Technical University Garbsen (Hanover)\*
- Member of the automotive cooperation network BerlinBrandenburg GbR.
- Construction of a die-casting foundry in Brandenburg
- Founding of a mechanical processing plant in Poland
- Member of planning committee for a second foundry in Brandenburg
- Project manager for the planning and implementation of a production centre for aluminium high-pressure die-casting cells with up to 2,800 tonnes of closing force for aluminium motor and structural casting for automotive components

\* Finished in 2006

## INDUSTRIAL EXPERIENCE

- Automotive OEMs, tier 1 & tier 2
- Automotive foundries
  - Non-automotive casting
  - Electronics casting
  - Automobile electronics casting
  - Renewable energy casting
  - Structural components casting
- Tool and die construction
- Special machine construction
- Automation technology
- Purchase of equipment
- Consulting in the planning of new foundry buildings and extensions

## CORE COMPETENCES

- Expert in the field of aluminium die-casting
- Specialist in mould design, tempering, and gate design for die-cast tools
- Reorganization of processes in switch from sand and gravity die-cast to aluminium die-cast products
- Technological support during the development phase for an aluminium die-cast component
- Technological support to address quality and supply problems faced by the purchasers or providers of die-cast products
- Interim management in foundries for aluminium die-casting, for the technical/technological section, and for human resources development
- Reduction of reject costs for current products; guarantee of deliverability and avoidance of assembly line stoppages
- Consulting for new procurement of equipment for die-casting foundries
- Consulting and distribution for industrial furnace products such as shaft furnaces, tilting furnaces, and crucible melting furnaces (electric and gas) for smelting aluminium alloys, as well as transport and holding furnaces for aluminium smelting
- Energy consulting for smelters in aluminium die-casting companies

# DIE CASTING CONCEPTS

## INTERNATIONAL EXPERIENCE

Successful technological applications in foundries

**Overseas**  
**In Europe**

Malaysia, Singapore, Brazil, Mexico

UK, Turkey, Italy, Poland, Austria, Hungary,  
Czech Republic

### Commission from a prominent company in Brazil

Successful technical optimization of casting process for seal tightness of an aluminium die-cast component



### Commission from a prominent company in Malaysia

Successful optimization of the TOP 10 rejects racks in aluminium die casting



### Commission from a prominent company in Mexico

Successful first casting of engine components



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## Commission from the JN die-construction company in Brazil

Selection of components on the basis of samples at the company Zen Brazil



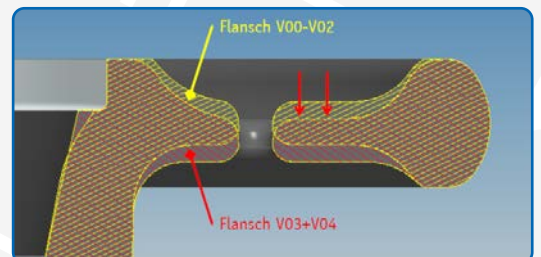
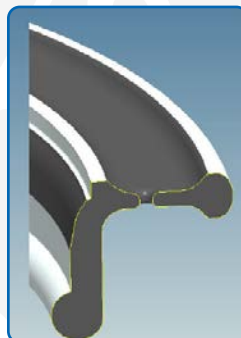
## Commission from Tool Machine Development

Supervision of new die construction in Brazil



## Commission from a German generator company

Suitable remodelling of a 5.5 kg gravity-cast component to produce a 3.5 kg die-cast part, with reduction of the mechanical processing by approx. 90 %



# DIE CASTING CONCEPTS

## **Commission from a prominent foundry in Hungary**

Current project: Building of a new foundry that produces engines and structural components for the automobile industry

