



Technologie in Kunststoff

# TiK - Technologie in Kunststoff GmbH

Technology in Plastics

TiK-Technologie in Kunststoff GmbH

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Part Development

Approval

Processing



# TiK - Technologie in Kunststoff GmbH

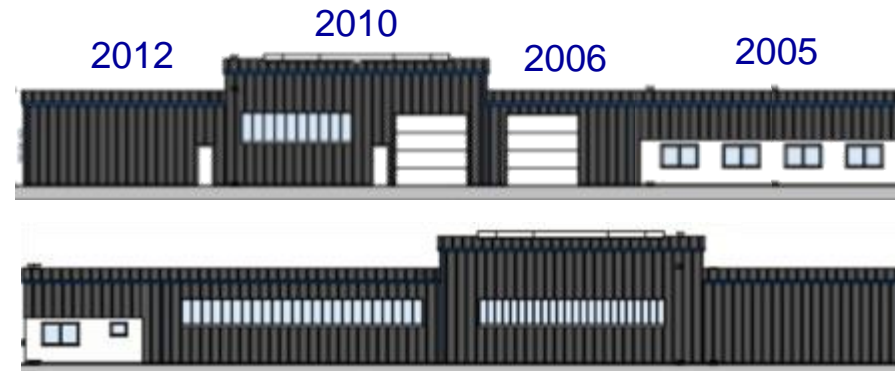
## Technical Center

- 2003 Establishment Engineering Office
- 2004 Establishment

TiK-Technologie in Kunststoff GmbH

- 2005 Start in an own Technical Center
- 2010 Enlargement of Technical Center
- 2012 Enlargement of Technical Center
- 2013 Approval according to ilac and DAkkS
- Technical Center: 600 m<sup>2</sup>
- Employees: 10
- Experience: 25 Years

↪ Cam Covers, Air Intake Manifold, Cooling Units, Exterior, Interior, Kitchen Stuff, Tooling, Processing (GIT, WIT), FEA-Simulation...



Deutsche  
Akkreditierungsstelle  
D-PL-18828-01-00

# TiK - Technologie in Kunststoff GmbH

## Idea of Success



Part  
Development

Part  
Approval

Process  
Knowledge

**From idea to serial product – one package!**

# TiK - Technologie in Kunststoff GmbH

## Strength Factors

- Wide range of know-how in the field of plastic technology, mould manufacturing and special machine engineering, automotive industry
- Sales and marketing
- Efficient networking
- Cooperations (Schmidt-Kranz-Gruppe, Cinpres Ltd, IKV Aachen)
- Huge top-level customer portfolio:



Mercedes-Benz



BRITA



PEGUFORM

playmobil



STIHL



INVISTA



socefi group

Linde

LANXESS

DSM

MAXIMATOR  
Maximum Pressure.



GARDENA

STOKKE

DENSO

Continental

BOSCH

DUPONT



BLANCO

KraussMaffei



BorgWarner

GEIGER

stringlinger

DSM

BOESCH+NEBE

SXS



POLYTEC GROUP  
REACTORS & SYSTEMS

curver

Kengsi  
AUTOMOTIVE

FILTRAN

DUNGHENRICH

montaplast

vitra.

BASF



etimex



BEHR

KUNSTSTOFF  
SCHWÄBEN

BRUSS

CO-Line

# TiK - Technologie in Kunststoff GmbH

## Philosophy



Projektmanagement

Concept study - Selection of process

Part construction

CAE-Calculation

Process simulation

Mold design and construction

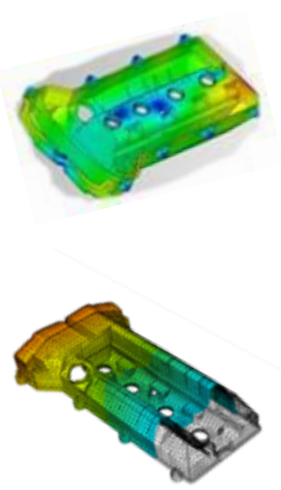
Prototype parts

Process optimization in customer plant

Part testing

Release for serial production

Projektmanagement

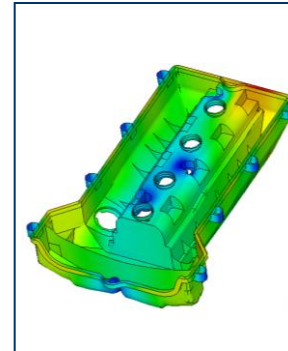


# TiK - Services

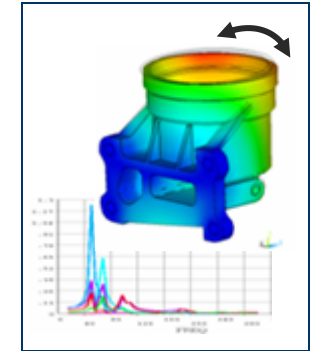
## FEM Part development

- mesh generation
- static structure analysis
- dynamic structure analysis
- process simulation
- acoustic calculation
- flow analysis CFX

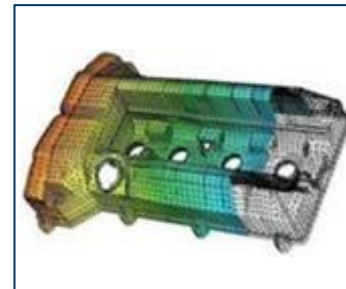
statical



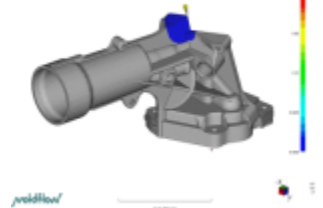
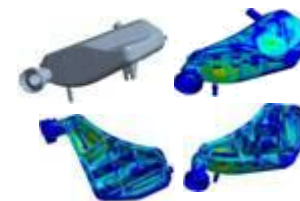
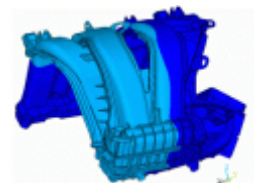
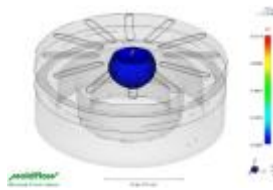
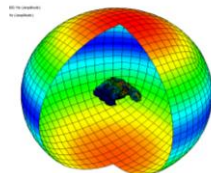
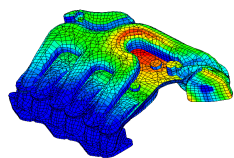
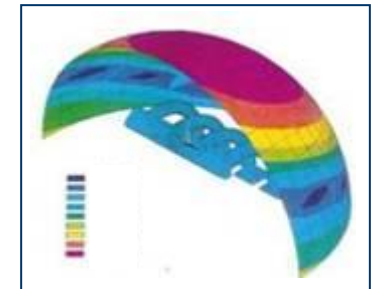
dynamical



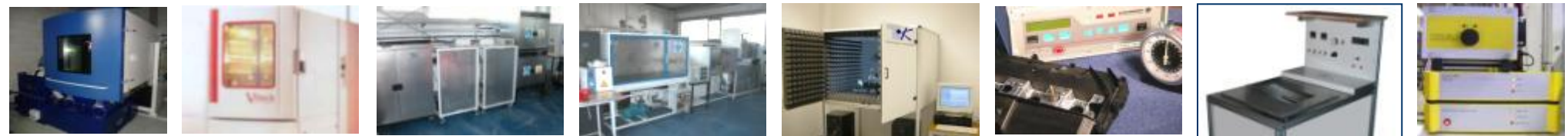
process simulation



acoustics

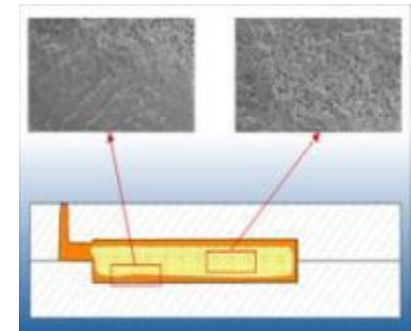


# TiK - Services Testing Facilities



- Vibration test bench (Shaker)
- Plasma oil separation measurement
- Oil spray test bench
- circular flow testing (cooling circuit)
- Flow rate measurement (air, water and oil)
- Pressure pulsation testing (oil, glykol, water)
- Pressure pulsation testing (air and vacuum)
- Hot air pressure pulsation testing (turbo charger tubes)
- Back-Fire-testing bench
- Temperature shock test
- Aging (up to 300 °C)
- Climatic chamber
- Leakage testing device
- static burst pressure testing
- acoustics measurements
- GMW 3155 (certified by GM world-wide)
- special testing on demand

- Project management
- Process based consulting service
- Conception and design studies regarding GIT, WIT, PIT and foaming.
- moulding trials in own technical lab
- part, mold design and manufacturing
- on site process optimisation





### For every technology the right injector

- Process optimized injector technology
- Active and non active injectors
- Special materials (type of steel)
- Low abrasion
- Low effects of contamination

WIT

DN 16 Z



DN16 ZH



TiK-WIT®

DN 5 st



DN 3 st



GIT

M10-N6 / M6-N2



- Accreditation No.PL-18828-01.  
Dipl.-Ing. Nico Tiersch  
Deutsche Akkreditierungsstelle GmbH (DAkkS)



flexible accreditation according to Cat I.