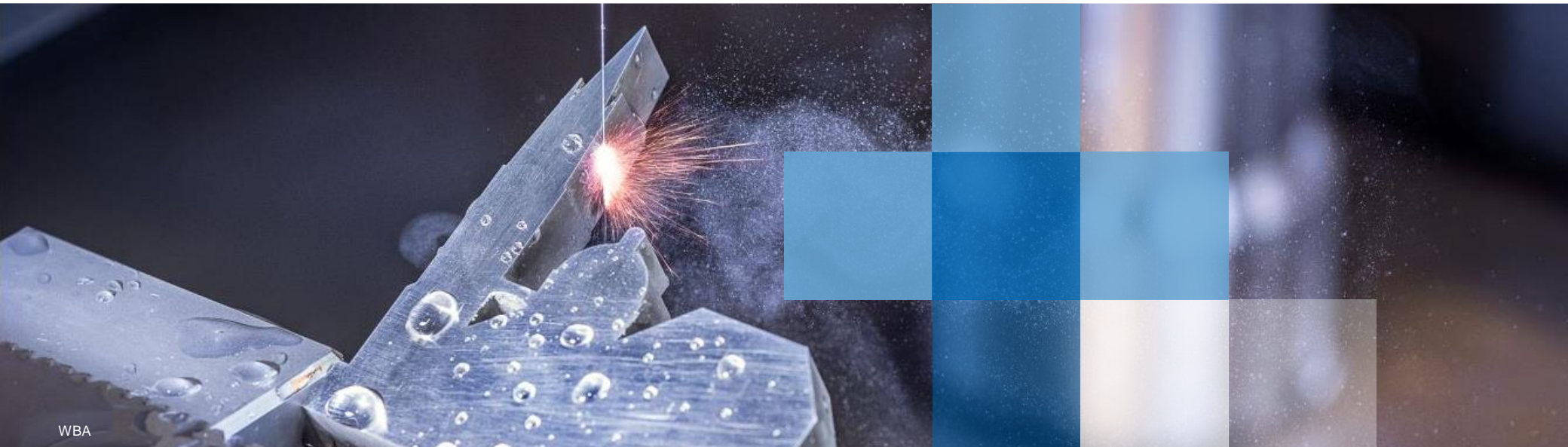




**WBA  
WERKZEUGBAU  
AKADEMIE**



WBA

## **Advanced Tool and Die Making – Future Strategies and Solutions**

Three Day International Seminar

Aachen, 22<sup>nd</sup> to 24<sup>th</sup> of October 2018

Powered by:



**Fraunhofer**  
IPT

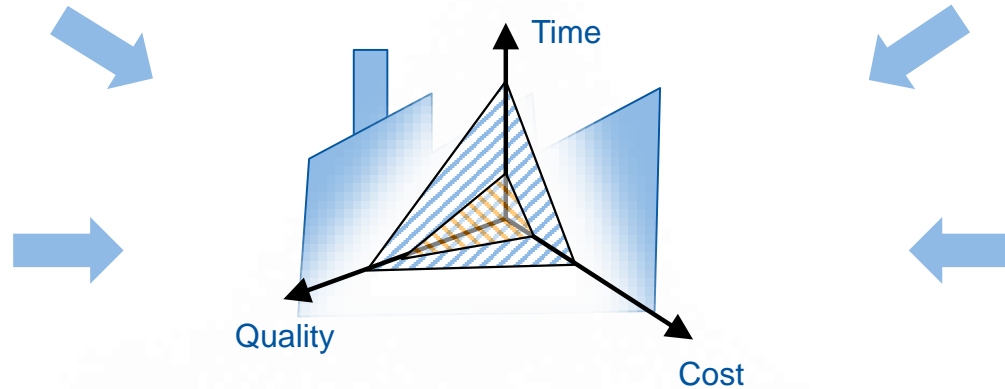
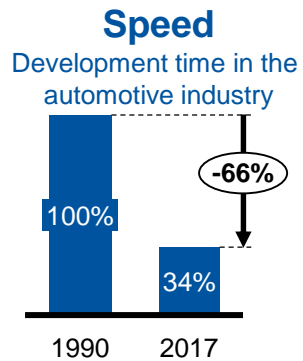
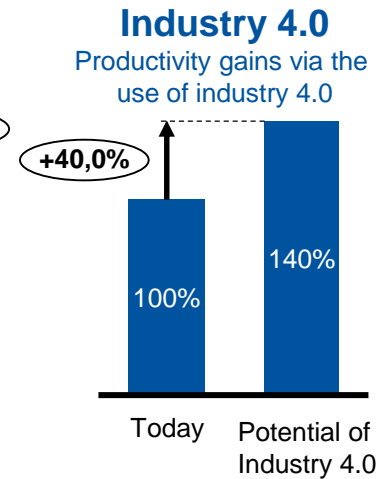
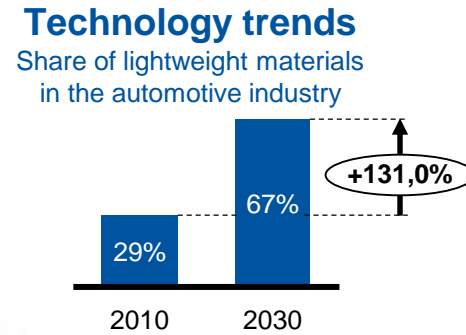
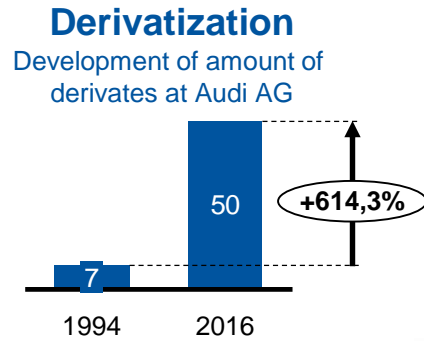
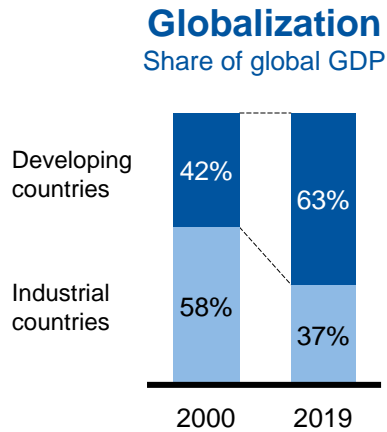
# Advanced Tool and Die Making – Future Strategies and Solutions

## Three Day International Seminar



- 
- 1 Motivation: Trends and Challenges in Tool and Die Making
  - 2 Seminar: Content, Structure and Organization
  - 3 WBA Aachener Werkzeugbau Akademie

# Trends in the Producing Industry Put Severe Pressure on Tooling Companies Forcing to Enhance Time, Quality and Costs



### Agility

Amount of design changes after commission

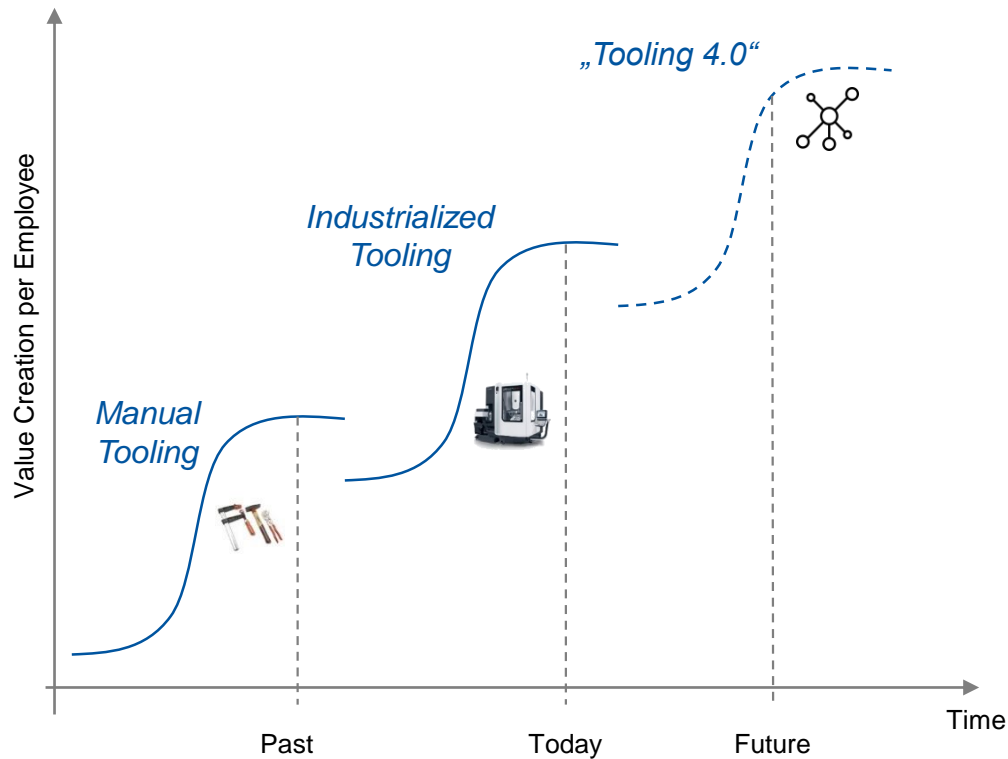
Up to  
**25**

**Are you prepared for today's and future challenges?**

# Successful Tooling Companies Have Managed to Constantly Adapt to Emerging Challenges

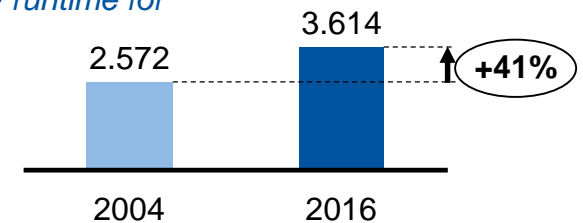


## The evolution of tool manufacturing

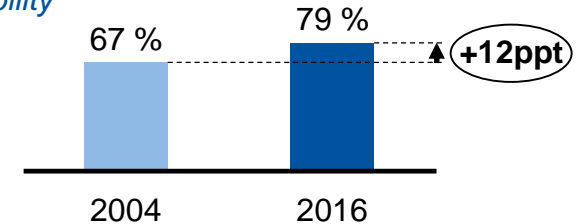


## Constant development within German tooling

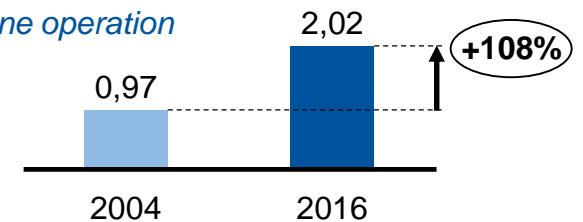
Average yearly runtime for milling [h/a]



Due date reliability



Multiple-machine operation for milling



**Tool and die making companies have to continuously adapt strategies, processes and technologies to ensure future competitiveness**

# Advanced Tool and Die Making – Future Strategies and Solutions

## Three Day International Seminar



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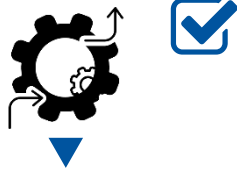
- 3 WBA Aachener Werkzeugbau Akademie

# The Seminar “*Advanced Tool and Die Making*” Will Facilitate Relevant Knowledge to Improve Operational Excellence



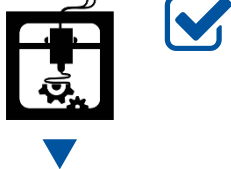
## Topics in focus

Process standardization & flow production



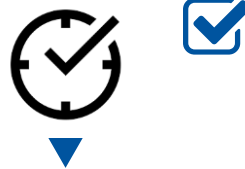
Process-oriented manufacturing and utilization of repetition effects for single batch manufacturing

Additive manufacturing



New opportunities by 3D printing technologies and connection into integrated process chains

Production planning and control



Efficient planning and scheduling to ensure delivery reliability and value creation speed

Digitalization & Industry 4.0



Outlook to the possibilities of Industry 4.0 for the tooling industry as well as best practice examples



Visit one of Germany's best tool shops and get in touch with local tooling experts

Learn from experienced lecturers and tooling experts and enjoy state-of-the-art training facilities



Experience real cases from the tooling industry for immediate application



Visit the RWTH Aachen University innovation campus with the latest production technology



Explore the historic city of Aachen with the cathedral



# The Seminar Is Structured into Three Days of Presentations, Case Studies and Insights into Best Practice Examples



## Structure of the seminar

	Sunday 21.10.	Monday 22.10.	Tuesday 23.10.	Wednesday 24.10.
09:00		Current Trends and Challenges		Additive Manufacturing and Integrated Process Chains
10:00		Development of Industrialization		
11:00		Standardization		Industry 4.0 in the Tooling Industry
12:00		Lunch	Company Visit of German Best Practice Tool Shop	Lunch
13:00		WBA Demonstration Shopfloor Tour		Industry 4.0 Demonstration Factory Tour
14:00	Individual Arrival or Shuttle Service	Material Flow and Synchronization		
15:00		Learning Game Industrialization		Wrap Up
16:00		Planning and Scheduling		Individual Departure or Shuttle Service
17:30	Leisure Time		Leisure Time	
18:30	Evening Program	Leisure Time	Evening Program	
Open end				

## Accompanying tooling activities

*Get the most out of your days in Germany: Combine the seminar with a visit to Germany's famous tooling fair "Fakuma" in Friedrichshafen*



### Key facts:

- International trade fair for plastics processing
- 1.800 exhibitors
- 50.000 visitors from 120 countries
- Latest technologies, processes and tools for efficient plastics processing via injection molding, extrusion, thermoforming and 3D printing

# The Seminar Includes Free Local Transfers and Accommodation in a 4\*\*\*\* Hotel in Germany



## Dates

22. - 24.10.2018



## Location

Aachen, Germany



## Cost

2,500€

*early booking*

2,900€

*regular booking*



## Group size

Max. 25



## Language

English



## Registration

- **Registration via email and payment of respective fees**
  - **Early booking** fees (2,500€) apply for reservations from now **until 31.08.2018!** To use the discount the **early booking price** has to be transferred until 31.08.2018 with confirmation of payment!
  - **Regular booking** fees (2,900€) apply after 31.08.2018 and have to be paid in full **until 12.10.2018** with confirmation of payment!
- **Free cancellation** and full refund **until 31.08.2018 for participant!**
- Please note, that the **WBA reserves the right to cancel the event until 31.08.2018** in case of insufficient participation. Please **do not make any travel arrangements** prior that date!
- If you want to **attend the seminar with your colleagues**, ask for a **group discount!**

## Organization details and included services:

- Free shuttle from the airports Düsseldorf and Cologne on Sunday, 21<sup>st</sup> of October 2018 (departure at 5:00 pm)
- Free shuttle on Wednesday, 24<sup>th</sup> of October 2018 starting at 3:00 pm to the airports Düsseldorf and Cologne (arrival about 4:30 pm)
- Free transportation during the seminar program
- Accommodation in a \*\*\*\* Hotel from 21<sup>st</sup> of October 2018 until 24<sup>th</sup> of October 2018
- Evening program including dinner on Sunday and Tuesday
- Free breakfast and lunch on the seminar days Monday, Tuesday and Wednesday
- Digital and printed documentation of the seminar documents
- Support of the participants through trained specialists prior to the seminar and during the event
- Access to state-of-the-art training facilities in the new introduced cluster of production technology from RWTH Aachen University
- International flights and the arrival to Aachen are not included except for the free airport shuttles mentioned above





# The Three Day International Seminar Has Already Taken Place in 2016 and 2017 in an Innovative and Interactive Environment



*Innovative and interactive workshops*



*Collaboration between research and industry*



*First-hand experience in the use of new technologies*



*Continuous learning and networking across borders*



**The international seminar promotes global exchange in order to solve today's challenges in the tool and die industry**

# Challenge Us during Our International Teaser Webinars – 30 Minutes Introduction into Specific Topic with the Latest Insights



## Webinar

- 30 Minutes
- Presentation of latest research and consulting insights
- Live video stream, chat- und poll function
- Download presentations, whiteboards and recording of the webinar

## International Webinars 2018

Free password for all Webinars: **ISAT2018**

Click on the time to log in for specific Webinar (approx. 15 min prior start)

- **Industrialization of the Tooling Industry**  
(06<sup>th</sup> of April, [10:00-10:30am](#) & [05:00-05:30pm](#), GMT+02:00)
- **Industry 4.0 in the Tooling Industry**  
(04<sup>th</sup> of May, [10:00-10:30am](#) & [05:00-05:30pm](#), GMT+02:00)
- **Additive Manufacturing in the Tooling Industry**  
(25<sup>th</sup> of May, [10:00-10:30am](#) & [05:00-05:30pm](#), GMT+02:00)
- **Industrialization of the Tooling Industry**  
(06<sup>th</sup> of July, [10:00-10:30am](#) & [05:00-05:30pm](#), GMT+02:00)
- **Industry 4.0 in the Tooling Industry**  
(10<sup>th</sup> of August, [10:00-10:30am](#) & [05:00-05:30pm](#), GMT+02:00)
- **Additive Manufacturing in the Tooling Industry**  
(14<sup>th</sup> of September, [10:00-10:30am](#) & [05:00-05:30pm](#), GMT+02:00)

## Webinar “Industry 4.0 in the Tooling Industry”



04<sup>th</sup> of May 2018

- Gain insights into possible implementation scenarios of Industry 4.0 technologies
- Learn about new technologies and best-practice-solutions from tooling and other industries
- Discuss open questions with our experts

## Contact and registration for webinars



### Carmen Halm

WBA Aachener Werkzeugbau Akademie GmbH  
Head of Further Education

- 🏠 [www.werkzeugbau-akademie.de](http://www.werkzeugbau-akademie.de)
- ☎ +49 241 990163 16
- ✉ [c.halm@werkzeugbau-akademie.de](mailto:c.halm@werkzeugbau-akademie.de)

# Advanced Tool and Die Making – Future Strategies and Solutions

## Three Day International Seminar



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# The WBA Aachener Werkzeugbau Akademie Offers the Full Range of Tool Making Competence



## Who we are

- **Central point of contact** for tool shops
- Close **collaborator with institutes** of the RWTH Aachen University and the Fraunhofer-Gesellschaft
- **25 employees** with organizational and technological focus on tool making
- Dedicated demonstration tool shop
- Execution of approx. **50 consulting projects** per year
- Initiator and leader of approx. **10 research projects per year** with partners from our network

## Where we come from

Powered by:

## Who our partners are

Premium	Cooperation
<b>Business</b> 	
<b>Basic</b> 	

## Our mission

- Establish **successful business strategies** and enhance **operational excellence** for our customers
- Share insights** on future business and market developments and latest technological enablers
- Connect our partners** for multi level cooperation
- Qualify personnel** for current and future challenges

# Please Get in Contact with Us for Further Details and Discussions



## Felix Stracke

Consultant

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