Advanced tool and die making – Future strategies and solutions

Three day international seminar

Aachen, 21st to 23rd of October 2019
Trends and challenges in tool and die making: The existing global trends lead to four main challenges

- 46% of the manufacturing companies are expanding internationally
- 785% increase in Audi model variations between 1994 and today
- 1,460% increase in the worldwide number of electric cars between 2012 and 2017
- 50% shorter model cycle time of the VW Golf between 1975 and today
- #15 iPhone model launches in the last 11 years

Globalization
Derivativeization
New Technologies
Shortened Product Lifecycles
Volatility & Change Requests

Challenges for the tool and die industry

- Cost pressure
- Innovation pressure
- Time pressure
- Flexibility pressure

Are you prepared for today’s and future’s challenges?
World class tool shops have successfully introduced new strategies in order to meet the current and future challenges.

The evolution of tool manufacturing

Value Creation per Employee

Manual Tooling

Industrialized Tooling

„Tooling 4.0“

Technology

Effectiveness

Organization

Efficiency

The tool and die industry has to continuously adapt strategies, processes and technologies to ensure future competitiveness.
The seminar “Advanced tool and die making” will facilitate relevant knowledge to improve operational excellence

Topics in focus

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

- Process standardization & flow production
  - Process-oriented manufacturing and utilization of repetition effects for single batch manufacturing

- Production planning and control
  - Efficient planning and scheduling to ensure delivery reliability and value creation speed

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

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

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

Experience real cases from the tooling industry for immediate application

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

Explore the city of Aachen with the historic city hall and the imperial cathedral
The seminar is structured into three days of presentations, case studies and insights into Best Practice examples

### Structure of the seminar

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### Accompanying tooling activities

**Get the most out of your days in Germany: Combine the seminar with a visit to the world’s no. 1 trade fair for plastics and rubber “K 2019” in Düsseldorf**

**K 2019**
16th to 23rd of October in Düsseldorf, Germany

**Key facts:**
- Leading trade fair for plastics and rubber
- 3,293 exhibitors
- 232,053 visitors from 161 countries
- Raw materials, auxiliary materials, semi-finished products, technical parts and reinforced plastic products, machinery and equipment for the plastics and rubber industry, services, research, science
The seminar includes free local transfers and accommodation in a 4**** hotel in Germany

**Dates**
21. - 23.10.2018

**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 15.08.2019! To use the discount the **early booking price** has to be transferred until 15.08.2019 with confirmation of payment!
  - **Regular booking** fees (2,900€) apply after 15.08.2019 and have to be paid in full until 30.09.2019 with confirmation of payment!
- **Free cancellation** and full refund until 15.08.2019 for participant!
- Please note that the **WBA reserves the right to cancel the event until 15.08.2019** in case of insufficient participation. Please do not make any **travel arrangements** prior that date!
- If you would like to **attend the seminar with your colleagues**, ask for a **group discount**!

**Organization details and included services:**
- Free transportation during the seminar program
- Accommodation in a 4**** Hotel from 20th of October 2019 until 23rd of October 2019
- 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 newly introduced cluster of production technology of RWTH Aachen University
- International flights and the arrival to Aachen are not included
During the seminar there will be an evening program, leisure time and a company visit of a German Best Practice tool shop

Sunday, October 20th: Brewery visit
- Subsequent dinner and **beer tasting**

Monday, October 21st: Individual leisure time
- Individual free time in Aachen that can be used for **shopping**, a visit of a **thermal bath** or anything you like

Tuesday, October 22nd: Company visit of German Best Practice tool shop
- Visit of a **world class** tool shop which focusses on **injection moulds**, **die casting tools** for aluminum and zinc as well as **stamping** and **bending tools**
- **Winner** of the award “**Tool-Maker of the Year 2018**” in the category internal tool maker with less than 50 employees

Tuesday, October 22nd: City tour and dinner together
- Guided tour through the city and the **old town of Aachen**
- Visit of Aachen's historical landmarks, e.g. the **imperial cathedral**
- **Dinner** together with all participants at a **traditional German restaurant**
Company visit at Harting Applied Technologies

Outstanding features of Harting Applied Technologies

- Harting Applied Technologies is the internal tool shop of the internationally operating and family-owned Harting Technology Group, one of the leading partners and drivers of the fourth industrial revolution (Industry 4.0).
- The manufactured injection moulds, die casting tools as well as stamping and bending tools are used for the production of industrial connection technology such as electrical connectors, network components and solutions for e-mobility.
- Harting Applied Technologies is the winner of the award “Tool-Maker of the Year 2018” in the category internal tool maker with less than 50 employees.

Harting Technology Group

- 5,000 number of employees
- 762 m. € turnover in 2018
- 13 production plants
- 3 tool shops
- 100% owned by the Harting family

Harting Applied Technologies is a world-class tool shop due to its high degree of innovation, automation and productivity.
The three day international seminar has already taken place between 2016 and 2018 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.
The “Tooling Theme Park” of the WBA presents new Industry 4.0 applications based on modern technology.

Within this unique infrastructure, digital networking and the future of toolmaking can be experienced live via demonstrators.
The WBA Tooling Academy Aachen 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

Who our partners are

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Where we come from

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

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