5G Forum (Hall 3)
Revolution or evolution? We already know that it is 5G that enables industry to realize the full potential of industry 4.0. But what is your potential behind the buzzword? What do you have to do to be 5G-ready and when will 5G-capable products be available at all? The 5G Forum will give answers on all these questions the Industry might have while the surrounded 5G Arena will demonstrate the potential for industry opened up my the fifth generation of mobile communication and further wireless communication solutions.

- 5G Applications in the production environment
- 5G-capable automation technology
- 5G: Safety & Security
- 5G: Campus networks and publicIoT
- 5G: Research projects
- 5G: Certification and Testing
- 5G: Norms and Standards

Automation Forum (Hall 6)
Experts from all over the world discuss in the Automation Forum innovative developments in factory and process automation, i.e. robotics, image processing, human-machine-collaboration, digitalization applications, energy-efficient drive systems, autonomous supply chain, logistics automation and efficient pump solutions.

- Autonomous supply chain
- Digitalization applications
- Digitization of the supply chain
- Efficient pump solutions
- Drive technology / motion control
- Industrial image processing / identification systems
- IT Technologies in the production environment
- Logistics automation
- Human-machine-collaboration
- Measuring and testing technology / smart sensors
- Modular automation in the process industry
- Robotics / mobile robots

Motion & Drives Forum (Hall 5)
The popular Motion & Drives Forum will again feature a series of lectures on the latest innovations and technology trends in the power transmission and fluid power sectors.
The trade visitors will receive answers to questions on how the manufacturers of the two important supplier industries have taken up and implemented the challenges of industrial transformation, digitization, networking and communication.

Power transmission and fluid power sectors:
- Individualization / Customizing
- Industrie 4.0’ / Smart Manufacturing
- Intelligent Power Transmission and Fluid Power Systems
- IoT und Data Analytics
- Sustainability / Energy Efficiency

Industrial Security Forum (Hall 14)
As industry becomes increasingly networked the issue of security becomes more acute. Industrie 4.0 would not be feasible without data protection and the know-how that protects production and communication processes within and between individual companies. The secure, reliable operation of digitally integrated production plant and services is an important challenge.

- Blockchain in the manufacturing & processing industry
- Cyber attacks (trends, prevention, detection and reaction)
- Industrie 4.0, Industrial Control Systems (ICS)
- IoT Security
- OT (Operational Technology) Security
- IT security and legislation
- Artificial Intelligence & Machine Learning for IT Security
- Security for Safety
- Security by Design
- Virtualization and cloud computing
- Certification in digitization

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### Integrated Lightweight Plaza (Halle 23)

The Speakers Corner will explore the topic of lightweight construction in all its facets. Centrally located at the Integrated Lightweight Plaza, this event will present the entire spectrum of modern lightweight construction, from lightweight materials to lightweight design and innovative joining techniques. In a series of short presentations, our speakers from industry and research will present their developments, products and research results in a compact, precise format. Afterwards, the Lightweight Café at the Integrated Lightweight Plaza will be open for in-depth discussions with the audience.

- Additive Manufacturing
- Coating and fastening
- Biogenic materials
- Design und materials
- Fibre composite and textile technology
- Production technologies
- Functional materials
- Functional integration
- High-performance materials
- Plastics and composites
- Material lightweight construction
- Modelling and simulation
- Multi-material design / hybrid lightweight construction
- Structural lightweight construction
- System lightweight construction
- Topology optimization (Finite element simulation)
- Materials for lightweight design

### Suppliers Forum (Hall 20)

This central discussion platform for Engineered Parts & Solutions examines key issues for the subcontracting industry – from metals and lightweight construction to mobility technologies, Industry 4.0, additive manufacturing and supply chain management. The daily program of talks is organized in association with the trade journal Industrieanzeiger and the Institute for Materials Science at the University of Hannover. Each 30-minute slot closes with a question-and-answer session. Highlights include luncheon platform discussions with distinguished guest speakers.

#### Lightening Session (Tuesday, 21 April):

- What potential do steel materials offer for lightweight construction?
- Materials for lightweight construction - what possibilities do aluminium, magnesium etc. offer?
- Material trends for the coming years: Where is lightweight construction heading?
- What is the potential of lightweight design?
- What role can additive manufacturing play in lightweight construction?
- How economical is mass production using lightweight construction?

#### Additive Manufacturing Session (Thursday, 23 April):

- 3D printing offers great possibilities for manufacturing - but what applications are additive processes suitable for and what are they not?
- Digitization as a prerequisite for additive manufacturing
- Potentials of additive manufacturing in the individual industries – i.e. in the automotive industry or medical technology
- Quality assurance in additive manufacturing - a challenge?
- Which materials can be printed?
- What are the organisational, legal and technical requirements when outsourcing production to a 3D printing service provider?
- What opportunities and challenges does additive manufacturing offer suppliers?
DIGITAL ENERGY User Forum (Hall 12)

Making the transformation of industry a tangible experience – this is the promise of HANNOVER MESSE 2020. In this context, digitalization assumes a special role. This is acknowledged by the DIGITAL ENERGY User Forum. With the aim to shape an energy-intelligent future, experts will outline ways towards comprehensive energy (data) management and energy monitoring for industrial, commercial and public properties as well as digitalization strategies for utilities and grid operators.

- Data-driven operating and business models for utilities and network operators
- Digital Energy / Energy 4.0 / Smart Energy for industry, commerce and utilities
- Energy automation
- Energy consulting, audits and certification
- Energy controlling / Energy monitoring (EnMon)
- Energy Data Analysis / Energy Data Management and Systems (EDMS)
- Energy efficiency
- Energy consumption and cost optimization
- Energy management (ENMS) in industry, commerce, infrastructure and the public sector
- Systems for building automation
- Smart Metering / Submetering / Gateway Administration
- Load management systems (LMS)
- Network control and monitoring, telecontrol technology, smart grids
- Test, measurement and control technology for electrical quantities

Forum Industrial Startups (Hall 24)

Young Tech Enterprises consists of an exhibit area, forum, matchmaking events and pitches. The startups present everything from AI-based software, virtual reality, sensor technologies and logistics platforms to navigation systems, smart materials, intelligent battery packs, e-mobility, and energy solutions.

Representatives from startups as well as related networks, incubators and economic development organizations give presentations and talks at the forum and is also home to the ‘Startup Pitches @ Young Tech Enterprises’, where young companies briefly present their products and ideas.

Startups can submit their presentation to the Industrial Start-ups Forum on all of the mentioned topics