



DEUTSCH



ENGLISH

16th International Congress and Expo



Automotive Transmissions, HEV and EV Drives

4 – 7 December 2017, Berlin, Germany

CTI Symposium World Series

2,500+ attendees in China, USA & Europe in 2016!
Representatives from over 28 countries!

Exhibitors 2015:

AAM Germany GmbH



As a leading Tier One global automotive supplier, **AAM** delivers driveline and drivetrain systems and components around the world. Our intense focus on engineering and manufacturing allows us to build value for our customers through quality, technology leadership, and operational excellence. AAM is present in more than 30 locations in 13 countries worldwide.

AAM Germany GmbH

Germany
www.aam.com

AB Elektronik GmbH



Transmissions of the latest generations are driven by a wide range of sensors for position, speed, pressure and temperature detection. Since more than 25 years **TT Electronics – AB Elektronik** is a well-known partner for developing and manufacturing best in class sensing solutions. Our global footprint in sales and local manufacturing resources in India, China and Mexico ensures our customers can access the best expertise available in response to their needs.

AB Elektronik GmbH

Germany
www.abelektronik.de



YOUR CONTACT



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Sales Director
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Email

Afton Chemical Ltd



Afton Chemical is the market leader for additives used in Automatic and Dual-clutch Transmission Fluids, and is approved by Ford, Daimler, GM, VW & ZF for factory fill. As the additive provider of the lowest-viscosity transmission oil worldwide, Afton offers “on-demand” solutions for customers to match their hardware needs, and performance that is maintained throughout the lifetime of their transmission.

Afton Chemical Ltd

United Kingdom

www.aftonchemical.com

AIDA S.r.l.



AIDA – the leader in the metalforming industry – has been concentrating on the innovation, development, manufacture, and sales and service of metal stamping equipment for a century.

AIDA S.r.l.

www.aida-europe.com

Alvier AG PM-Technology



Our company is represented at the booth of the **Powder Metal Gearbox Initiative**.

Alvier AG PM-Technology

www.alvier.com

AMES



Our company is represented at the booth of the **Powder Metal Gearbox Initiative**.

AMES

www.ames-sintering.com

Associated Spring



Since 1857, **Associated Spring** has been a pioneer & global leader of innovative engineered springs. Our precision transmission springs & stamping solutions are manufactured using state-of-the-art technology. We are proud to partner with our customers to solve design & manufacturing challenges such as environmental regulations, performance & global requirements.

Associated Spring

USA

www.asbg.com

AvCarb Material Solutions



AvCarb Material Solutions is a leading manufacturer of woven carbon friction materials, highly engineered for automatic and manual transmissions, rear differentials, wet brakes and other friction applications.

AvCarb Material Solutions

USA

www.avcarb.com

AVL List GmbH



AVL is the world's largest independent company for the development of powertrains (combustion engines, transmissions, control software, electric motors and batteries). The development and integration is fully supported by simulation tools; instrumentation & test systems; as well as the methodology required for passenger cars, trucks and marine engines. AVL offers a complete service portfolio for OEMs and transmission suppliers which contains design, analysis, calibration, transmission control development, hybridization and manoeuvre-based testing.

Visit us at our booth at the Transmission Expo.

AVL List GmbH

Austria

www.avl.com/transmission

Bakker Magnetics BV



Since 1971 **Bakker Magnetics** is manufacturer and supplier of permanent magnets and assemblies. Headquarters are located in the Netherlands with an own Joint Venture in China. In both locations we have a dedicated facility for production of assemblies, where we produce products for the market of drive and motion.

Bakker Magnetics BV

Netherlands

www.baktermagnetics.com

Bomatec Automotive AG



Bomatec is involved for 20 years with magnet-, sensor- and drive technology. Bomatec is a competent, solutionoriented and quality-conscious supplier to automotive, general equipment and machine industry with our own R&D, production and testing laboratory. Magnets: Permanent magnets, magnet-assemblies, customer-designed solutions. Engineering for magnetic circuits, sensors and e-motors. F/E calculations and simulations, preparation of prototypes. Test laboratory for magnets and sensors. Sensors: Resolver, encoders, MEMS-Gyro.

Bomatec Automotive AG

Switzerland

www.bomatec.ch

BorgWarner Drivetrain Engineering GmbH



BorgWarner Drivetrain Group harnesses a legacy of more than 100 years as an industry innovator in transmission and all-wheel drive technology. The group is leveraging this understanding of powertrain clutching technology to develop interactive control systems and strategies for all types of torque management.

Transmission Systems

Products include one-way clutches, transmission bands, friction plates, torsional vibration dampers and our market leading DualTronic® dual-clutch modules. We also offer a wide range of transmission solenoids, complete electro-hydraulic control modules.

TorqTransfer Systems

We offer a complete line of All-Wheel Drive products for FWD and RWD applications, including transfer cases, actively controlled electro-magnetic and electro-hydraulic AWD couplings as well as electric drive transmissions.

Visit us at our booth at the Transmission Expo.

BorgWarner Drivetrain Engineering GmbH

Germany

www.borgwarner.com

Robert Bosch GmbH



Automotive Technology is the largest **Bosch Group** business sector. In 2014, its sales came to 33.3 billion euros, or 68 percent of total group sales. This makes the Bosch Group one of the leading automotive suppliers. Bosch provides technologies and solutions for the electronic and hydraulic control of all types of automated transmissions and offers key components for CVT.

Robert Bosch GmbH

Germany

www.bosch-mobility-solutions.com

Brand KG



The **Brand Group** is the specialist for development and manufacturing cold formed technical springs and wire formed parts. In Europe we are the leading producer of damping springs for the powertrain. We offer innovative technology and efficient solutions for constantly increasing requirements. Our customers appreciate since decades our reliability and know-how regarding material, development, prototypes and as well our sophisticated manufacturing technology.

Brand KG

Germany

www.brand-group.com

Bühler Motor GmbH



Bühler Motor is an independent, globally-active company focused on the development and production of mechatronic drive solutions and electric pumps. A leading supplier in the Automotive industry, with 1700 employees at nine locations worldwide, we are committed to offering world-class products to help to improve the drivetrain efficiency and performance.

Bühler Motor GmbH

Germany

www.buehlermotor.de

BP Europa SE



Castrol is a world leading manufacturer of innovative lubricants. High performance gear oils are developed in close cooperation with automotive OEMs. Castrol's Driveline Technology is using their special in-house tests as part of the professional project management programme for developing newest fluids for dual clutch, automatic and manual transmissions, CVT, PTU and rear axles, demonstrating highest reliability.

BP Europa SE

Germany

www.castrol.com

Changan UK R&D Centre Ltd



Changan UK R&D Centre Limited (CAUK) is a UK company set up by Changan Automobile in June 2010. CAUK is dedicated to the design and development of Changan's next generation powertrains

Up to now, Changan Automobile has successfully launched a series of classic own brand models such as EADO, CX30, CX20, CS35, Raeton, Benben and Honor, widely sought after by markets and consumers. In 2013, Changan Automobile's own-brand production ranked No.14 in the world, No.1 in China.

Changan UK R&D Centre Ltd

United Kingdom

www.changanuk.com

Christian Bauer GmbH + Co. KG



With decades of familiarity with the market and solid know-how, **cb** successfully designs flexibility creatively. Wherever disc springs, diaphragm springs and complete subassemblies for vane pumps are involved, we stand for the tightest of production tolerances while being consistently solution-driven. In addition to the DIN disc springs we also support you with tailored and customised developments.

Christian Bauer GmbH + Co. KG

Germany

www.christianbauer.com

Continental AG



The Automotive Group of **Continental** with achieved sales of approximately € 21 billion in 2014 is present in more than 180 locations worldwide. The Transmission business unit (BU) is one of five BUs of the division Powertrain, which integrates innovative and efficient system solutions for the drivetrain. BU Transmission develops and produces electronics and mechatronic systems for controlling the latest automatic transmissions such as stepped automatic transmissions, continuously variable transmissions (CVT), automatic gearshift systems, double-clutch transmissions, transfer boxes and all-wheel drive systems.

Continental AG

Germany

www.conti-online.com

Cremer Thermoprozessanlagen GmbH



Our company is represented at the booth of the **Powder Metal Gearbox Initiative**.

Cremer Thermoprozessanlagen GmbH

www.cremer-ofenbau.de

Curtiss Wright Surface Technologies



CWST – since 1945 known as Metal Improvement Company – with more than 70 global business units is the market leader in the process "Controlled Shot Peening". The implementation of Engineered Coating Services and the development of our Laser Peening Process expanded our product portfolio to a complete high quality package (One-Stop-Job) for our customers in the global Surface Technology sector.

Curtiss Wright Surface Technologies

Germany

www.cwst.de

CY Myutec Co.,Ltd.



CY Myutec is specialized in development and manufacturing of Synchronizer Rings for Manual and Dual Clutch Transmission. As a total solution provider, the company offers Synchronizer Ring pack design consulting including various tests and simulations. On the basis of self-developed carbon friction material technology, the company's product portfolio comprises steel stamping & forging and brass alloy Synchronizer Rings.

CY Myutec Co.,Ltd.

Korea

<http://www.cymyutec.co.kr>

Daimler AG

DAIMLER

Daimler AG is one of the world's most successful automotive companies. With its divisions Mercedes-Benz Cars, Daimler Trucks, Mercedes-Benz Vans, Daimler Buses and Daimler Financial Services, the Daimler Group is one of the biggest producers of premium cars and the world's biggest manufacturer of commercial vehicles with a global reach. Daimler Financial Services provides financing, leasing, fleet management, insurance and innovative mobility services.

Daimler AG

Germany

www.daimler.com

Diehl Metall Stiftung & Co. KG



For more than 60 years, **Diehl Metall** has been a successful partner to the international automotive industry when it comes to synchronizer ring production. The long-established company, with its product expertise, sets innovative trends in transmission solutions. The unique diversity of products as well as the combination of long-standing experience and the latest know-how enable efficiency increases in existing technologies.

With the brand Formed@Diehl, the company offers both conventionally forged brass synchronizer rings as well as production of steel synchronizer rings with high-performance coatings. These improve friction and wear behavior and cover the entire performance range.

As the global market leader in this area, Diehl Metall is a specialist in optimizing existing transmissions as well as in developing customized solutions for new projects. Furthermore, production sites in Germany,

wear behavior and cover the entire performance range.

As the global market leader in this area, Diehl Metall is a specialist in optimizing existing transmissions as well as in developing customized solutions for new projects. Furthermore, production sites in Germany, Brazil, China and India ensure supply to the international markets.

Our claim: Precision. Innovation. Quality.

Visit us at our booth at the Transmission Expo.

Diehl Metall Stiftung & Co. KG

Diehl Metall Schmiedetechnik

Germany

www.diehl.com/metall

DORST Technologies GmbH



Our company is represented at the booth of the **Powder Metal Gearbox Initiative**.

DORST Technologies GmbH

www.dorst.de

Drive System Design



Drive System Design (DSD) is an innovative transmission design and development company. DSD specialises in transmission/driveline design and simulation delivering prototype demonstrators and solutions to production issues. Current technology focus is around robust low noise gear design for volume production, efficiency improvement process for existing axles/transmissions and EV/Hybrid architecture derivation.

Drive System Design

United Kingdom

www.drivesystemdesign.com

DuPont International Operations Sàrl



DuPont Performance Polymers collaborates with customers worldwide to help develop new products, components and systems that help build lightweight transmission solutions – from fuel to electrical powered engines – with high efficiency and improved engine performance. DuPont high-performance parts, thermoplastics, elastomers and specialty polymers (Vespe^l®, Vamac®, Zytel®, Hytrel®, Kalrez®) contribute to reduce frictional loss and reduce weight while extending the durability and reliability of mechanical components.

DuPont Int. Operations Sàrl

Switzerland

www.vespel.de

www.vespel.dupont.de

<http://www.dupont.de/produkte-und-dienstleistungen/plastics-polymers-resins/articles/supporting-sustainable-mobility.html>

DVS Technology GmbH



As the service provider in the strong community of the DVS group, **DVS Technology** offers contract manufacturing equipped with everything that is required for a sophisticated serie production. Our areas of expertise:

- turning, gear tooth forming, grinding
- gear honing, gear grinding
- machining before and after heat treatment
- milling of shifterstops and pockets
- bore honing
- skiving
- precision machining
- machining of large parts

The latest machine generations of the DVS group are used for the entire production technology.

DVS Technology GmbH

Germany

www.dvs-technology.de

DYNAX Corporation



Since 1973 **DYNAX** is partner of global OEM and their Tier1 supplier. We are leading in Research, Development, Design, Production of wet-type friction plates, reaction plates, clutch pack assemblies, lock-up piston assemblies, high-performance synchronizer rings and further components for automobiles, motor cycles, construction machines, industrial vehicles and agricultural machines.

DYNAX Corporation

Germany

www.dynax-j.com

ebm-papst St. Georgen GmbH



The **ebm-papst Group** is the world's leading manufacturer of fans and motors. As a highly qualified engineering partner of the automotive industry, our innovations have been helping to make the driving experience safer, more comfortable and less stressful for over a decade. A growing number of renowned manufacturers and system suppliers, in both the passenger and commercial vehicle areas, are among our customers.

ebm-papst St. Georgen GmbH

Germany

www.ebmpapst.com

EFI Automotive



EFI Automotive is a tier-one and tier-two automobile parts supplier that specializes in smart integrated modules designed to improve the efficiency of engines and transmissions and reduce CO₂ and polluting emissions.

EFI Automotive supplies a range of innovative products to automobile manufacturers and their systems suppliers worldwide: speed, position sensors, mechatronic modules for transmissions.

EFI Automotive

France

www.efiautomotive.com

EJOT GmbH & Co. KG



The **EJOT Group** is a medium-sized company which is dedicated to innovative fastening solutions. The Industrial Fasteners Division produces thread-forming fasteners for plastics and metal. Cold forming parts are manufactured up to a 6-die/6-blow forming stage. Another group of products are novel fastening elements, especially designed to work with new materials and material combinations.

EJOT GmbH & Co. KG

Germany
www.ejot.de

ElringKlinger AG



As a partner to the international automotive industry, we develop and produce cylinder-head and specialty gaskets, lightweight plastic components and shielding systems for engine, transmission, exhaust tract, underbody, body and chassis applications. Specifically for transmission applications, our portfolio is complemented by integrated mesh solutions, shift pistons and plastic oil pans as well as bearing rings, piston rings and guides made of PTFE. In 2014, we received a ZF Innovation Award for a pioneering sandwich plate for hydraulic control units with an option of integrating additional functions.

ElringKlinger AG

Germany
www.elringklinger.de

Erdrich Umformtechnik GmbH



Core Competencies: Development and production of non-cutting metal parts and complex construction units with target market gearbox and clutches.

Products: Deep drawings, Stampings, Fine blanking parts and assemblies

Customers: Daimler, Behr, Vibracoustic, Bosch-Group, ZF-Group, Schaeffler Group, BorgWarner, Getrag, Valeo, FTE, Continental Automotive Group.

Erdrich Umformtechnik GmbH

Germany
www.erdrich.de

ERNST GROB AG



ERNST GROB AG develops, designs and builds precision machines dedicated to the cold forming of splined and nonsplined workpieces. The manufacture of slotting machines for secondary and finishing operations on cold formed workpieces is yet another core competence of the company.

- Cold forming machines for sheet metal and solid components
- Slotting machines for sheet metal components
- Subcontracting
- Engineering

ERNST GROB AG

Switzerland

www.ernst-grob.com

Ernst Umformtechnik GmbH



Ernst Umformtechnik GmbH is a recognized, leading partner in the sheet metal forming industry. Core activities are the production of high precision stampings, deep drawn parts and assemblies as well as the development and production of prototypes. Complementary processes such as laser welding, machining and surface-/heat treatment complete the program. Product portfolio: components for synchronization-, clutch- and transmission systems, waste gas, automotive safety, automotive electronics and HVAC.

Ernst Umformtechnik GmbH

www.ernst.de

Favi S.A.



FAVI is the provider of your technical solutions in pressure die-casting. Main activity is the development and production of shift forks in brass or aluminium for gear boxes, from single parts to a complete internal shifting system. Moreover, FAVI is leader in production of die-cast copper rotors for e-mobility and hybrid motors.

FAVI

France

www.favi.com

Federal-Mogul Holdings Corporation



Federal-Mogul Holdings Corporation is a leading global supplier of products and services to the world's manufacturers and servicers of vehicles and equipment in the automotive, light, medium and heavy-duty commercial, marine, rail, aerospace, power generation and industrial markets. The company's products and services enable improved fuel economy, reduced emissions and enhanced vehicle safety. Federal-Mogul's Powertrain Division designs and manufactures original equipment powertrain components and systems protection products for automotive, heavy-duty, industrial and transport applications.

Federal-Mogul Holdings Corporation

USA

www.federalmogul.com

Feintool Group



FEINTOOL – Expanding Horizons

Feintool is the world's leading technology group specializing in the development of fineblanking systems and the production of ready-to-install fineblanking and forming components, notably for the automotive industry. The Group maintains close partnerships with its customers across the entire fineblanking and forming process – from component design, toolmaking and system construction through to large-scale series parts production.

Feintool Group

Switzerland

www.feintool.com

Felss Shortcut Technologies



The **Felss Group** manufactures under the brand Felss Shortcut Technologies metal processing machines and components for diverse sectors such as the automotive industry. The cold forming processes rotary swaging, axial forming, bending, autofrettage and tube end forming are central to the technology. Based in Königsbach-Stein, Germany, Felss has revenues of approximately 100 Million Euros, and employs approximately 550 people in 4 countries.

Felss Shortcut Technologies

Germany

www.felss.com

FEV GmbH



FEV is an independent powertrain systems research, design and development company. From concept to production, FEV offers comprehensive transmission design and development solutions for a variety of applications ranging from electric or hydraulic hybrids to conventional systems. We provide extensive functional/durability testing and benchmarking for all transmissions types.

FEV GmbH

Germany

www.fev.com

Fischer & Kaufmann GmbH Co. KG



Fiuka has ranked among the recognised suppliers of the automotive industry. Main focus is the development and manufacture of metal parts in cold forming for the areas of airbag, chassis, engine, transmission and exhaust gas technology. Using forming presses (150 – 1,500 tons) and with the utmost precision, we manufacture components from steel, stainless steel, aluminium and special materials. Engine and transmission parts will be finished on automated production lines. Ancillary plant: Środa Śląska, Poland

Fischer & Kaufmann GmbH Co. KG

Germany

www.fiuka.de

Freudenberg Sealing Technologies GmbH & Co. KG



Freudenberg Sealing Technologies Automotive, a market leader in the auto industry's technology, quality and service segments, provides a wide range of products to all the major automobile and commercial vehicle manufacturers worldwide. The portfolio includes a large assortment of seals – ranging from O-rings to bidirectional, low-friction cassette seals.

Freudenberg Sealing Technologies GmbH & Co. KG

Germany

www.fst.com

FTE automotive GmbH



The **FTE automotive Group** is your competent partner in the sector of development and production of drive train and brake system applications for the automotive industry. The company is located in all important continents and one of the leading OE-suppliers for passenger cars and commercial vehicles worldwide.

FTE automotive GmbH

Germany

www.fte.de

GETRAG Getriebe- und Zahnradfabrik



GETRAG is one of the largest system suppliers for transmissions worldwide with approximately 13,500 employees at 23 locations. The company is headquartered in Untergruppenbach, Germany. The company develops and manufactures transmission solutions for the automotive industry. The transmission portfolio comprises manual, automated manual and dual clutch transmissions. Getrag also offers a range of hybridization and electrification of transmissions.

Visit us at our booth at the Transmission Expo.

GETRAG

Getriebe- und Zahnradfabrik

Hermann Hagenmeyer GmbH & Cie KG

Germany

www.getrag.com

GIF-Entwicklungsgesellschaft mbH



The main target of the **GIF-E** is to bring innovative developments regarding powertrain technology with focus on engine and transmission to production stage and place on the market.

Beside customer contracts GIF-E is also working on own developments like the axial combustion engine, a new dual mass flywheel and the cone-ring transmission which will go into series production in China in the near future.

GIF-Entwicklungsgesellschaft mbH

Germany

www.gif-e.de

GIF-Gesellschaft für Industrieforschung mbH



GIF – Gesellschaft für Industrieforschung mbH

GIF is based in Alsdorf, and employs 450 staff and boasts more than 130 test benches, making it an important development service provider in the automotive industry, and the world's largest independent operator of transmission test benches. The company offers manufacturers of drivetrains, transmissions and components a cost-efficient alternative to personal durability tests. The customers include almost all automotive and transmission manufacturers.

GIF mbH

Germany

www.gif.net

GKN Automotive



GKN Automotive is the world's leading driveline technology engineer, an expert in conventional, hybrid and electrified power delivery. Encompassing GKN Driveline and GKN Powder Metallurgy divisions, GKN Automotive is a true integration partner with unmatched driveline expertise and world leading powder metal process capability delivering brand aligned driving experiences. GKN is also represented at the booth of the '**Powder Metal Gearbox Initiative**'.

GKN Automotive

GKN Driveline International GmbH

Germany

www.gkn.com/automotive

Goudsmit Magnetic Supplies BV



Goudsmit Magnetic Supplies forms part of the worldwide operating Goudsmit Magnetics Group, a family business incorporated in 1959 with branches in 5 countries. The company specializes in delivering high quality permanent magnets and magnet systems for the automotive industry. We are ISO 9001:2008 and ISO/TS 16949:2009 certified and comply with VDA6.3 self-assessment directives.

Goudsmit Magnetic Supplies: Knowledgeable. Empathetic. Reliable

Goudsmit Magnetic Supplies BV

Netherlands

www.goudsmitmagnets.com

Great Taiwan Gear



Great Taiwan Gear is a leading manufacturer of high-accuracy gears and transmission parts. Our production capabilities allow us to offer our customers the quality, cost effectiveness and reliability they demand. We have considerable experience in the production of gears and shafts for DCT, CVT and EV projects – from prototypes to mass production.

Our willingness and ability to manufacture and develop new products for our customers in a short space of time is the basis for our growth.

Great Taiwan Gear

Taiwan

www.taiwangear.com

Heinz Hänggi GmbH, Stanztechnik



Your reliable development partner and stamping specialist for more than 50 years: Innovation alone is not enough to satisfy the markets of today and tomorrow. Short reaction times, development, realization and effective quality management require an intensive and trusting cooperation between customer and supplier. **Heinz Hänggi** is here to develop and realize your projects.

Heinz Hänggi GmbH, Stanztechnik

Switzerland

www.hanggi.com

HOERBIGER Antriebstechnik GmbH



HOERBIGER is the leading independent provider of synchronizer systems worldwide. The product range of HOERBIGER Strategic Business Unit Drive Technology encompasses full “package” support from complete development down to serial supplies of components and complete synchronizer systems. OEMs and transmission manufacturers can select the appropriate system from different product lines: the ClassicLine and the new CompactLine offer the right solution for any requirement.

HOERBIGER Antriebstechnik GmbH

Germany

www.hoerbiger.com

hofer powertrain GmbH



Established in the 1980's, **hofer** is a global automotive engineering consultancy with expertise in the field of powertrain and energy efficiency. Development, industrialisation and production of components for passenger cars, trucks, mobile industrial and construction machines, motorcycles and special vehicles form hofer's core competences. The hofer group is placed strategically: its competence centers in Germany and abroad are in close proximity to customers and thus guarantee efficiency, promptness and short reaction time.

hofer powertrain GmbH

Germany

www.hofer.de

Höganäs AB



Our company is represented at the booth of the **Powder Metal Gearbox Initiative**.

Höganäs AB

www.hoganas.com

Hugo Benzing GmbH & Co. KG



As one of world's leading producer of retaining elements **Hugo Benzing** is a Tier-1 supplier for almost every reputable automotive manufacturer. On more than 20.000 square meters we employ about 350 people. Over 22.000 different items are included within our product range of retainers, wire forms, precision stampings and complex designed assemblies. Benzing components are used in numerous applications for example in parking lock systems for torque converters and dual clutch transmissions.

Hugo Benzing GmbH & Co.KG

Germany

www.hugobenzing.com

IAV GmbH



IAV – Your Partner for Automotive Engineering

As one of the leading development partners to the automotive industry, IAV offers more than 30 years of experience and a range of skills second to none. With our expertise in the entire vehicle, and the passion to match, we provide technically perfected solutions. Employing 6,000 members of staff and first-class facilities, we assist manufacturers and suppliers in carrying out their projects wherever they are in the world – from concept to start of production

IAV Automotive Engineering

Germany
www.iav.de

IBS Filtran GmbH



IBS Filtran GmbH/Filtran LLC

leading manufacturer of filter system solutions for automatic transmissions. With our development centers and manufacturing plants in Germany, USA, China and (soon) Mexico, as well as cooperation partners in Japan and Korea, we are able to satisfy our global customers' requirements due to innovative system solutions.

IBS Filtran GmbH

Germany
www.ibs-filtran.com

Ing-D.B. GmbH

Ing-D.B. GmbH is your partner for the development and distribution of automation technology. One focus are the setting processing equipment for sealing plugs, blind rivet nuts, rivet screws and blind rivets.

From simple manual workstations, over the use of process monitoring, to a high level of automation with automatic feeding systems and workpiece handling all customer requests can be satisfied.

Ing-D.B. GmbH

Germany
www.ing-db.de

Institute of Automotive Engineering



Institute of Automotive Engineering

- Shift and launch comfort (objectification, documentation, automated application)
- Requirement engineering and representative load spectra (testing, simulation, requirements based on customer operation and test routes)
- Gearshift and selector lever actuation (objectification, optimization)
- Drivetrain efficiency (measurement, simulation and optimisation of drivetrain components)
- Energy and thermal management
- Electric and hybrid drives (analysis of drivetrain topologies, simulation, customer benefit, control strategy)

Institute of Automotive Engineering Member of Automotive Research Center Niedersachsen Technische Universität Braunschweig

Germany

www.iff.tu-bs.de

JATCO Ltd



JATCO is a dedicated manufacturer of automatic transmission for automobiles including the step automatic transmission (AT) and the continuously variable transmission (CVT). With a mission to provide value to our customers, to automotive culture and to society, we constantly strive to provide high quality transmission units that meet the needs of society to our customers in a speedier manner. Today, JATCO offers an extensive line that includes step AT, advanced and environmentally friendly CVT and a transmission exclusively for hybrid vehicles. We are also the only manufacturer of CVT in the world to feature a line up that spans from mini vehicles through to full-size sedans.

Jatco Ltd

Japan

www.jatco.co.jp/ENGLISH/index.html

Jing Jin Electric



Jing-Jin Electric (JJE) is China's leading supplier of traction electric motors for EV, HEV and PHEV. JJE's R&D center in Beijing, JJE's production center in Shanghai, capacitized at 100,000 units per year. With quality,

technology, innovation and teamwork, JJE is taking
Electric Motors for the electri

Jing-jin Electric

www.jjecn.com

Johnson Electric International AG



The **Johnson Electric Group** is the world's leading provider of innovative motion subsystems and components for transmission and driveline applications. We improve fuel economy and driving experience by deploying advanced motion technologies and precision manufacturing processes for global automotive markets. Johnson Electric Group is headquartered in Hong Kong and has over 36,000 employees in 23 countries.

Johnson Electric International AG

Switzerland

www.johnsonelectric.com

JOPP Group



The **JOPP Group's** product range comprises gearshift systems and knobs, mechanical components (machining), powder metal parts, plastic components and electronics. There are 10 production sites worldwide. Own developments include internal and external shifters as well as oil- and water-bearing engine and transmission components. With its various own patents in the shifter sector, JOPP has been a competent partner in the automotive industry for many years.

JOPP Group

Germany

www.jopp.com

JTEKT Corporation



JTEKT Corporation was established in 2006 through the merger of Koyo Seiko Co., Ltd., a world-class bearing manufacturer, and Toyoda Machine Works, Ltd., a machine tool manufacturer excelling in world-leading technologies. Combining the most advanced technologies and the manufacturing passion of the two companies, JTEKT is now a trusted systems supplier of automotive components, bearings and machine tools, providing customers with world-class products and technologies that result in ongoing contributions to society.

JTEKT Corporation

Japan

<http://www.jtekt.co.jp/e/index.html>

KACO GmbH + Co. KG



KACO develops and produces seals for moving parts of machines and vehicles. The company is strongly development-oriented. Its customers today include almost all OEMs and many tier-one suppliers. High level in automatic production systems, advanced development equipment in-house. Manufacturing plants are in Germany, other European countries, USA and China.

KACO GmbH + Co. KG

Germany

www.kaco.de

Keihin Seimitsu Kogyo Co.,Ltd



KSK offers the next stage of production creation, like new developed plastic binding and one clutch one motor technology.

KSK can provide high-precision products to meet any accuracy, or time restriction, and KSK will continue to develop environmentally friendly products with a focus on lower energy consumption, less material use, recycling, and light-weight technology.

Keihin Seimitsu Kogyo Co.,Ltd

Japan

www.ksk-inc.co.jp

KISSsoft AG



KISSsoft is a modular calculation system for the design, optimization and analysis of machine elements. The scope of the software ranges from a single machine element up the automatic sizing of complete gearboxes. Besides calculation software, we provide the power transmission community with engineering services, know-how and training. In the last 25 years, over 2800 companies decided to use KISSsoft/KISSsys to their advantage. KISSsoft AG is located in Switzerland with resellers worldwide.

KISSsoft AG

Switzerland

www.KISSsoft.AG

Kleinknecht GmbH & Co. KG



H. Kleinknecht GmbH & Co. KG holds the entire expertise in testing technology for gearboxes. The company covers the complete scope such as test stands for manual, automatic, double-clutch, electric-transmission, and hybrid gearboxes, components, and corresponding assembly lines. Due to the self-developed test stand automation system ATS-Advanced the company holds proven know-how in software engineering.

Kleinknecht GmbH & Co. KG

Germany

www.kleinknecht.de

KOKI TECHNIK Transmission Systems GmbH



KOKI TECHNIK: Development partner and production company in one. KOKI initiates and gives support to development processes of transmission systems and produces the components itself. KOKI's current product range contains shift towers and shift forks – systems that enable the switching operation as well as the shift feel both of a manual and double clutch transmission.

KOKI TECHNIK Transmission Systems GmbH

Germany

www.kokitransmission.com

Konzelmann GmbH



KONZELMANN
KUNSTSTOFF · INNOVATIONEN

Are you looking to increase efficiency without adding extra costs in your tribological system? Look no further. At **Konzelmann GmbH**, using global market experience and results from our test laboratory, we design each solution's polymer blend and geometry in order to optimize your application, with price and performance in mind. Our solutions include bushings, axial/radial bearings, thrust washers, seal rings, gears, guiding components, and more.

Konzelmann GmbH

Germany

www.konzelmann-gmbh.de

Kyowa Synchro Technology Europe SAS



Kyowa Synchro Technology Europe is responsible to European market as a member of Kyowa Metal Group, a global synchronizer ring manufacturer. Not only to supply conventional rings, Kyowa also has high expertise to develop innovative systems which can provide proper solutions for VA/VE requirement in the synchronization mechanism.

Kyowa Synchro Technology Europe SAS

France

www.kyowagokin.co.jp/e/

LEE Hydraulische Miniaturkomponenten GmbH



For more than 65 years, “**The LEE Company**” has been a leading supplier of high-precision, miniature hydraulic components mainly for the aerospace industry but also used in the Offshore industry, in the racing world and other high end industries. In the late 80s the portfolio has been extended by an industrial valve program. Formally used in the automotive and truck industry but also used in the medical and pharmaceutical market.

LEE Hydraulische Miniaturkomponenten GmbH

Germany

www.lee.de

Linamar



Linamar is a diversified global manufacturing company of highly engineered powertrain products, world renowned for its precision machining expertise. Linamar has extensive product capabilities in transmission modules, driveline components and complete AWD systems including Hybrid E-Axle solutions. The range of services provided by the company also include hot forging on horizontal multi stage presses and conventional hot forging for precision components for drive and chassis applications. This know-how is clustered in the LINAMAR SEISSENSCHMIDT Forging Group.

Linamar

Canada

www.linamar.com

Magna International Europe AG



Magna is the most diversified global automotive supplier. Magna designs, develops and manufactures automotive systems, modules and components, and engineers and assembles complete vehicles, primarily for sale to original equipment manufacturers of cars and light trucks. Our capabilities include the design, engineering, testing and manufacture of automotive interiors; seating; closures; body & chassis; vision systems; roof systems; electronics; exteriors; powertrain as well as vehicle engineering and contract manufacturing. We have 316 manufacturing operations and 87 product development, engineering and sales centers in 29 countries on five continents as of Q1 2015.

Visit us at our booth at the Transmission Expo.

Magna International Europe AG

Austria

www.magna.com

MELECS EWS GmbH & Co KG



MELECS Elektronikwerk Siegendorf (EWS), with sales revenue of 146 million euros, is the largest electronics manufacturing service provider (EMS) with Austrian roots. MELECS EWS is part of the MELECS Group and has more than 25 years of experience. MELECS EWS relies on innovative solutions tailored specifically to its customers, such as in the areas of all-wheel drive ECUs (Electronic Control Units) and LED lighting in vehicles.

MELECS EWS GmbH & Co KG

www.melecs.com

Metaldyne



Our leading position in the automotive industry is demonstrated by our capabilities in metal components, products and modules for chassis and powertrain, engine and transmissions applications. Our high quality products lead us to our common goal: optimization of resources, reduction of cycle times and therefore, cost reduction and improvement of vehicle quality and performance.

Metaldyne

Germany

www.metaldyne.com

MIASA



MIASA with different locations worldwide, is a global partner with more than 45 years expertise in transmission market. Thanks to Miasa's vertical integration, including product concept, material development, foundry, casting, machining and in-line verification, Miasa is recognised as leader supplier in high precision transmission components, for small and large series.

MIASA

www.miasa.com

Miba Group



Technological competence, high competitiveness, and international service – those are the core competences that distinguish the **Miba Sinter Group** and the **Miba Friction Group** as market and technology leader. Miba possesses extensive design and manufacturing experience in sintered components and friction materials for synchronisers in manual, automated and double-clutch transmissions.

Miba is also represented at the booth of the 'Powder Metal Gearbox Initiative'.

Miba Group

Germany

www.miba.com

Michigan Spring and Stamping



Michigan Spring and Stamping manufactures millions of clutch return spring packs, detent assemblies, technical springs, precision stampings, and wire forms for global transmission customers. Cradle to grave philosophy including wire and flat spring design, FEA, prototyping, and component testing and verification services. Signi

Michigan Spring and Stamping

www.msands.com

Moving Magnet Technologies SA



MMT is an innovative company specialized in the field of electromagnetism. This unique know-how applies in the development of direct drive actuators, non-contact position sensors and electric motors. These mechatronics systems integrating patented technology are then industrialized for mass production in collaboration with the customer under a License agreement. MMT offers a full range of engineering services including magnetic simulation, prototyping and tests, drive electronic and magnetization equipments.

Moving Magnet Technologies SA

France

www.movingmagnet.com

Mubea Tellerfedern GmbH

Mubea

Mubea Tellerfedern GmbH produces highly-stressed transmission springs and separating springs for modern automatic transmissions, CVT- and dual clutch transmissions. The transmission weight and drag torque losses can be reduced significantly by using Mubea disc springs instead of coil springs. Further products in the transmission sector are light weight transmission shafts. The weight of these shafts can be reduced by up to 30 %.

BU Getriebetellerfedern:

Mubea Tellerfedern GmbH

BU Rohrwellen:

Muhr und Bender KG

www.mubea.com

MS-Schramberg GmbH & Co. KG



ALL OUT OF ONE HAND FOR HIGHEST RELIABILITY

MS-Schramberg personifies solution competence and quality. The company is among the leading producers of permanent magnets and assemblies in Europe. More than 500 staff members produce more than 5.000 customerspecific parts which are being applied with success all over the world in several branches.

MS-Schramberg GmbH & Co. KG

Germany

www.ms-schramberg.de

Oerlikon Balzers



Oerlikon Balzers is one of the world's leading suppliers of surface solutions that significantly improve the performance and durability of precision components as well as tools for the metal and plastics processing industries:

- Plasma heat treatment, primarily for wear and corrosion protection
- PVD coating
- PACVD coating minimizing friction
- Duplex treatment (nitriding and PVD/PACVD from a single source)

Oerlikon Metaplas GmbH

Germany

www.oerlikon.com/balzers

Oerlikon Graziano SpA



Oerlikon Graziano is world's no.1 in design, development and supply of transaxles for high performance cars, highly specialised in transmission systems for 4WD (PTU, RDM and transfer case assemblies), electric and hybrid transmissions for passengers cars and commercial vehicles, key player in applying innovative technology, as DCTs, AMTs and their hybrid derivatives to premium supercars. Leading transmission controls technology is provided by Vocis, majority owned by Oerlikon Graziano.

Oerlikon Graziano SpA

Italy

www.oerlikon.com/graziano

Oerlikon Friction Systems (Germany) GmbH



Oerlikon Friction Systems specializes in manufacturing synchronizers for manual and dual-clutch transmissions, as well as developing customer-focused synchronizer components and modules. Oerlikon Friction Systems is the leader in Carbon friction technology. With a combination of in-house produced stamped steel synchronizers and highly efficient friction materials, Friction Systems offers the ideal solution for maximum gear shifting comfort during the lifetime of the vehicle. Locations: Germany, USA, Brazil, Italy, China, India, UK, Japan

Oerlikon Friction Systems (Germany) GmbH

Germany

www.oerlikon.com/metco

Paul Beier GmbH
Werkzeug- und Maschinenbau & Co. KG



Paul Beier is one of the leading companies in the field of tool manufacturing and mechanical engineering. Our customers are top German and international industrial enterprises. They rely on our precision and professionalism. And value the flexibility and proximity offered by a medium-sized enterprise such as ours.

Paul Beier GmbH
Werkzeug- und Maschinenbau & Co. KG
Germany
www.beier-kassel.de

Petronas Lubricants



PETRONAS

PETRONAS Lubricants International (PLI) is the global lubricant manufacturing & marketing arm of PETRONAS, the national Malaysian fully integrated oil and gas company with operations in a broad spectrum of the oil and gas value-chain.

PETRONAS Lubricants International is developing in their global Technology Center in Turin, Italy, tailor made Transmission Lubricants for various OEMs globally both for First Fill and for the Aftermarket same as high performance transmission oils for various motorsport applications (such as Formula 1 and DTM). PLI's portfolio offers a wide range of Manual Transmission Fluids (MTF), Automatic Transmission Fluids (ATF incl. DCTF) and Axle/Differential Fluids for global applications in the Automotive sector (Passenger Car and Commercial Vehicles). PLI is market leader for highly specialized lubricants for the use in Off-Highway applications like fluids for agriculture and construction equipment.

Visit us at our booth at the Transmission Expo.

Petronas Lubricants International
www.pli-petronas.eu

PMG Füssen GmbH



The **PMG group** is a leading manufacturer of powder metallurgical systems and components for the automotive industry and operates seven plants in Europe, the U.S.A. and Asia. The PMG group offers ready-to-mount systems for manual, double clutch and automatic transmission applications, as well as their components like synchronizer hubs, synchronizer rings, sliding sleeves, clutch cones, gears, cams and races.

PMG is also represented at the booth of the '**Powder Metal Gearbox Initiative**'.

PMG Füssen GmbH

Germany

www.pmgsinter.com

Porsche Engineering Group GmbH



Porsche Engineering, a wholly owned subsidiary of sports car manufacturer Dr. Ing. h.c. F. Porsche AG, is a premium engineering services provider for car manufacturers, the automotive parts industry and other sectors. Its engineers work out new unusual ideas for cars, vehicles and industrial products. On behalf of clients they develop a wide range of solutions – from the conception of individual components and the design of complex modules through to the planning and implementation of complete developments including production start-up management.

Porsche Engineering Group GmbH

Germany

www.porsche-engineering.com

POWDER METAL GEARBOX INITIATIVE

The **POWDER METAL GEARBOX INITIATIVE** is a major collaborative Powder Metal (PM) industry development project to prove the concept, the durability, the possible benefits and the implementation readiness for powder metal gear technology for modern automotive transmissions. Initiated and coordinated by Swedish metal powder maker Höganäs AB and leading PM technology providers, tech partners and component suppliers from the entire PM value chain, the world's first redesigned 6-speed manual transmission demonstrator vehicle with powder metal gear technology is now at display at booth no K01.

Profiroll Technologies GmbH



Profiroll Technologies is specialized in the development and manufacturing of thread rolling machines, spline rolling machines and cold ring rolling machines. The appropriate process techniques and rolling dies are completing the service.

Profiroll is also represented at the booth of the '**Powder Metal Gearbox Initiative**'.

Profiroll Technologies GmbH

Germany

www.profiroll.de

Punch Powertrain N.V.



Punch Powertrain N.V. is an independent Tier1 developer and manufacturer of continuously variable transmissions (CVT), electrical and hybrid powertrains for passenger cars. In developing the new generation CVT and hybrid powertrains optimal performance, minimal fuel consumption, low emissions and driving pleasure are key topics.

Punch Powertrain NV

Belgium

www.punchpowertrain.com

Ricardo Deutschland GmbH



Ricardo is a leading partner in engineering and strategic consulting for the automotive industry worldwide. The company employs over 2,200 professional engineers, consultants and scientists who are committed to delivering outstanding projects and innovations in our core product areas of engine, transmission, vehicle, hybrid and electrical systems. Global 'one-stop' capability from concept to production: design, prototype, test & validation, and low-volume manufacture. Our activities cover a range of market sectors including passenger car, commercial vehicle, motorsport, motorcycle and o

Ricardo Deutschland GmbH

Germany

www.ricardo.com

Romax Technology Limited



Romax Technology provides software and services for gearbox, bearings and driveline systems to automotive, aerospace, off road, rail, marine, bearings and wind energy sectors worldwide. 14 of the world's top 15 auto manufacturers use Romax solutions to help them get better quality products to market faster and at lower cost.

Romax Technology Limited

United Kingdom
www.romaxtech.com

Rotor Clip LTD



Rotor Clip is the leader in the manufacture of tapered, constant section and spiral retaining rings meeting DIN, Inch, ANSI Metric and JIS standards, as well as TRUWAVE wave springs, ROTOR CLAMP hose clamps and custom designs. We support the market with first class Engineering Know-How, expert advice, reliability of delivery and high quality products. Rotor Clip is certified to ISO 9001, TS 16949 and AS9100.

Rotor Clip LTD

United Kingdom
www.rotorclip.com

Saint-Gobain Performance Plastics L+S GmbH



Saint-Gobain Performance Plastics L+S GmbH is your global partner for applying high-performance polymer materials to solve engineering challenges in advanced transmissions. Design, testing and manufacturing expertise in seal rings, axial plain bearings and radial plain bearings allow these engineered components to be used where their compact installation, low mass and easy assembly allow their high performance to be combined with economic e

Saint-Gobain Performance Plastics L+S GmbH

Germany
www.seals.saint-gobain.com

Schaeffler Technologies GmbH & Co. KG

SCHAEFFLER



The **Schaeffler Group** is a leading global integrated automotive and industrial supplier. The company stands for the highest quality, outstanding technology and strong innovative ability. The Schaeffler Group makes a decisive contribution to „mobility for tomorrow“ with high-precision components and systems in engine, transmission and chassis applications as well as rolling and plain bearing solutions for a large number of industrial applications.

Schaeffler Technologies AG & Co. KG

Germany

www.schaeffler.de

SCHERDEL GmbH



SCHERDEL, with its 29 locations worldwide, offers a full product range in the area of technical springs and metal forming with extensive knowledge in primary materials, spring calculation, production processes and testing methods. Our product portfolio comprises technical springs, stamping and bending parts, welded and assembled parts as well as in-house tool and machine construction. Our products can be found in power train applications, break systems and the car interior.

SCHERDEL GmbH

Germany

www.scherdel.de

Schondelmaier GmbH Presswerk



We are a proactive international systems supplier in the field of cold forming who secured its place in the world market with sophisticated products and commercial success. Our thinking and acting are always orientated to the satisfaction of our customers. The employees have an essential share in the development of the company and an important role in our establishment.

Schondelmaier GmbH Presswerk

Germany

www.schondelmaier.de

Schunk Sintermetalltechnik GmbH



Our company is represented at the booth of the Powder Metal Gearbox Initiative.

Schunk Sintermetalltechnik GmbH

www.sintermetalltechnik.com

SEEGER-ORBIS



SEEGER-ORBIS is the leading innovator and manufacturer of retaining and snap rings. We offer a large variety of industry standard products and custom parts. With engineering, manufacture, quality, sales & marketing, SEEGER-ORBIS is focused on supporting our customers from design concept to final assembly. The ultimate in quality and technically superior design support while remaining respectful of our environmental impact – that’s globally known as a “SEEGER®-Ring”.

SEEGER-ORBIS

Germany

www.seeger-orbis.de

SELZER Fertigungstechnik GmbH & Co. KG



SELZER is one of the first addresses within the automotive industry. We design and manufacture systems and components in the areas transmissions, engines and brakes. In particular SELZER have a large know how for internal shift controls and shift fork systems. From the plants in Germany and Brazil SELZER supplies the customers world-wide.

SELZER Fertigungstechnik GmbH & Co. KG

Germany

www.selzer-automotive.de

SETFORGE



SETFORGE is recognized as one of the leading suppliers of high-quality forged parts made out of all forgeable materials using all kinds of forging technologies like hot-forging, upset forging, warm and cold forging. In particular for the transmission business field SETFORGE offers solutions like hollow shafts, parts produced by using different technologies as well as drive components which are the results of a close partnership together with our customers.

SETFORGE

France

www.farinia.com

Shell Deutschland Oil GmbH



Shell Lubricants are a global leader in the development of fluid solutions for the automotive industry. We work with OEMs and component manufacturers to deliver ATF, MTF and fluids for CVT, IVT, differentials and double-clutch systems for on- and off-road applications, continually improving friction durability, component life and fuel efficiency.

Shell Deutschland Oil GmbH

Germany

www.shell.de

SHW Automotive GmbH



SHW Automotive is one of the leading European manufacturer for transmissions- and lubricating oil pumps as well as sintered parts for transmissions and engines. SHW presents the latest developments of regulated concepts for oil pumps. The division sinter production will give you an overview of new material as well as of the form parts for camphaser systems.

SHW is also represented at the booth of the '**Powder Metal Gearbox Initiative**'.

SHW Automotive GmbH

Germany

www.shw.de

AB SKF



The **SKF group** is the leading global supplier of products, solutions and services in the area comprising rolling bearings, seals, mechatronics, services and lubrication systems. The Groups service offer includes technical support, maintenance service, condition monitoring and training with focus on energy saving and sustainable solutions.

AB SKF

Sweden

www.skf.com

Smart Manufacturing Technology



Smart Manufacturing Technology is an internationally trusted provider of cutting-edge drivetrain design, analysis and simulation software as well as technical consultancy services. SMT has in-depth experience in all industries that involve gear-shaft-bearing systems. Increasing development efficiency, reducing costs and driving innovation has been the core outcome from all of its global projects.

Smart Manufacturing Technology

United Kingdom

www.smartmt.com

Sodecia FSG



As part of the Sodecia Group, **Sodecia FSG** is a well-known solution provider and manufacturer of precision fine blanking parts and powertrain products with manufacturing facilities in Europe and Asia Pacific. Our precision transmission products range from manual gearboxes up to dual clutch systems and our powertrain specialized products range from shift forks to park break systems.

Sodecia FSG

www.sodecia.com

www.fsg-automotive.de

Solvay



Solvay Specialty Polymers manufactures over 1500 products across 36 brands of high-performance polymers offering the widest range of specialty polymers in the world which fulfils critical requirements of global customers in Automotive, Aerospace, Chemical, Healthcare, Membranes, Plumbing, Semiconductor, Oil & Gas, Wire & Cable and Alternative Energy Markets.

Solvay Specialty Polymers

Italy

www.solvay.com

Sonceboz



SONCEBOZ develops, produces and sells electric motion solutions dedicated to AMT, DCT, CVT applications for the major global equipment manufacturers and OEM's in the automotive industry. Innovative mechatronic concepts and creative ideas are put into practice in partnership with the customer aiming to bring technological added value to the transmission or driveline architecture.

SONCEBOZ SA

Switzerland

www.sonceboz.com

SwePart Transmission AB



Our company is represented at the booth of the **Powder Metal Gearbox Initiative**.

SwePart Transmission AB

Sweden

www.swepart.se

Swoboda KG



Swoboda develops and produces in Germany, Czech Republic, the States, China and in Romania and is a worldwide leader in the technologically complex area of molding elements (high-precision metal-plastic composite parts). Swoboda develops and manufactures components and assemblies for the automotive industry that form the interface between mechanical parts and electronics.

Swoboda KG

Germany

www.swoboda.de

teamtechnik Maschinen und Anlagen GmbH



teamtechnik is an internationally leading company for innovative production technologies. Over 900 highly qualified employees have been developing and building intelligent and reliable automation solutions for assembly and functional testing. In transmission testing, the company supplies development test benches, interlinked serial test systems and complete EOL test facilities.

teamtechnik Maschinen und Anlagen GmbH

Germany

www.teamtechnik.com

TE Connectivity Germany GmbH



TE Connectivity is a \$ 14 billion global technology leader. Our connectivity and sensor solutions are essential in today's increasingly connected world. We collaborate with engineers to transform their concepts into creations – redefining what's possible using intelligent, efficient and high-performing TE products and solutions proven in harsh environments.

TE Connectivity Germany GmbH

Germany

www.te.com

teckentrup GmbH + Co. KG



Since 1938 the midsize family owned **teckentrup** has developed continuously towards a production specialist for stampings, coining, forming and deep drawing components with sophisticated requirements and for patent protected bolt locking products.

Many years of experience in process and application engineering for substituting fine blanking, machining, powder metal and cold heading create cost optimized solutions for our customers.

teckentrup GmbH + Co. KG

Germany

www.teckentrup.de

Torotrak



Torotrak Group offers a range of innovative fuel saving and performance improving technologies for various vehicle applications. The Group's three core technologies include: Torotrak traction drive, a gearless variable transmission system; V-Charge variable ratio supercharging, offering efficient power boost for downsized engines, and Flybrid KERS, a leading mechanical hybrid technology which offers a highly power dense, affordable and durable alternative to electric hybridisation.

Torotrak

United Kingdom
www.torotrak.com

Tremec



Torque transfer solutions from **TREMEC** are found in products ranging from supercars and high-performance sports cars to severe duty, vocational and commercial vehicles worldwide. The portfolio includes manual and automated RWD transmissions, dual clutch transmissions, gears, shafts, clutches, shift controllers, synchronizers, and mechatronic systems with integrated clutch systems and control software.

TREMEC

USA
www.tremec.com

Tribco, Inc.



Tribco manufactures Braketex®/Clutchtex® – the world's ONLY 100 % Kevlar® fibered Textile polyimide composite friction lining. It lasts 3 to 5 times LONGER than conventional linings, offers higher energy capacity, withstands higher temperatures and pressures to deliver higher torque. It is ideal for wet and dry clutches, transmissions, brake plates and other friction applications. Tribco's lining also is nonabrasive and won't damage flywheels, rotors and drums.

Tribco, Inc.

USA
www.tribco.com

UNICK CORPORATION



Established in 1971, **UNICK** today produces components for the automotive industry with more than 700 employees in its homeland Korea as well as in China. UNICK supplies hydraulic solenoid valves for automatic transmissions & oil pump to the main Korean OEMs. In addition UNICK also produces EGR-valves & EGR-Bypass valves. UNICK holds certification in accordance to TS16949, QS9000, ISO9001, ISO14001, OHSAS18001, CMMI level 3.

UNICK CORPORATION

Korea

www.unick.co.kr

VACUUMSCHMELZE GmbH & Co. KG



VACUUMSCHMELZE (VAC) with 4,100 employees worldwide, thereof 1,450 employees in Hanau, designs, produces and markets advanced materials, particularly with magnetic, but also other physical properties as well as related products. In over 50 countries VAC Group today achieves annual sales of over 400 million euros and, with over 800 patents to the world's most innovative companies in the development of advanced industrial materials. For more information, see www.vacuumschmelze.com ® = registered trademark of VACUUMSCHMELZE GmbH & Co. KG

VACUUMSCHMELZE GmbH & Co. KG

Germany

www.vacuumschmelze.com

Valeo



Valeo is an automotive supplier, partner to all automakers worldwide. As a technology company, Valeo proposes innovative products and systems that contribute to the reduction of CO2 emissions and to the development of intuitive driving. Valeo is listed on the Paris Stock Exchange and is a member of the CAC 40 index.

For more information about the Valeo Group and its activities, please visit our website www.valeo.com

Valeo

www.valeo.com

Victrex Europa GmbH



Victrex, the innovative world leader in high-performance polymer solutions, supports engineers in developing cost-effective, durable transmission components enhancing fuel efficiency and driving comfort. For more than three decades, the industry has specified VICTREX® PEEK-based solutions for components like thrust washers, seal rings, and other elements to improve reliability, fuel efficiency and driving comfort.

Victrex Europa GmbH

Germany

www.victrex.com

Vicura AB



Our company is represented at the booth of the Powder Metal Gearbox Initiative.

Vicura AB

Sweden

www.vicura.se

Walter Henrich GmbH



Walter Henrich
Metallverarbeitung

The middle-class family business **Walter Henrich GmbH** has specialized in the development and production of precisely cold-formed tubular shafts. The Walter Henrich GmbH offers you the following advantages:

- support in the development of new products
- optimization regarding development time and costs through the own manufacturing of samples and prototypes
- use of efficient production technologies for chipless and chipping processing

Walter Henrich GmbH

Germany

www.walter-henrich-gmbh.de

WEBO Werkzeugbau Oberschwaben GmbH



We are an innovative tooling company and technology leader in the tool and process technology for the forming production of components used in the automatic and hybrid transmission as well as in the powertrain. In addition to component and tool design services, mechanical part testing units and simulation we offer our customers complete tool and process solutions for competitive production.

WEBO Werkzeugbau Oberschwaben GmbH

www.webo.de.com

Winkelmann Powertrain Components GmbH & Co. KG



The company "**Winkelmann Powertrain Components**" produce among other things drive elements and driveline components by different non-cutting forming, for example Grob-forming, profiling, deep drawing and other innovative manufacturing processes. The company is subsidiary company of the "Winkelmann Group", are established suppliers of the automobile industry, construction equipments industry and agriculture industry, and belong to the world market leaders in these markets.

Winkelmann Powertrain Components GmbH & Co. KG

Germany

www.winkelmann-automotive.com

ZF Friedrichshafen AG



ZF is a global leader in driveline and chassis technology as well as active and passive safety technology. The company, which acquired TRW Automotive on May 15, 2015, is now represented at about 230 locations in some 40 countries. ZF is one of the top three automotive suppliers worldwide.

ZF Friedrichshafen AG

Germany

www.zf.com

Zoerkler Gears GmbH & Co KG



Zoerkler – the spirit of precision

From exactly made gears to high quality bevel gears and spur gears offers Zoerkler precisely manufactured gearboxes and drive systems worldwide.

Beginning the development with production of prototypes and ending with testing of mounted series production transmissions stands Zoerkler for highest precision, quality and safety.

Zoerkler Gears GmbH & Co KG

Austria

www.zoerkler.at
