

Auto-Kabel Group

Any information in this presentation has been derived from our actual knowledge based on our developments and our experiences without any relationship to any specific application or use. The might not be deemed "presentation" in a legal context or understanding and do not contain any recommendation for specific applications. The information is at any time subject to our changes or amendments at our discretion. Each application or use or exploitation of the information is in the sole responsibility of the user. We do not assume any responsibility, liability or warranty of any kind or nature. The information does not imply or contain a legal statement or acknowledgement. The information is protected by our Industrial Property Rights and are to be deemed our business secrets. Any not expressly in written form authorized exploitation is prohibited. We reserve all our rights.

SiThis document including cover sheet comprises 18 pages. It is in its entirety one homogeneous documents and is valid only in its entirety. It remains exclusively our property.

PP - Rel.: J.S.

Date: September 2018



Overview

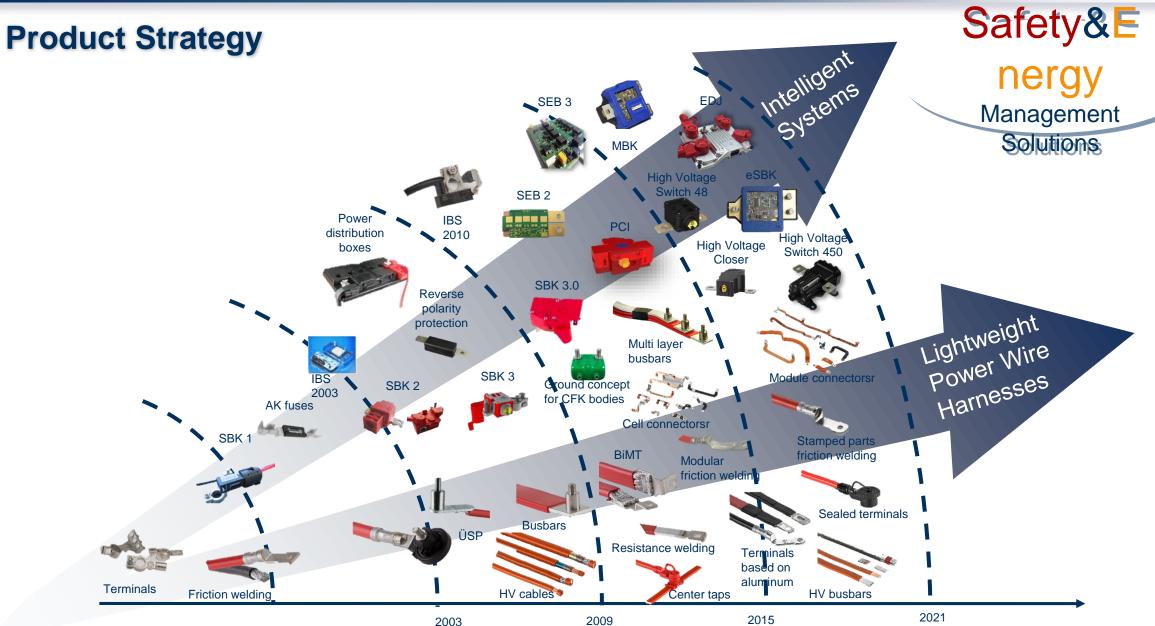


Auto-Kabel Group, overview (source: AKMG)

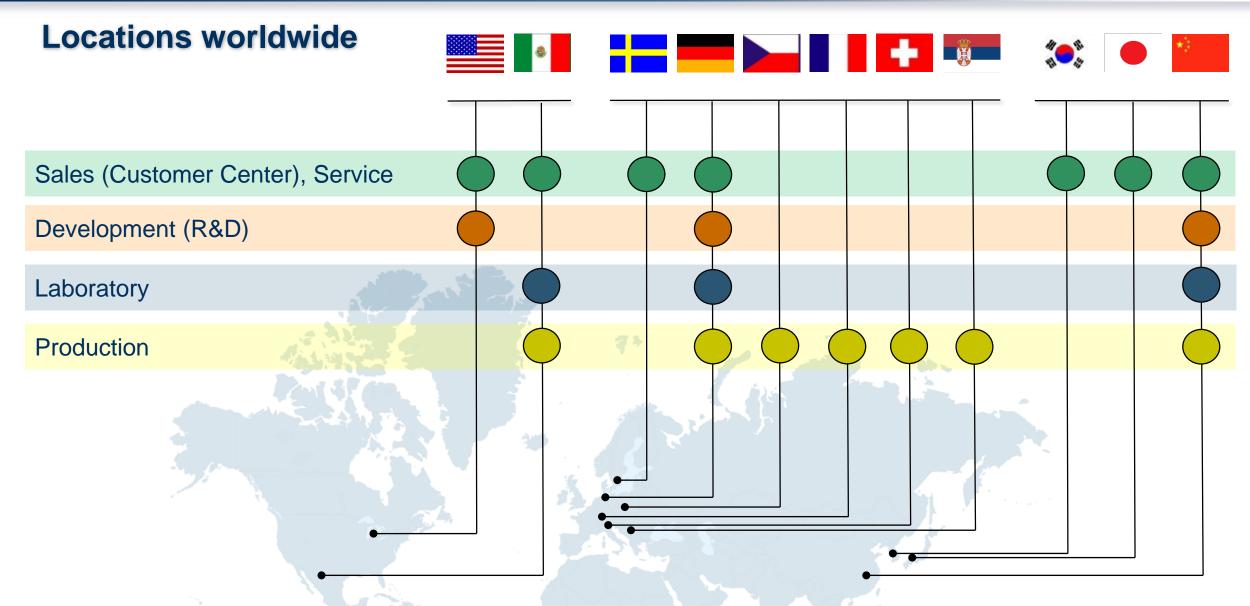
- Privately owned company, founded 1930 in Cologne (NRW)
- Globally operating venture, 9 production facilities in 7 countries on 3 continents
- ► Quality Standard IATF16949
- More than 80% Tier-1 OEM suppliers
- ► Product focus: innovative product solutions in the scope of battery cables and cable routing as well as of electrical safety for all voltage levels in vehicles
- Development partner for customized battery cables and functional components for OEMs and Tier-1 since 1970
- Global technical leader in aluminum battery cables

free for distribution

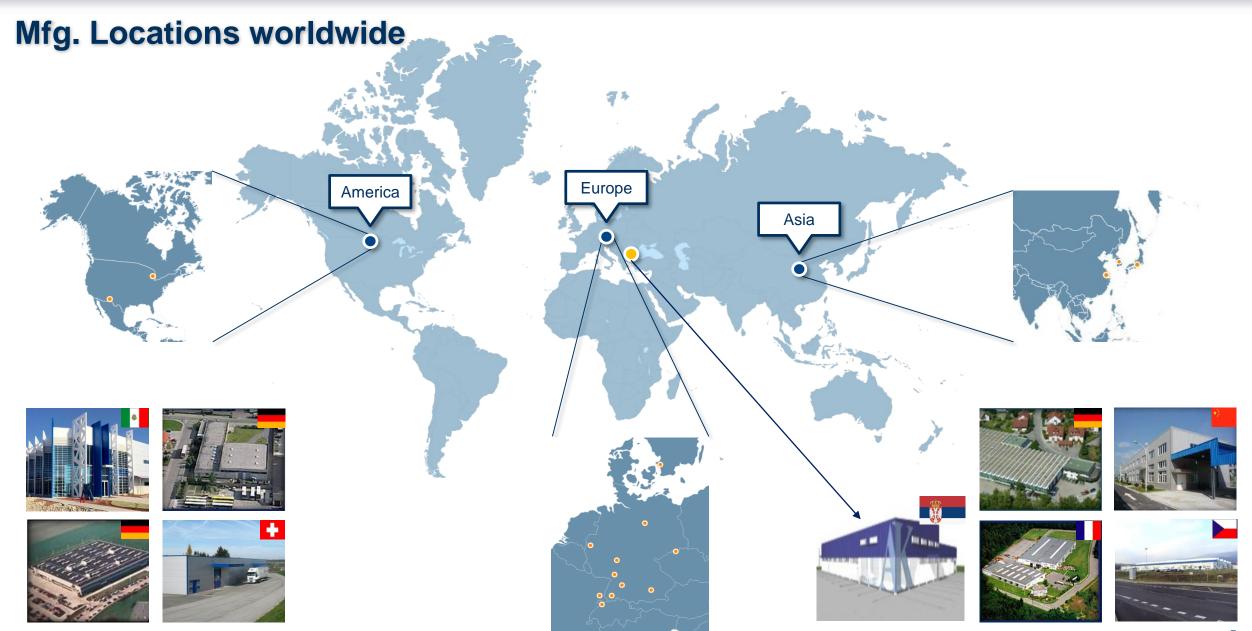












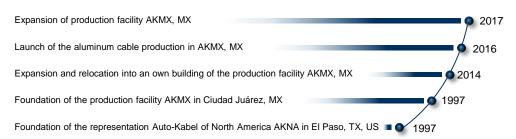


Auto-Kabel de México S.A. de C.V. - AKMX





History



Header DUNS - 124029161 Manufacturing DUNS - 816329254

Ciudad Juárez, Chihuahua, México

Size: 240K ft² (22K m²) **Employees: 658**

Main Customers:

- General Motors
- DAG
- BMW
- Ford
- Audi
- Honda
- Daimler Trucks

Activities:

- Production
- Prototype
- Laboratory
- Sales (Customer Service)

Main Products:

- Cu and Al Battery Cables Assemblies
- HV Battery Cable Assemblies
- Cu Battery Interconects
- Cu Ground Straps Assemblies
- Al Busbar Assemblies
- PFC's Assemblies
- PVC and PUR Extrusion Line (Cu and Al)



Product Portfolio & Service: Cables & Components

Harnesses













Cables















Cable components















Connection technologies



















- Development of specific components
- Design and dimensioning of starter-/ alternator harnesses
- Development support for new electrical system topologies
- Individual applications with high flexibility





Product Portfolio & Service: HV-Cables and Components

HV-Cables (with and without shielding)















HV-Busbars (cell- and module connectors)















HV-Components





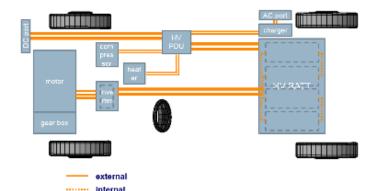












- ► Long term HV-experience
- Wordwide cooperation with OEM'S and Tier1
- Low contact resistance based on intermetallic connection
- Customized HV-systems
- Worldwide availability thanks to worldwide customer proximity
- HV-Cables out of Copper and light weight Aluminum



Product Portfolio & Service: Functional Components

Fuses 12 V

- pyrotechnical
- classical













Fuses/Switches 48 V, 450 V



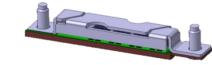






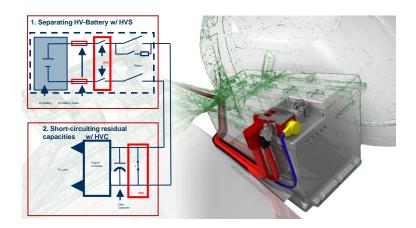
Mechatronic functional components











- Research & Development of mechatronic functional systems (switches, sensors, energy storage systems)
- Support in energy distribution problems
- Support in analyzing, optimizing, redeveloping of electrical systems
- Willingness and power to take new approaches and to review the "status quo" together with our costumers
- Power of innovation as driver for improvement

status:



Product Portfolio & Service: Laboratory

Development related tests













Verification tests





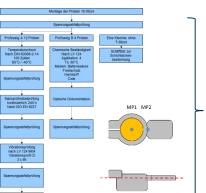




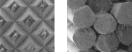




Analysis



















Tasks:

- Advice and service
- Tests to support tasks of the development
- Verification test to archive (DV/PV)
- Benchmarks, endurance runner tests, field analysis, failure part analysis
- Training of AK employees



AK Group Certifications

IATF 16949:2016



ISO 14001:2015



ISO 50001:2011



Customer Awards / Certifications

Supplier of the Year Award by GM (2006, 2008)



Supplier Quality Excellence Award by GM (2014, 2016, 2018, 2019)



Excellent Innovation Supplier Award by SAIC (2016)



Excellent Quality Supplier Award by SAIC (2018)



Gold Supplier Status Award by GM (2014, 2015)



QSB Certification by SGM (2015)



Excellent Supplier Award by BBAC (2015, 2016)



Q1 Supplier Award by FORD (2009 - 2017)



Cordova Bridge

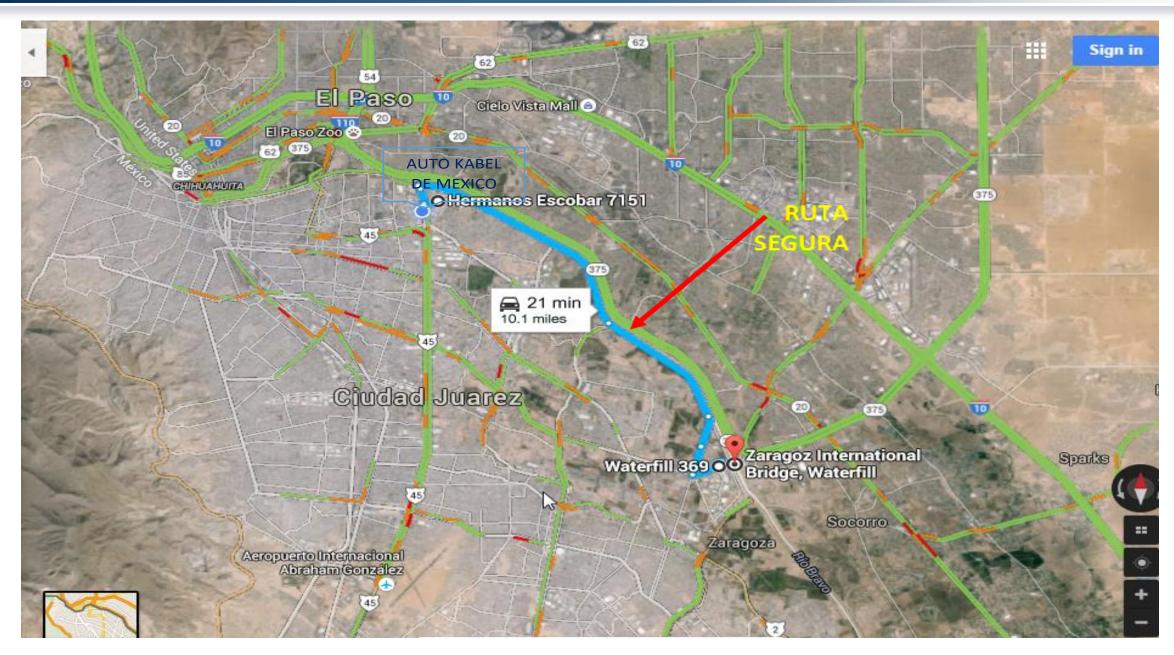


Secure and fast access to bridges of customs



Zaragoza Bridge





POLITICA

En Auto Kabel de México

Estamos comprometidos en lograr y mantener una empresa LIBRE DE DROGAS promoviendo la seguridad de todos nuestros empleados, clientes, proveedores e intalaciones ante cualquier amenaza, actividad ilícita o de terrorismo.

POLICY

In Auto Kabel of México

We are committed to achieving and maintaining a DRUG FREE company promoting the safety of all our employees, customers, suppliers and facilities against any threat, illegal activity or terrorism.





Thank You