TEKNIA

2017

www.tekniagroup.com

TEKNIA GROUP

Index

- Teknia Group · Business Units, Locations, Facts & Figures, Customers — Slide 3 - 6
- Teknia Automotive — Slide 7 - 9
- Teknia Machining Division — Slide 10
- Locations, Facts & Figures, Customers, Core competences — Slide 11 - 15
- Technologies — Slide 16 - 17
- Products — Slide 18
- Quality — Slide 19
- Teknia Technologies — Slide 20 - 27
- Management and Contacts — Slide 28 - 29

Teknia Group Business Units

TEKNIA AUTOMOTIVE

- Quality Commitment
- Cover our customers needs
- Applied technologies thinking in our customers

TEKNIA TECHNOLOGIES

- Our know-how closer to you
- Innovating to lead
- Making the world a better place

Corporate Video

Teknia Group Locations

AFRICA
Morocco - Production

AMERICA
Brazil - Production
Mexico - Production
USA - KAM and Production

ASIA
China - Tooling purchasing
South Korea - KAM

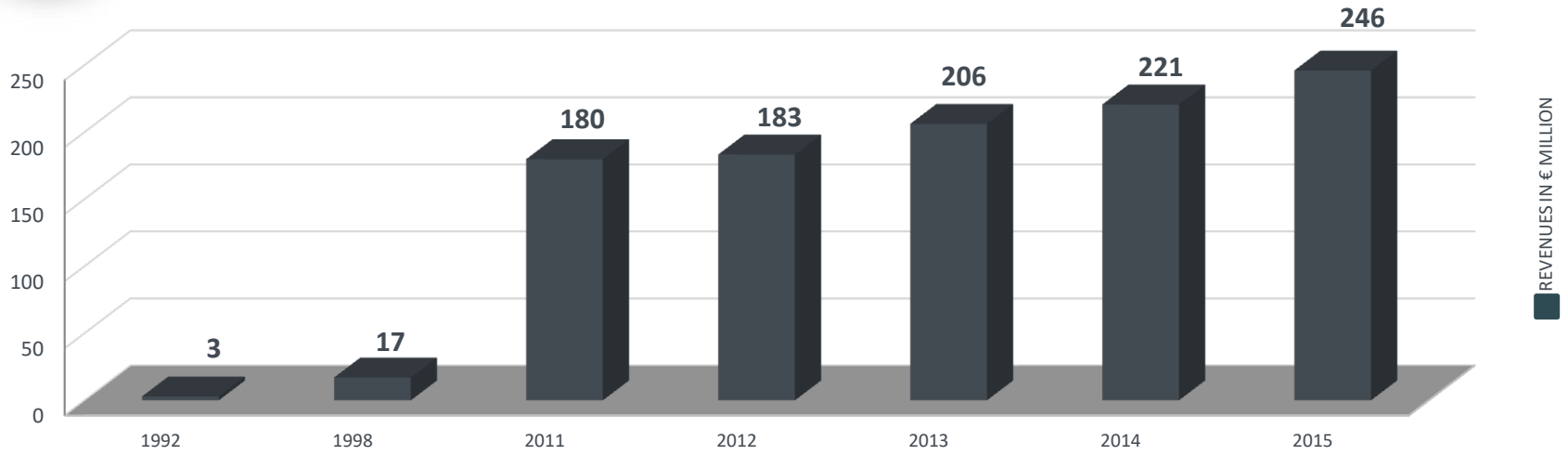
EUROPE
Czech Rep. - Production
Germany - KAM
Poland - Production
Serbia - Production
Spain - Headquarters and Production

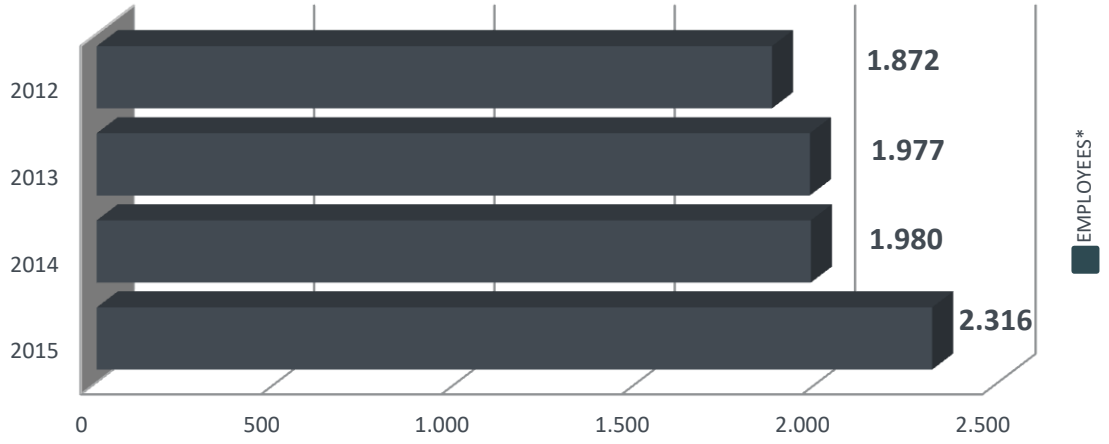
Headquarter
Commercial Office
Technologies
Machining Production Plant
Metallic Production Plant
Plastic Production Plant

*Target Markets in Strategic Plan

TEKNIA 2017

Facts & Figures





*Personnel excluding Temporary Agencies

Main Customers

- **Main OEM customer:**

- **Main Tier1 customer:**

TEKNIA
AUTOMOTIVE

Advantages

Footprint:

- Teknia Automotive, a multinational group, has more and more of a global footprint, being present in the most important automotive markets. In many cases you may have the same contacts for equal projects worldwide which saves wasted time and cost.

Technologically:

- Machining, Plastics and Metallic technologies worldwide. Managing your projects all the way from the concept phase until SOP.
  Definition and design of the best productive manufacturing processes for your products.
  Know how shared across all plants worldwide.
  R&D activities also available in these geographical locations.

Pricing and Quality:

- Through the technological sharing the best manufacturing processes are designed to obtain the most optimum quality level with the lowest possible manufacturing costs.

Solvency:

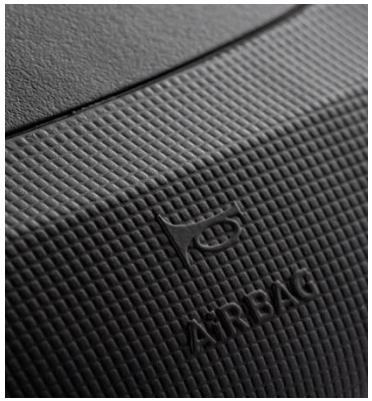
- Our customers will benefit from having a supplier which is backed by a solid and stable financial group.

Teknia Automotive Divisions

Machining Division

Metallic Division

Plastic Division

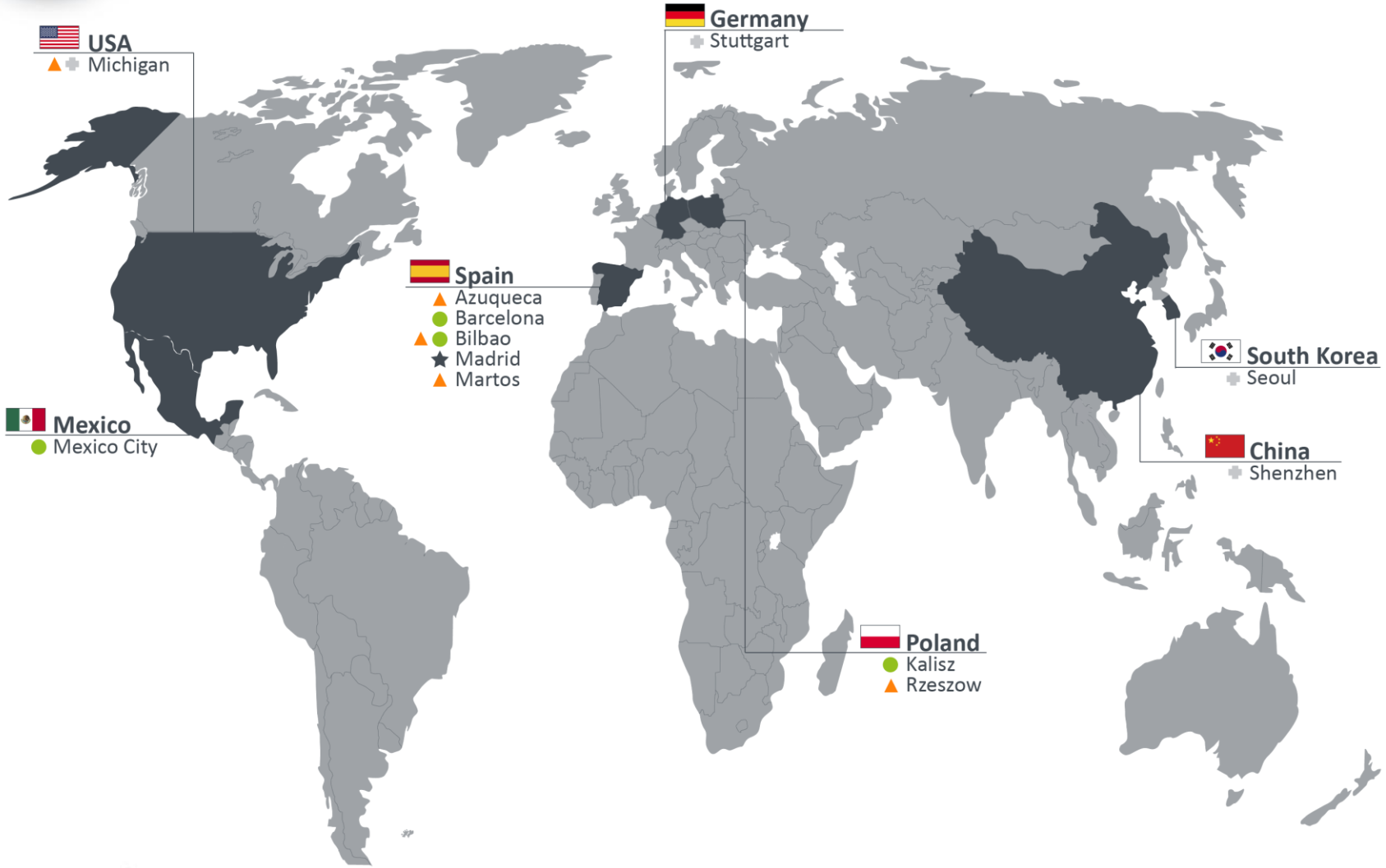


TEKNIA AUTOMOTIVE

MACHINING DIVISION

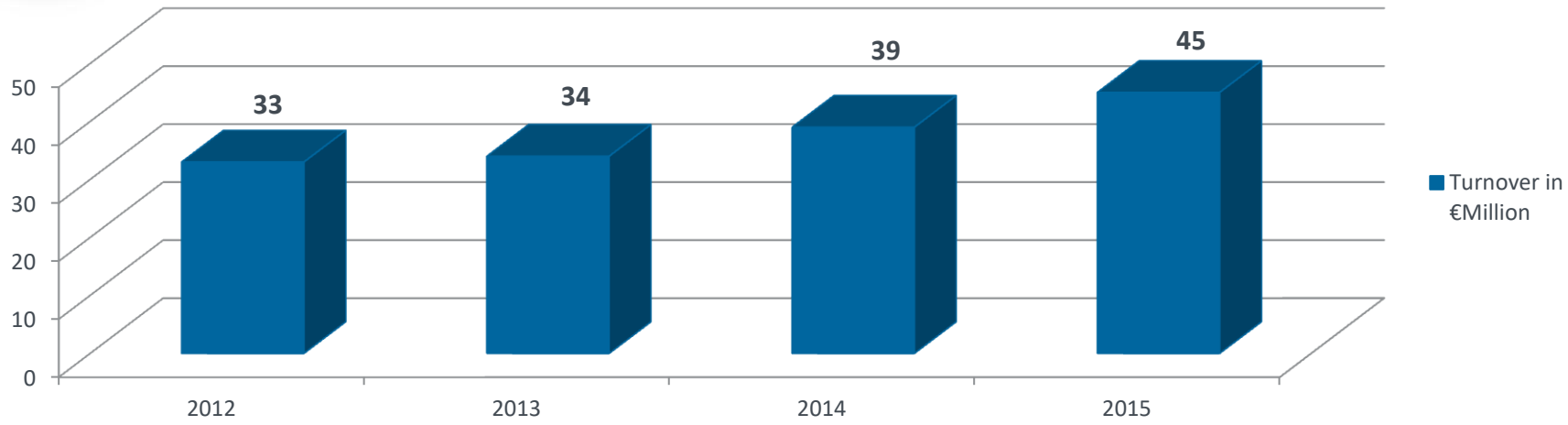
MACHINING DIVISION

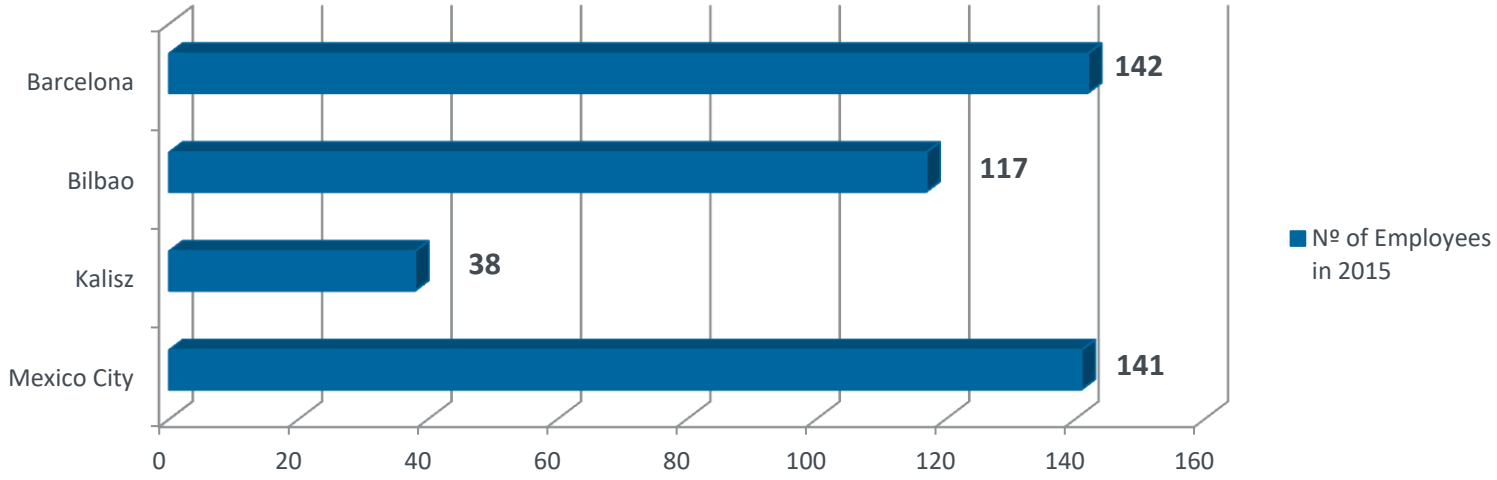
Machining Division Locations



★ Headquarter
Commercial Office
▲ Technologies
● Machining Production Plant

Facts & Figures





Aggregate sales for the 2015 period based on company's internal data

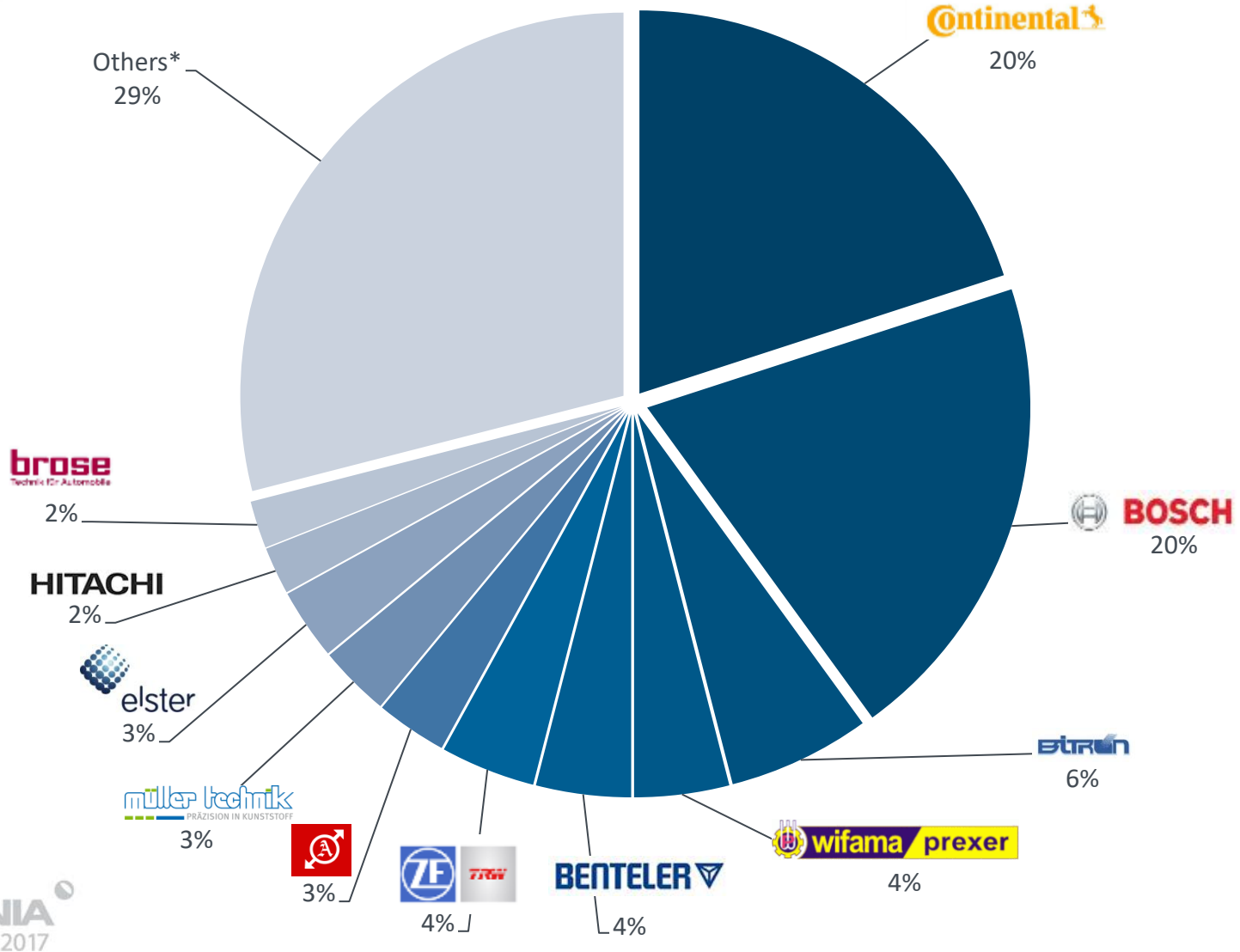
Main Customers

- **Main OEM customer:**

- **Main Tier1 customers:**

MACHINING DIVISION

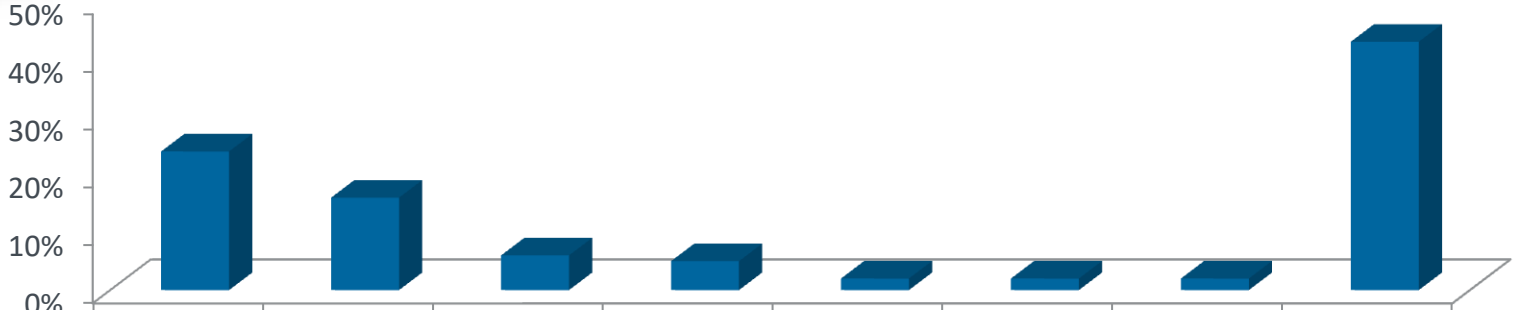
Customer Share



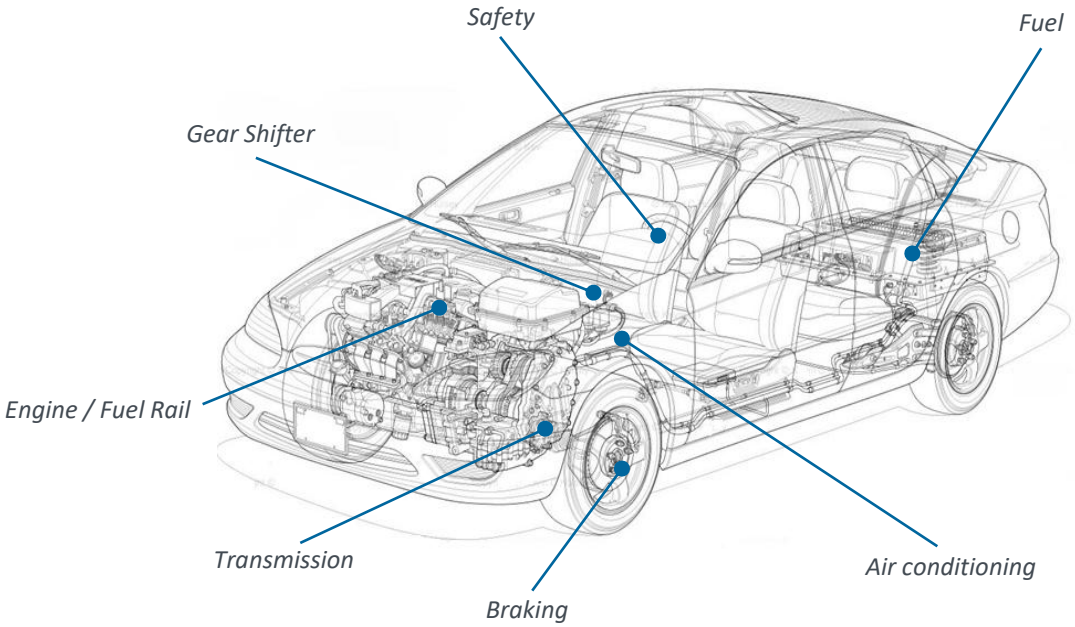
* Include VARIOUS < 2M

Aggregate sales for the 2015 period based on company's internal data

Core Competences



	Brake System	Powertrain	Home Appliances	Transmission	Suspension	Air conditioning	Power tools	Others
%	24,0%	16,0%	6,0%	5,0%	2,0%	2,0%	2,0%	43,0%



MACHINING DIVISION

Technologies

Type of Machines in the Machining Division

CNC Multi-spindle	CNC Single-spindle	Mechanical Multispindle	Transfer Machines
6 & 8 Spindles	1 Spindle	6 & 8 Spindles	6 & 12 Stations
INDEX, SCHÜTTE	TORNOS, INDEX, TRAUB	SCHÜTTE,TORNOS,WICK MANN	W&G,MAUTO,
18 Machines	24 Machines	80 Machines	2 Machines

Second Operations

- Stamping&folding
- Grinding
- Deburring
- Final inspection 100% (automatically, manually)
- Threading
- Cleaning
- Super finishing

MACHINING DIVISION

Technologies

Activity

- Precision metallic components primarily for automotive industry

Processes

- Bar - turning
- Second operations in transfer machines
- Grinding and deburring
- Small - scale sub-assemblies
- Stamping and folding

Specialization

- High precision and safety parts
- High standard surface finishing and cleanliness

Product areas

- Brake systems (actuation, foundation)
- Air conditioning (nippels, connectors)
- High pressure fuel systems (valves, plungers)
- Gear boxes, steering systems, clutches, inserts, shifters, pins
- Electrical and household appliances

Production specifications

- Bar diameters: from 4 to 58 mm
- Length: max. 440mm (Monospindle), 160mm (Multispindle)
- Material: aluminium, carbon, stainless steel, brass

MACHINING DIVISION

Product Families

- Sensors & Actuators

- Bleedscrews

- Gear Shifters

- Fuel Systems

- Brake Systems

- Brake Systems

Quality

- The Group's commitment is to quality and the environment, in accordance with the international standards ISO 14001 and ISO TS16949. The quality policy is designed to meet the requirements of the major OEMs and Tier1 customers. All our plants are certified with ISO/TS 16949 and some of them with ISO 14001.

- Our demand for excellence has lead us to commit to a “zero defects” policy, supported by several key systems:
  - Quality tools
  - PDCA
  - Lessons learned
  - Continuous improvement

- The zero defects systems are implemented and applied across the organization.

ISO 14001
BUREAU VERITAS
Certification

ISO/TS 16949
BUREAU VERITAS
Certification

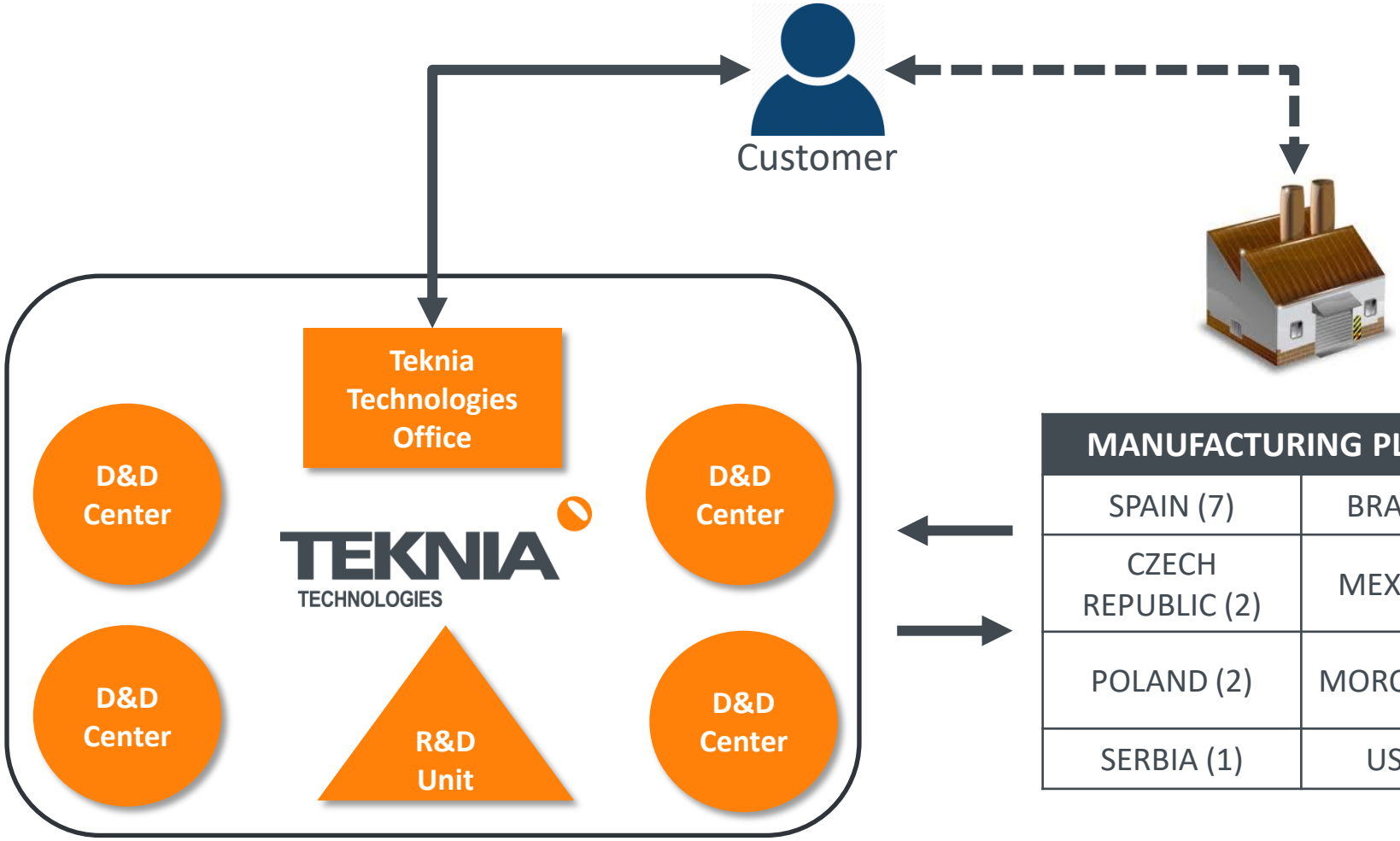
TEKNIA
TECHNOLOGIES

Engineering Strategy and Vision

Teknia Technologies is the result of a new Teknia global engineering strategy and vision

VISION MISSION	Lead Teknia Group towards its technological excellence. Collect, develop and share Teknia know-how and expertise within the Group.
WHAT	Business Unit concentrating Teknia Group know-how to lead, organize and execute internal and external projects. R&D and Engineering together for a better service.
HOW	Main local point of contact (Offices) managing access to specific Design & Development Centers for Strategic Products (Reservoirs, Airbag Covers, Wipers,..) and R&D Units.
WHERE	Worldwide, next to our customers and our plants.

Teknia Group's Organization focused on our Customers



MANUFACTURING PLANTS	
SPAIN (7)	BRAZIL (3)
CZECH REPUBLIC (2)	MEXICO (2)
POLAND (2)	MOROCCO (1)
SERBIA (1)	USA (1)

Structure Description

Teknia Technologies Office

Your main point of contact for Teknia Technologies.
Built to support and care for your success.
Commitment and Reactivity.

D&D Centers

Teknia expertise and know-how hub.
Built to deliver technological excellence.
Effectivity and Reliability.

Strategic Products

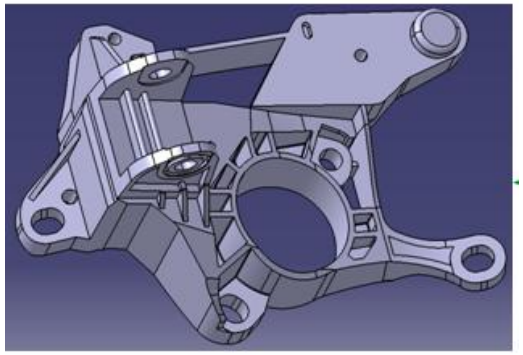
- Reservoirs & Tanks
- Airbag Covers
- Metallic Tubes
- Transfer Technology
- Wipers
- Brake Pistons
- W. Shafts

R&D Units

Teknia pool of innovation.
Built to imagine and create future.
Creativity and Proactivity.

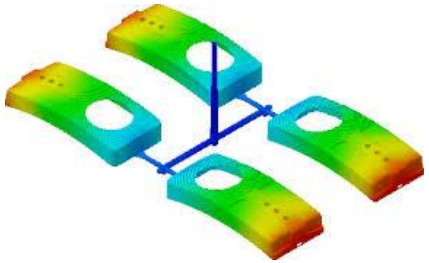
Product & Process Development Capabilities

DESIGN AND DEVELOPMENT OF NEW PRODUCTS



- The definition of technical specifications for new products.
- Failure Modes and Effects Analysis (FMEA)
- CAD design of plastic and metal parts (CATIA V5)
- Conceptual and detailed design.
- Material selection and manufacturing technology.
- Estimation of production, product and tooling costs

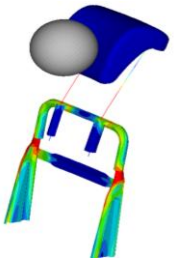
PRODUCTS SIMULATIONS



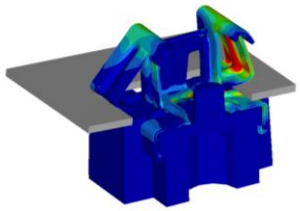
- Mechanical: Static, dynamic and impact analysis of the part versus actual requests to check product specifications (ABAQUS).
- Thermal: Analysis of systems under defined thermal conditions, temperature ranges and thermal resistance of system components. (FLUENT).

PROCESS SIMULATIONS

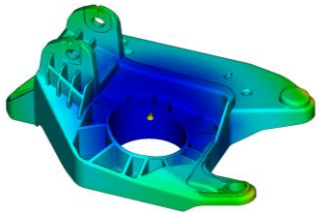
- Injection: MOLDFLOW, MOLDEX 3D
- Production optimizer: QUEST (Delmia)



Impact analysis



Non linear analysis



Plastic injection analysis

Feasibility stamping analysis

R&D Structured Development Process

Concept	Definition	Development	Qualification	Launch

Design Review Product Requirements*

Design Review Product Design*

Design Review Design Verification*

Design Review Validation and Transfer*

Customer Voices

Business Voices

Customer Requirements

Operational Requirements

Product Requirements → Product Specification → Verification Units → Validation Units

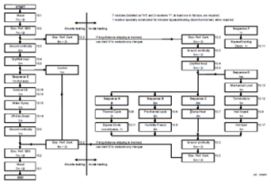
Process Requirements → Process Specification → Process Validation

Manufacturing Engineering Prototypes

Pilot Manufacturing

Operational Requirements Review

Operational Specifications Review



Engineering Services Offers Details

Teknia Technologies Office

Sustaining Engineering →

Your day to day support.
On-site engineers on a T&M basis.
Flexibility and Open-mindedness.

D&D Centers

Turnkey Projects →

Your expertise and know-how hub.
Delivery of an entire Project.
Risk Sharing and Know-how access.

R&D Units

Work Packages →

Your outsourced experts.
Delivery of specific mini-Project.
Capabilities and Objectivity.

Benefits for our Customers

Access to a robust source of Engineering Services

Established foundations for a higher level partnership

Reliability on Teknia Group as a supplier of reference

MACHINING DIVISION

Management Contact Details

Division Manager		**Michel Peña**	michel.pena@tekniagroup.com
Division Commercial Director		**Martín Errasti**	martin.errasti@tekniagroup.com
Division Technical Director		**Javier Bañobre**	javier.banobre@tekniagroup.com
Division Quality Director		**Sergio Fernandez**	sergio.fernandez@tekniagroup.com
Global Purchasing Director		**Rafael Morales**	rafael.morales@tekniagroup.com
Chief Technology Officer		**David Martínez**	david.martinez@tekniagroup.com

Worldwide Contacts

Commercial
europe@tekniagroup.com
worldwide@tekniagroup.com
northamerica@tekniagroup.com

Financial and Investors
investors@tekniagroup.com

Technologies
technologies@tekniagroup.com

PR and Media
marketing@tekniagroup.com

TEKNIA
2017

Thanks for your attention!