

COMMITTED WITH INNOVATION
CONNECTED TO THE FUTURE



Corporate Presentation

2017

Group Highlights

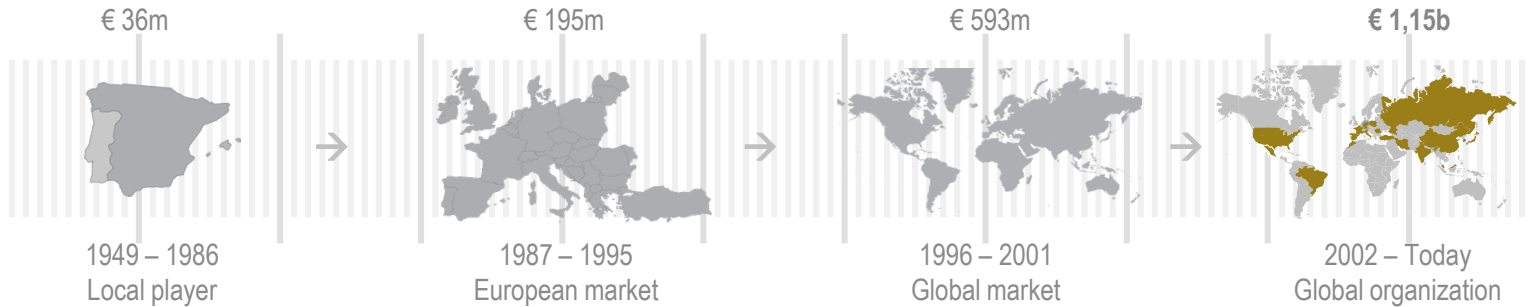
-  Automotive Tier 1
-  Established in 1949 in Barcelona
-  Global partners with Panasonic
-  Decades of experience supplying all major OEMs
-  Global company
-  6.5% of sales invested in R&D



€ 1,15b sales

10,000 employees

In 19 countries



Global Footprint

Portugal

Porto

Spain

Barcelona
Soria
Sant Guim

France

Dieuze
Le Neubourg

Germany

Rüsselsheim / Köln /
Lindau / München /
Wolfenbüttel

Italy

Venaria Reale
Morcone

Poland

Dabrowa Gornicza

Turkey

Bursa
Gemlik

USA

Detroit (Mi)
Cookeville (TN)
Shelbyville (KY)

Mexico

Salinas-Victoria
Escobedo

Brazil

Sao Paulo

Korea (Joint -venture)

Gyeongsangbuk-do

Japan

Tokyo - (Office)

China

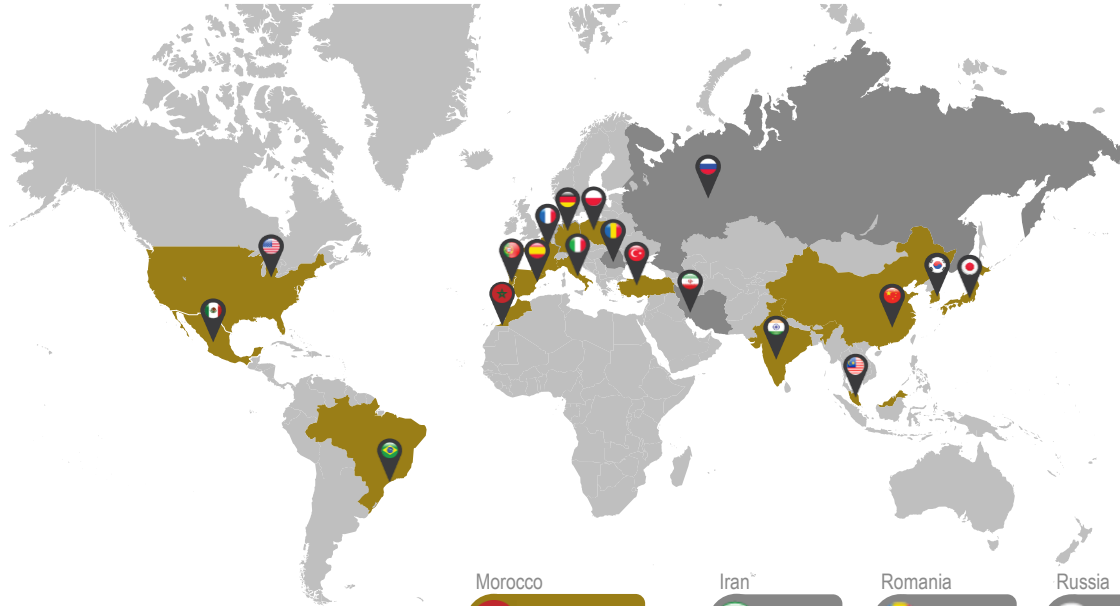
Taicang
Chongqing
Shenyang

Malaysia

Kuala Lumpur

India (Joint -venture)

Pune (Two plants)
Pant Nagar



Commercial Office
Technical Center
Plant
Research

Morocco

Sala Al Jadida

Iran*

License agreement

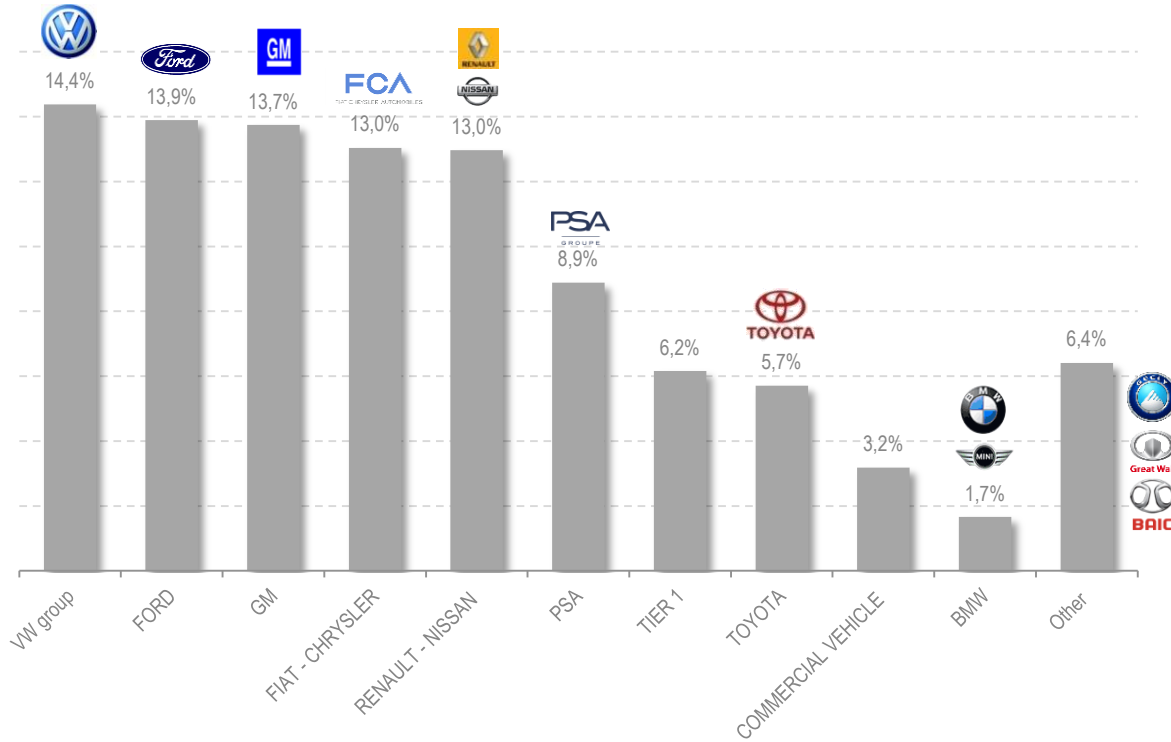
Romania

License agreement

Russia

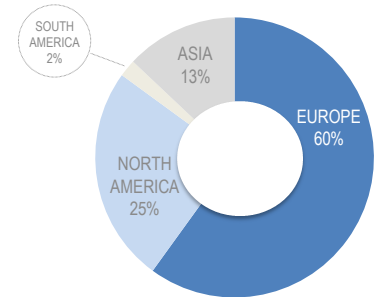
License agreement

Customer Diversification



- Ficoso has a diversified customer base, as a partner to all the major global OEMs, not being dependent to a single customer or market

FICOSA SALES BY REGION



Source: FY-2016 consolidated data

A higher technological company



Business Units

REAR VIEW SYSTEMS



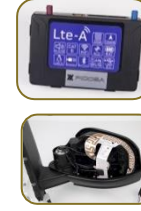
- Exterior Mirrors
- Interior Mirrors

UNDERHOOD SYSTEMS



- Washer Systems
- Sensor Cleaning System

ADVANCED COMMUNICATIONS



- Communication Modules
- Integrated Antennas
- Smart Connectivity Modules

COMMAND & CONTROL



- Shifter systems
- Parking Brake Systems

COMMERCIAL VEHICLES



- Exterior Mirrors
- Interior Mirrors
- Camera Monitoring Systems
- Communication Modules

eMOBILITY



- Battery Management Systems
- On Board Charger

DOOR & SEAT SYSTEMS



- Comfort
- Light Cables



ADAS



- Cameras
- Camera Monitoring Systems
- Surround View System

Rear-view Mirrors Business Unit



Exterior rearview mirror



Intelligent rearview monitoring system



Exterior rearview mirror



Intelligent rearview monitoring system



Exterior rearview mirror With Light Signals



Light signals into rearview mirrors



- Ficosa produces 24 million mirrors per year growing to 28 million mirrors in 2021
- Global Tier 1 supplier with WW engineering & manufacturing footprint
- Among top 3 leading mirror suppliers
- Leading technological change to intelligent vision

Command and Control Business Unit



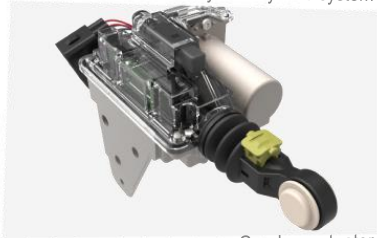
Joystick shift-by-wire system



Rotary shift-by-wire system



Styling part



Gearbox actuator



ATX Automatic shifter



MTX Manual shifter



- Since 1992 developing and producing manual, automatic and shift by wire systems
- Full system approach
- Embedded mechatronic solutions
- High degree of integration

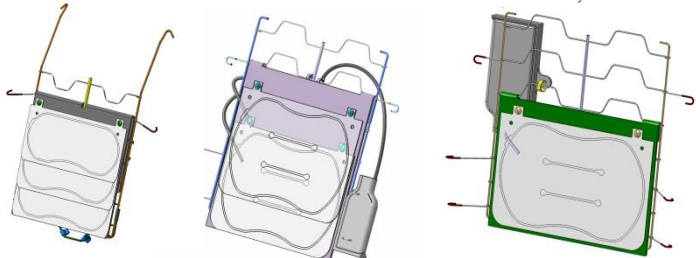
Door and Seat Systems Business Unit



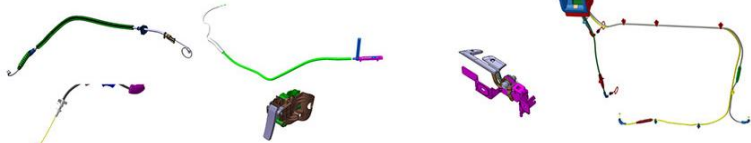
Cushion and backrest supports



Systems for doors



Lumbar support systems



Door cables

Hood cables and Handles

Trunk/Fuel cables
& Handles

Seat cables & Handles



- Worldwide leaders in light cables
- Comforts expertise in steel and plastic materials
- Innovative solutions in Lumbar systems
- Fully integrated process

Underhood Business Unit



Windshield and headlamp washer system



Sensor and camera cleaning



Windshield and headlamp washer tank



Wash pumps



Telescopic nozzles for headlamps



- Global Tier 1 supplier with worldwide engineering and manufacturing footprint
- Full system approach
- Main processes & components fully vertical integrated
- Leading technological change to assure safety and vision performance of new automotive sensor applications through new cleaning solutions

Commercial Vehicles Business Unit



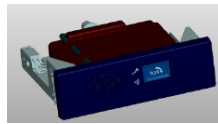
Rear-view mirrors to Class II until Class VI



Telescopic mirrors for agricultural and construction equipment



Specific V2V modules for trucks



Coach, city bus and trail Mirror solutions with integrated antennas



Rear view cameras



- Expertise on rear-view mirrors technology for heavy duty and medium duty trucks
- Wide product portfolio for all passenger transportation vehicles - coach, city bus and trail
- Global leader in rear view systems for agricultural and construction equipment
- ADAS solutions for trucks with integrated detection features specific.
- TCU's for truck platooning and ERA GLONASS connectivity modules

Advanced Communications Business Unit



Communication modules



V2X Systems



Integrated antenna



Emergency call HMI



Smart connectivity module – Shark fin



Smart connectivity module – Hidden antennas

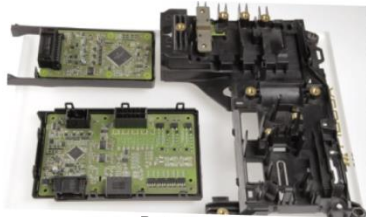


- Expertise in automotive connectivity
- 6 Telematic platforms experience
- + 2 Million Telematic units in the market
- Customers: 8 OEMs. Award of 2 programs with 2 new OEMs

eMobility Business Unit



Battery management system



Battery management system



Battery management controller extended



Battery module and cell controller



High voltage box



On board charger



- Expertise in automotive electrical, hybrid and hydrogen vehicles
- Developing and producing for 5 OEMs
- ASIL-C software compliance as per ISO26262
- EMC & electrical safety compliance lab, high voltage lab & HIL/SIL lab

ADAS Business Unit



Camera monitoring system - Display



Camera monitoring system - camera



Camera monitoring system - Fender



Machine vision



Surround vision - 360°



Sensor cameras



- Expertise in automotive vision systems
- Machine vision specialists in Germany
- Awarded for ADAS systems and 2 million cameras per year
- Customers: 5 OEM's

What's new in Ficosa



State of the Art Technical Center in Barcelona

- 200 New Engineers Hired in 2016
- 942 Engineers World Wide (≈10% of Group Employees)



New Technological Products Sales Achievement

- First Company WW to be awarded with a CMS for a luxury OEM Brand
- €320 M euros awarded program of Cameras for a German OEM
- Ficosa-Panasonic awarded with a €800 M On Board Charger for EV (luxury Brand)
- 2 New OEM Customers in Car Connectivity
- Laserscanner Cleaning



New Turning Lights Activity in the Soria Plant

- Fully Vertical Process Integrated



New “state of the art” plant in Cookeville, TN (USA)

- Fully Vertical Process Integrated



New Plant in **Shenyang (China)**



New Plant Enhancement in Poland for Die Casting and Command & Control



Business transfer to a **New Plant in Brazil**



ADASENS 100% ownership



Iran technical agreement



Malaysia new plant



New Plant in **Morocco**



Soria Plant – New Blinkers Activity



USA New Plant









Brazil New Plant



Adasens (Lindau - Germany)

Commercial Highlights

	Rear-view Systems	<ul style="list-style-type: none">• New Asiatic global customer• Awarded important regional platform in NA & 5 important global platforms of several OEMs• Awarded for 2 pre-developments of IRMS
	Command & Control	<ul style="list-style-type: none">• Awarded new Shift by Wire with gearbox actuator• Awarded AT shifter in China for global customer• Awarded first AT project with Asiatic OEM
	Underhood Systems	<ul style="list-style-type: none">• Selected for the Sensor Cleaning Pre Development in luxury brand (Rear Camera Water & Air, Front Camera Ring Nozzle, Laserscaner Telescopic)• First Nomination for luxury brand Telescopic Laserscaner Cleaning
	Advanced Communications	<ul style="list-style-type: none">• Antenna supplier for Tesla Model X and S• Awarded Telematic Control Unit TCU with 2 OEMs• Mass production in Russia with full ERA GLONASS certification for 3 OEMs and new program awarded for 2017
	eMobility	<ul style="list-style-type: none">• Production launch of BMS second generation vehicles• Partner for the Battery management system & Junction box (BMCe+CMCe) development• Research partner for semiconductor high voltage box
	ADAS	<ul style="list-style-type: none">• Parking Camera Supplier for 3 OEMS (5 by 2020)• Camera Monitor System (CMS) nomination for a luxury brand. First one to be launched in the market• Surround View System (SVS) nomination for a luxury brand

R & D

Talent
942 engineers



Commitment
6,5 % sales
invested in R&D

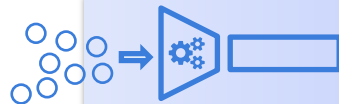
Global
14 Development Centers



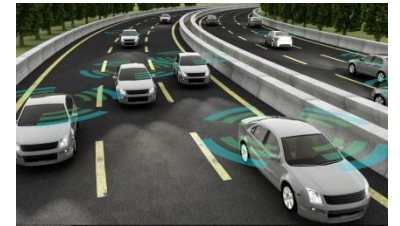
647 Patents Filed



World class **labs & testing** facilities



Robust methodology & development process





Thanks • Danke • Merci • ありがとう • 谢谢 • 감사