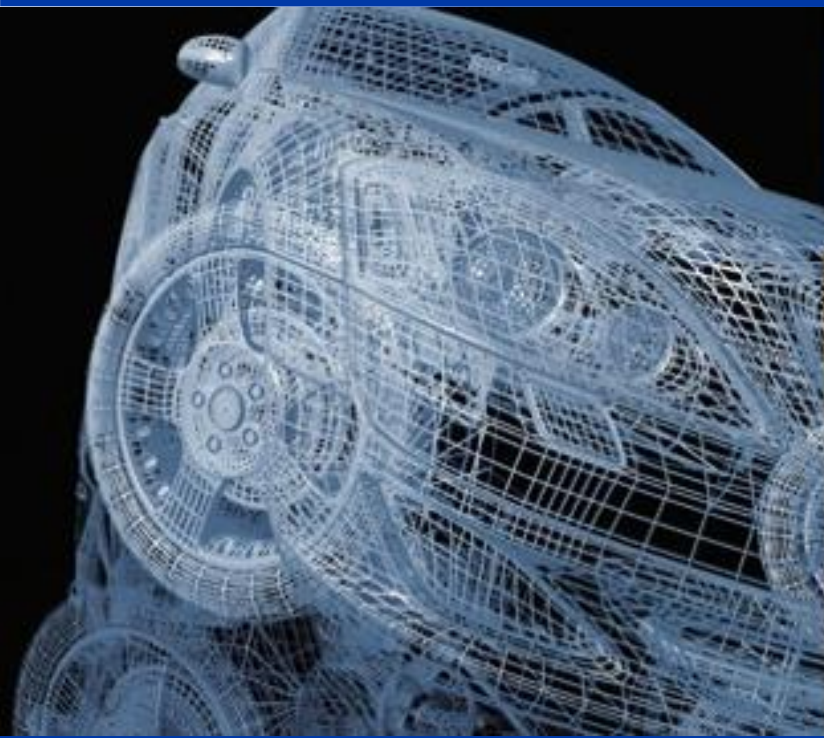


Bocar Group Company Profile



Business Units

Aluminum High-Pressure Die Casting



Development and manufacture of high quality and precision aluminum components.

Aluminum Semi-Permanent Mold



Development and manufacture of aluminum automotive components through gravity casting technology.

Plastics



Complex plastic components developed and produced through high precision plastic injection.

History

50's – 70's



70's – 80's



90's



2000's



2010's



- 1958 Mexico City**
AFISA: Manufacture of parts in automatic lathes
- 1963 Mexico City**
Carburetors and gasoline, oil and water pumps
- 1967 Mexico City**
AUMA: aluminum die cast and trimmed parts
- 1974 Mexico City**
PLASTIC: plastic injection components
- 1976 Mexico City**
AFISA changes its name to BOCAR (Bombas y Carburadores, Pumps and Carburetors)

- 1985 Chihuahua**
AUMA
- 1991 Lerma (Toluca)**
BOCAR
- 1992 Lerma (Toluca)**
FUGRA
- 1995 Queretaro**
AUMA TEC
- 1996 Wixom, MI, US**
AUMA Engineered Products: Sales and Project Management office
- 1997 Lerma (Toluca)**
PLASTIC

- 2001 Saltillo**
AUMA SALTILLO
- 2002 Manchester, TN, US**
AUMA Engineered Products: Logistic Center
- 2004 Yokohama, Japan**
AUMA Engineered Products: Sales, Engineering and Project Management office
- 2009 San Luis Potosi**
AUMA SLP
- 2010 San Luis Potosi**
PLASTIC

- 2012 Stuttgart, Germany**
BOCAR GmbH: Sales, Engineering and Project Management office
- 2014 Lerma (Toluca)**
PLASTIC IMD
- 2016 Mexico**
Growth of Chihuahua, Lerma, Queretaro and San Luis Potosi facilities
- 2018 Lerma (Toluca)**
"Centro de Excelencia FB" (Training Center)
- 2019 Waldmössingen, Germany**
Bocar Technical Center

- 2020 Shenzhen, China**
Bocar Trading Office
Huntsville, Alabama
Bocar US
- 2021 San Jose, CA, USA**
AUMA Engineered Products

High-Pressure Die Casting

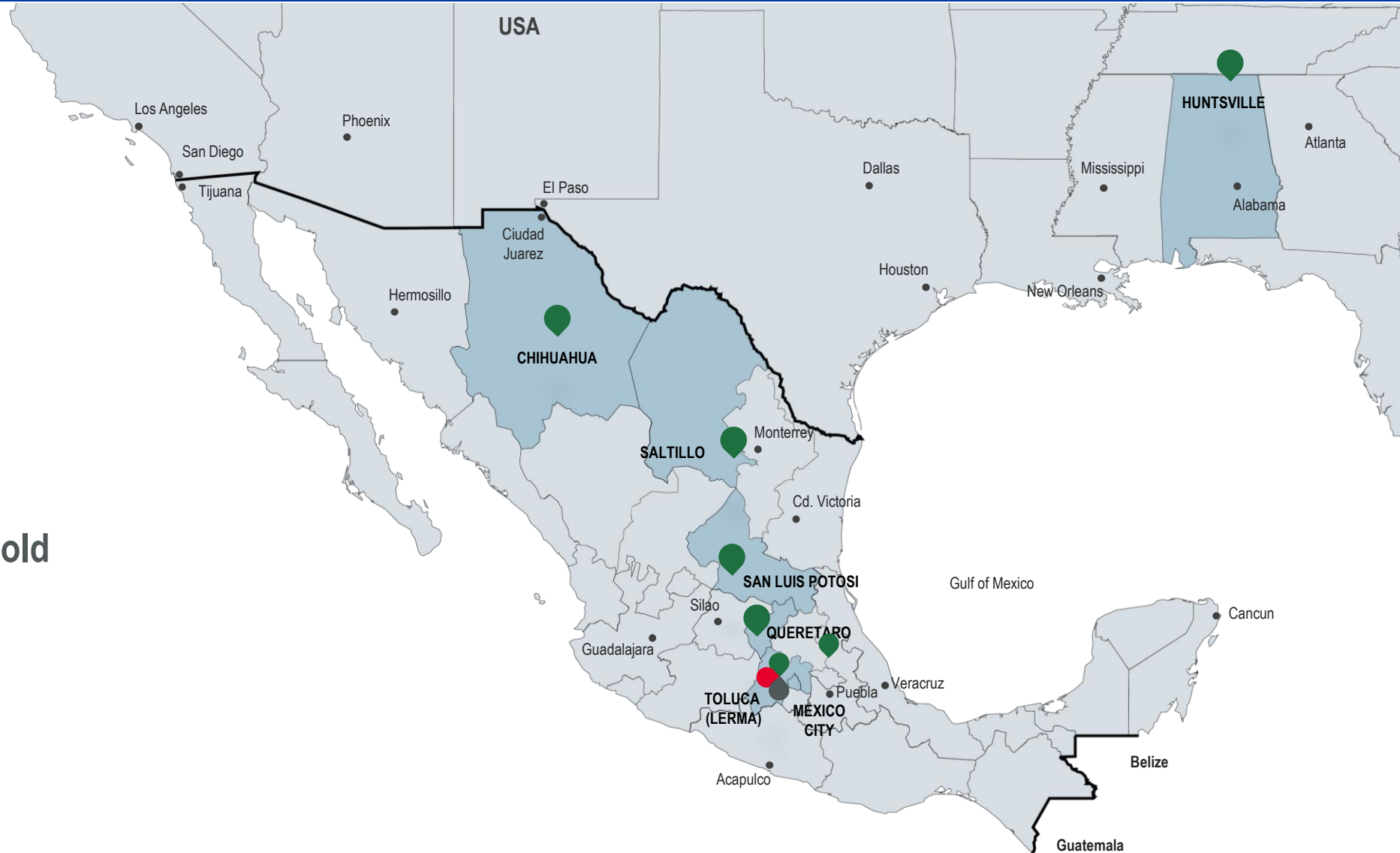
- Chihuahua (1985)
- Huntsville (2020)
- Lerma (1991)
- Mexico City (1958)
- Queretaro (1995)
- Saltillo (2004)
- San Luis Potosi (2009)

Semi-Permanent Mold

- Lerma (1992)
- Lerma (2017)
- Lerma (2018)

Plastic

- Lerma (1997)

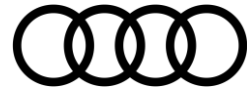


Footprint – Global Services



Supporting customers in a global footprint.

Successful Partnerships





Automated casting cells

- Holding furnace
- Casting machine
- Lubrication system
- Handling robot
- Trim press

Machining

- Milling and Lathe CNC machines
- Vertical and Horizontal CNC
- In process CMM
- 5 Axis Machining
- Multi Spindle Machining






Assembly

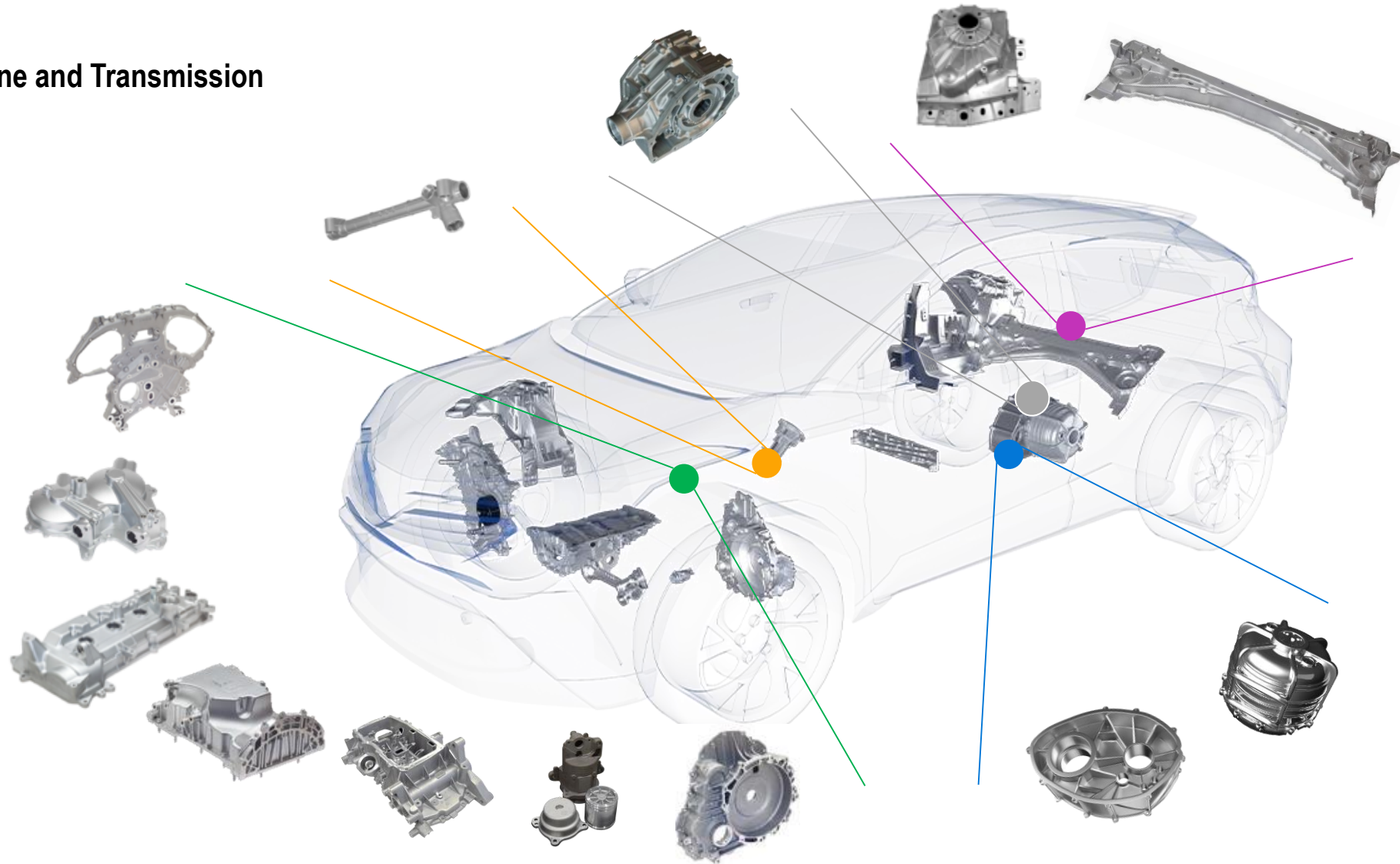
- Lean manufacturing concept
- Automated process control
- In line Poka-yokes
- Modular assembly lines
- In-house and supplier's expertise

Additional processes

- In process X-Ray capabilities
- Heat treatment capabilities
- Polishing and straightening
- Dye Penetrant Testing

High Pressure Die Casting Products

-  Powertrain: Engine and Transmission
-  Structural
-  EV
-  Steering
-  Drivetrain





Gravity Casting

- Automated and manual pouring cells
- Organic Shell, Cold Box and Inorganic core processes
- Automatic degassing process
- Process development and tooling debugging
- Fully equipped Metallurgy Lab

Machining

- Milling and Lathe CNC machines
- Vertical and Horizontal CNC
- In process CMM
- 5 Axes Machining
- Multi Spindle Machining




Assembly

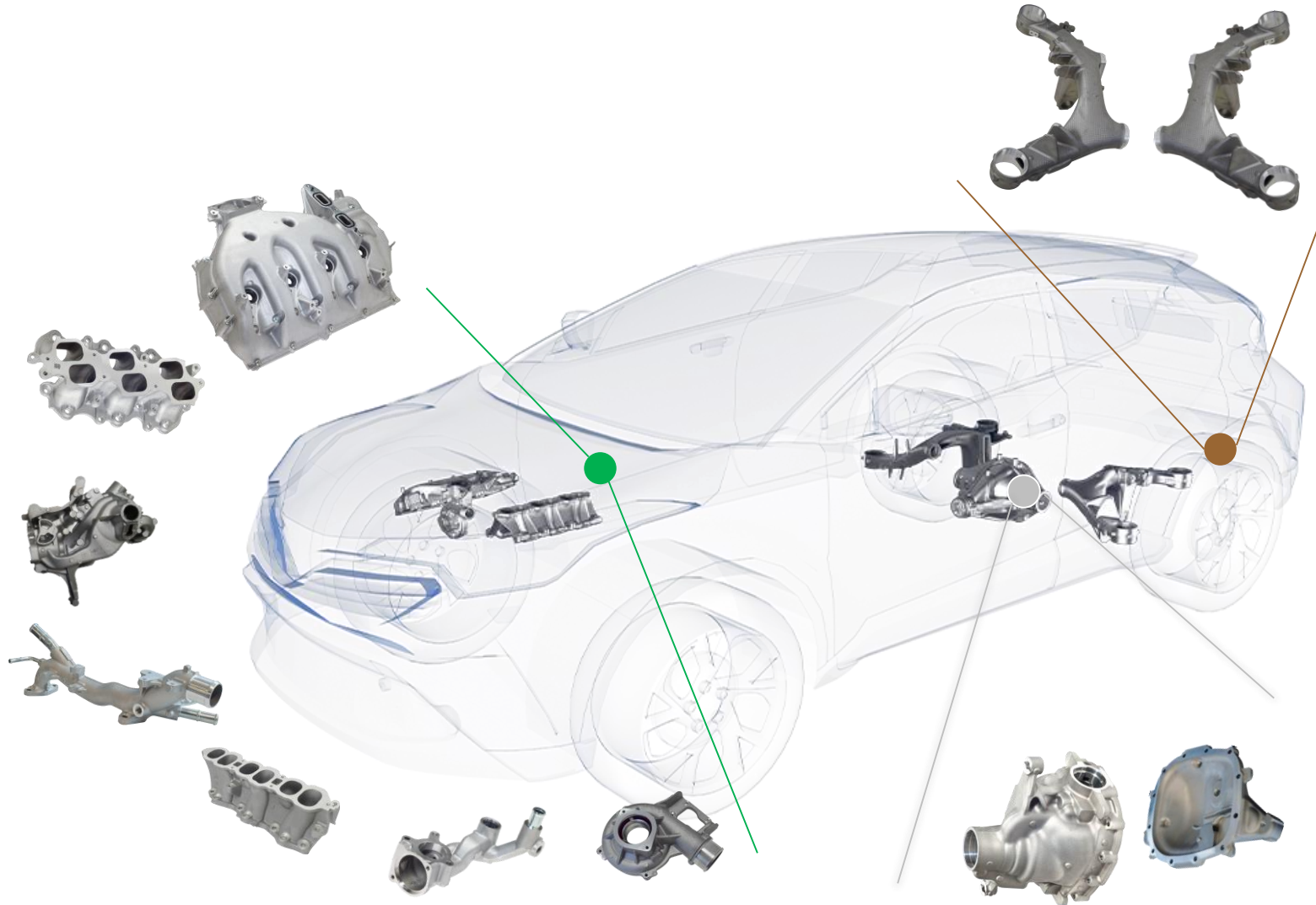
- Lean manufacturing concept
- Automated process control
- In line Poka-yokes
- Modular assembly lines
- In-house and supplier's expertise

Additional processes

- In process X-Ray capabilities
- Heat treatment capabilities
- Dye Penetrant Testing
- Impregnation
- Polishing and straightening

Semi Permanent Mold Products

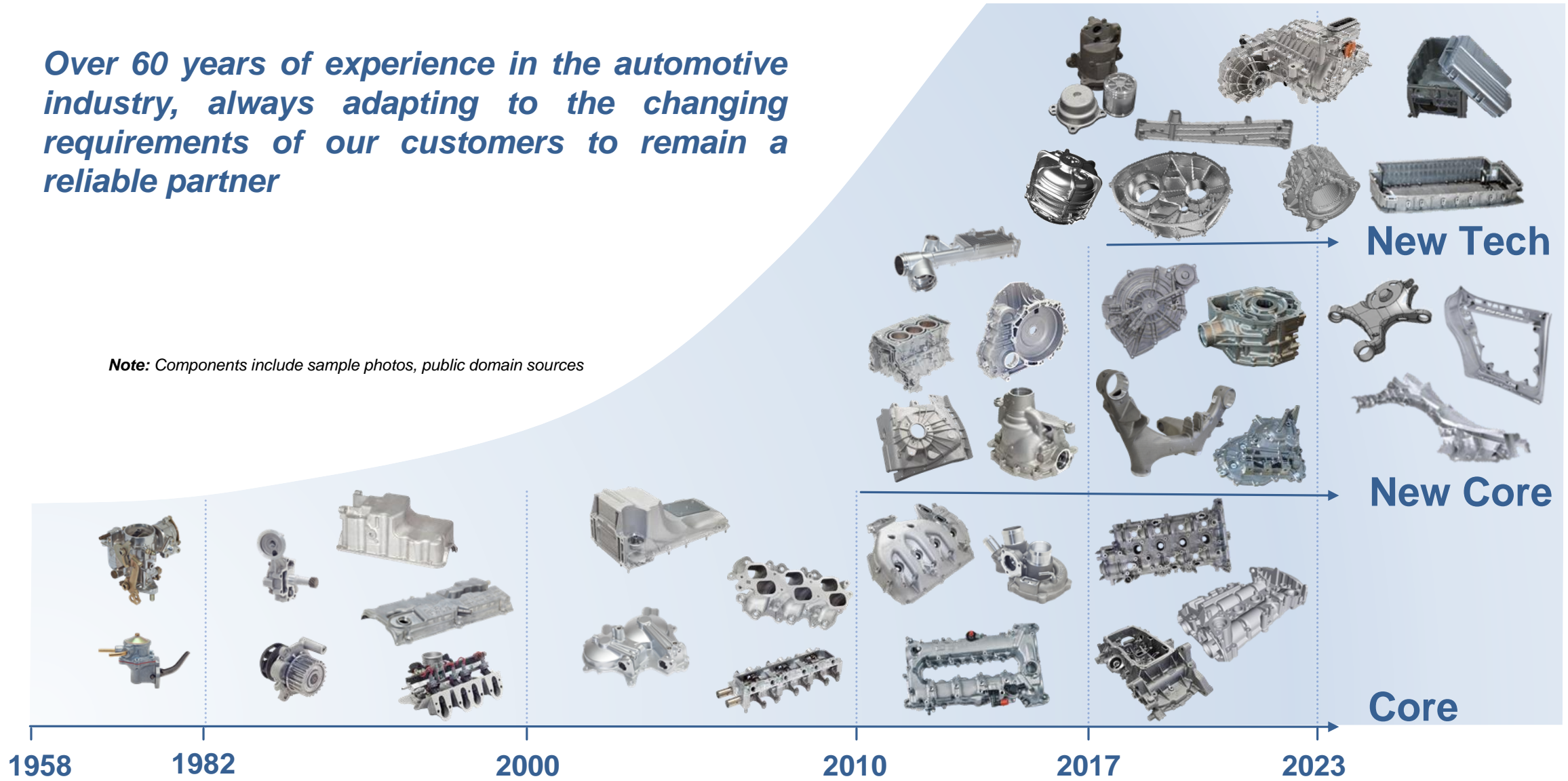
-  Powertrain
-  Drivetrain
-  Suspension



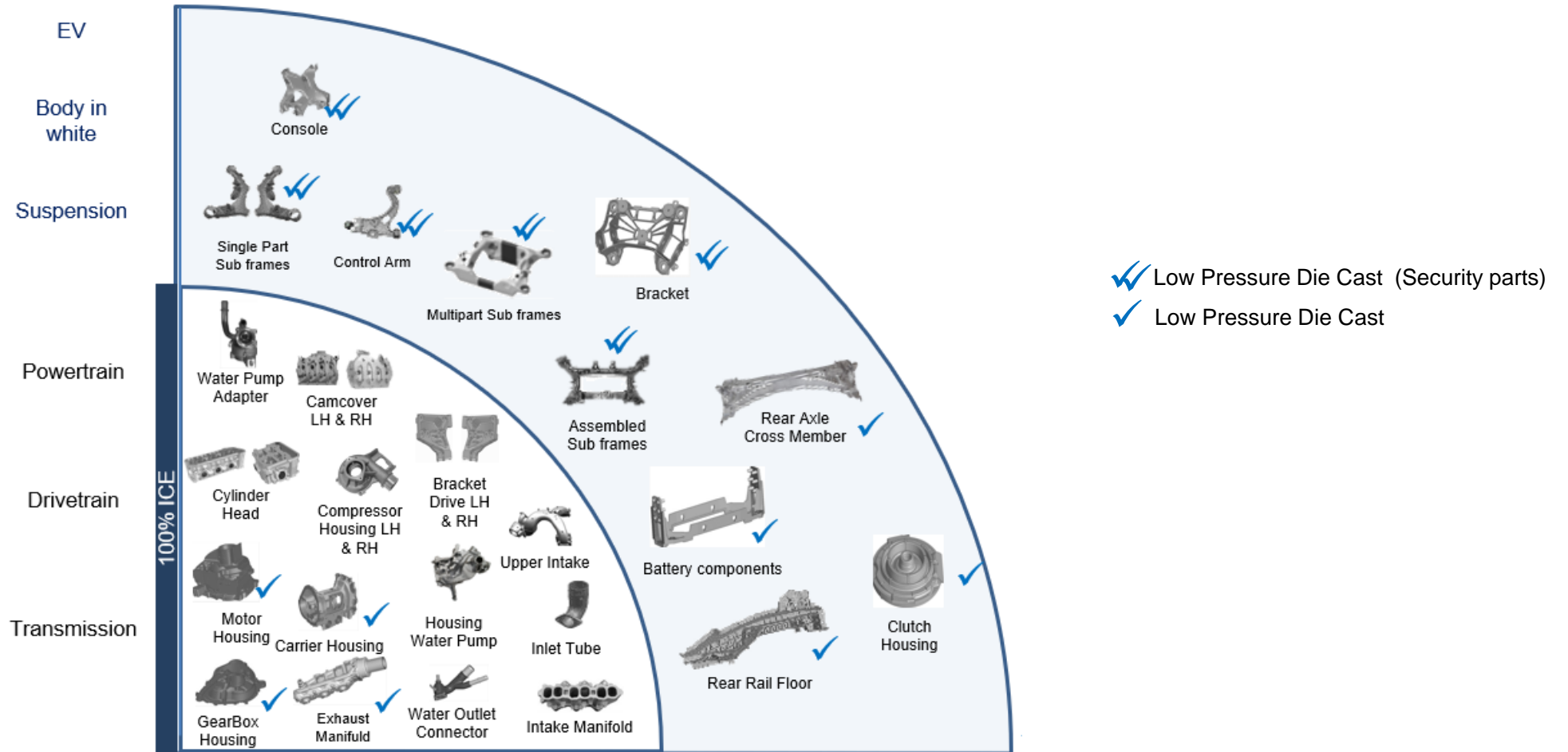
BOCAR GROUP Aluminum Products Evolution

Over 60 years of experience in the automotive industry, always adapting to the changing requirements of our customers to remain a reliable partner

Note: Components include sample photos, public domain sources



BOCAR GROUP SPM & LPDC Aluminum Products Evolution



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