



Lear Engineering Valls Tech-Center

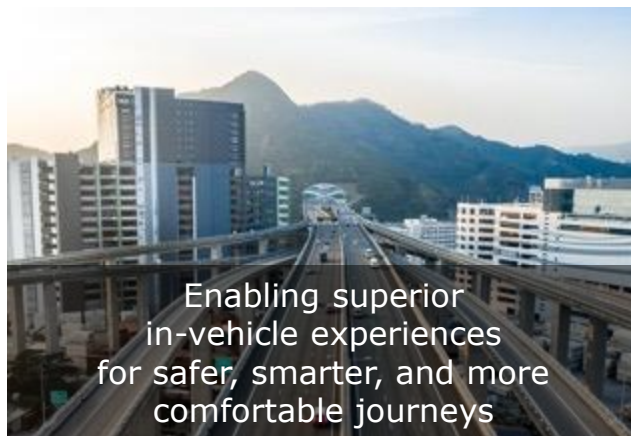
Forum: Research and Innovation in the Automotive sector in Catalonia

2022, May 24th

Making every drive better™

Lear At A Glance

A Global Auto Supplier - \$17 Billion Sales in 2020



FORTUNE
WORLD'S MOST
ADMIRED
COMPANIES[®] 2021

FORTUNE
500
#179

~175,000 EMPLOYEES GLOBALLY

Industry leading talent and technical expertise

251 FACILITIES IN 38 COUNTRIES

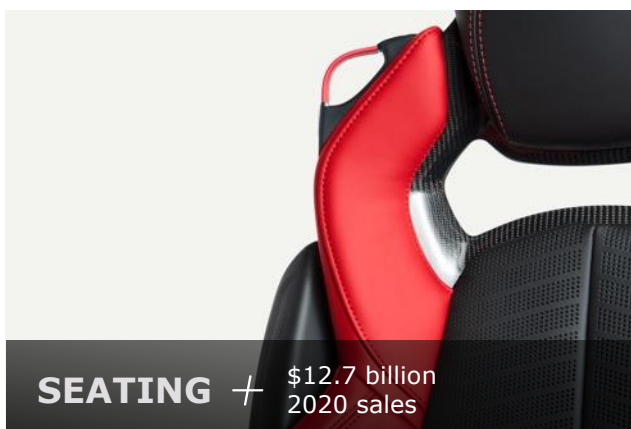
Balanced global engineering and manufacturing footprint

400+ VEHICLE NAMEPLATES

Lear designs, engineers and manufactures world-class products for every major automaker in the world

100+ YEAR HERITAGE

As an automotive supplier



Committed to our values – Be Inclusive, Be Inventive, Get Results the Right Way

Lear's Products are Aligned with Industry Trends

Lear is a **global leader** in Seating, Electrical and Electronic Systems with a **strategic and complimentary product portfolio** delivering advanced seating comfort, vehicle architecture and in-vehicle technology solutions.



Autonomy



Connectivity



Electrification

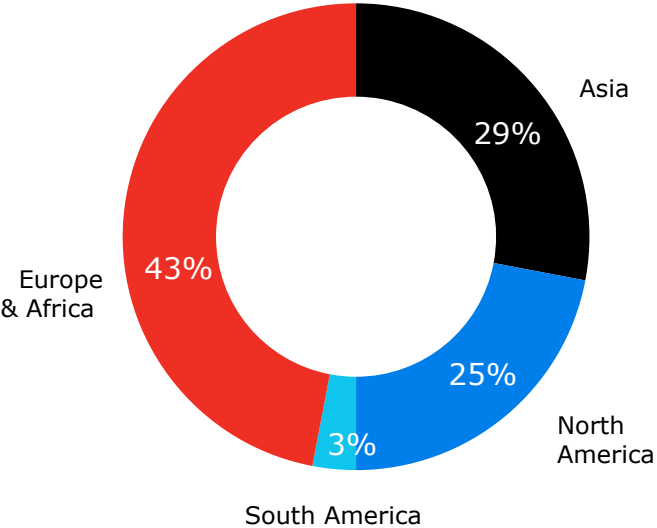


Shared Mobility



Well-Diversified Global Electrical Distribution, Connection Systems, Electronics & Software Supplier

SALES BY REGION



\$4.3B
2020 E-Systems
Sales

~80,000
E-Systems Employees
Worldwide



E-Systems Product Portfolio

+ ELECTRICAL DISTRIBUTION SYSTEMS

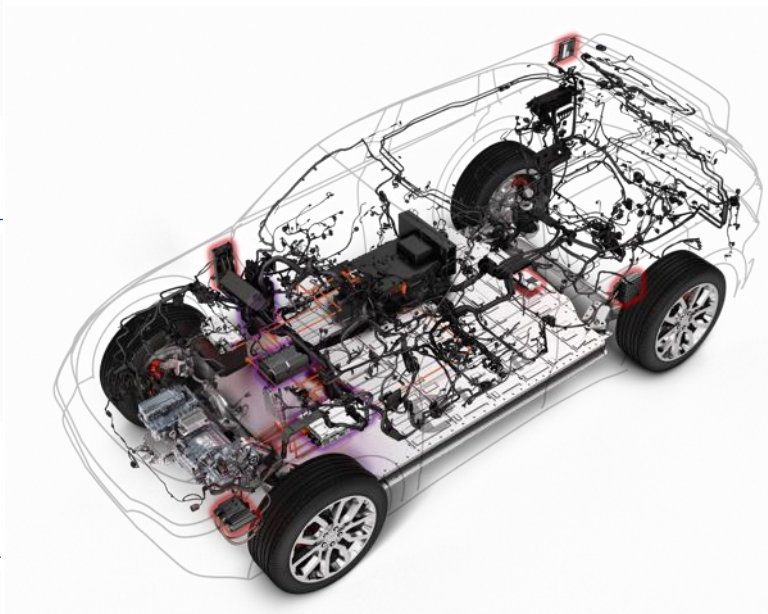
Proven partner with full-service capabilities across power and signal distribution for both low and high voltage vehicle solutions

+ CONNECTION SYSTEMS

Robust and vertically integrated product portfolio aligned to industry megatrends, delivering high-performance terminals, connectors and components

+ CORE ELECTRONIC SYSTEMS

Experienced leader in sophisticated body and core electronics delivering innovation across Body Domain Controllers, Smart and Passive Junction Boxes



+ ELECTRIFICATION

Innovative, customized and scalable charging, power management, battery management and distribution solutions delivering world-class performance and packaging

+ CONNECTIVITY

First to market next generation connectivity and antenna solutions offering 5G, V2X and GNSS navigation capabilities

+ SOFTWARE & CONNECTED SERVICES

Modular software architectures and solutions deliver in-vehicle experiences aligned to Connectivity, Electrification and Internet of Things



Delivering expertise across **complete** electrical architectures



Global Electronics Engineering Facilities

**1,200 Engineers
Globally**

Southfield (US)



Valls (Spain)



Rabat (Morocco)



Kronach (Ge) / Leuven (B)



Pune (India)



Cebu (Philippines)



Remscheid (Germany)



Shanghai (China)



Engineering E-Systems Eu & Africa

Kronach (Ge) / Leuven (B)



Center of Excellence:
- Connectivity & GW

Valls (Sp)



Center of Excellence:
- Electrification OBC, BMS & DCDC
- Body Domain Controller / ZCM
- GW
- Smart Junction Box / Junction Box

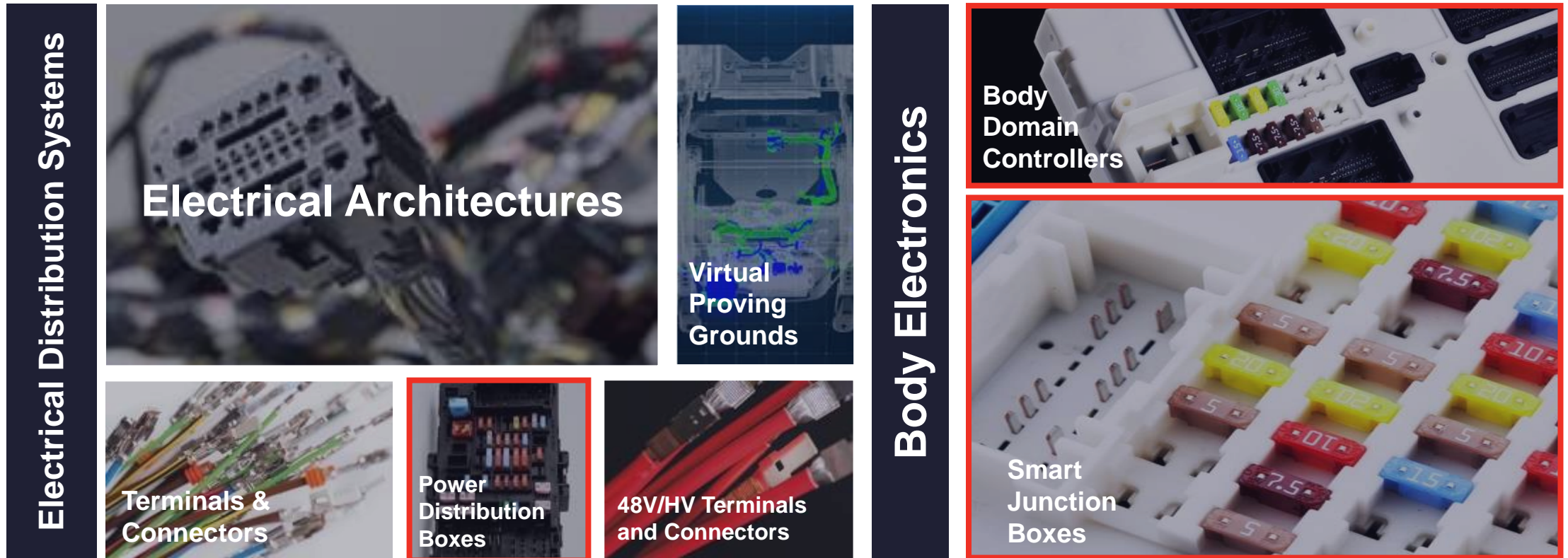
Rabat (Morocco)



Center of Application:
- Body Domain Controller
- Smart Junction Box / Junction Box
- Electrification
- Audio

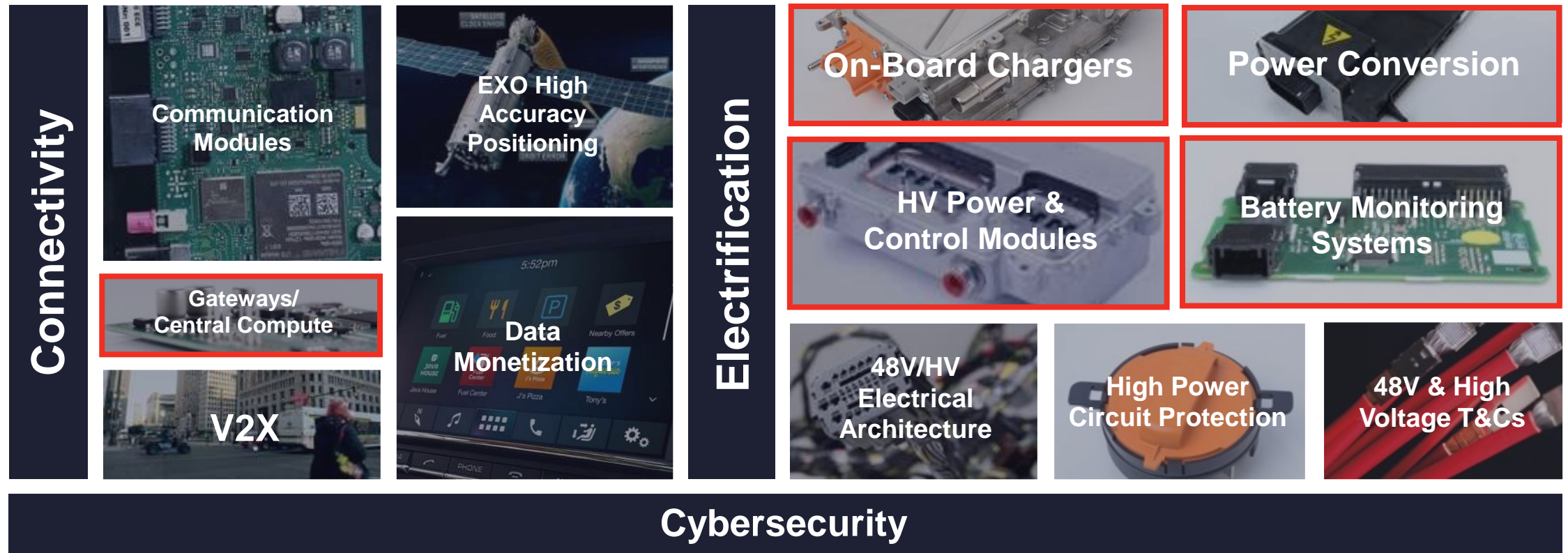


E-Systems Core Product Portfolio



 **Valls Engineering Center**

E-Systems Core Product Portfolio



 **Valls Engineering Center**



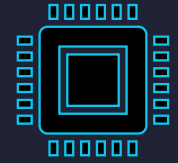
Lear Valls Engineering at a Glance

- +25 years of Power Distribution expertise
- +20 years of experience with Domain Controllers
- +10 years of experience with HV Electrification
- Engineering and Operations/Plant synergies by sharing same site
- Core Software and Systems responsibility - ASPICE level 3 certified
- Consolidated know-how on ISO26262 ASIL-D and Cybersecurity
- Solid Hardware and Mechanical expertise
- Accredited TestLab
- Wide and varied Ecosystem
- Local University Collaboration (URV, UPC, UZ)

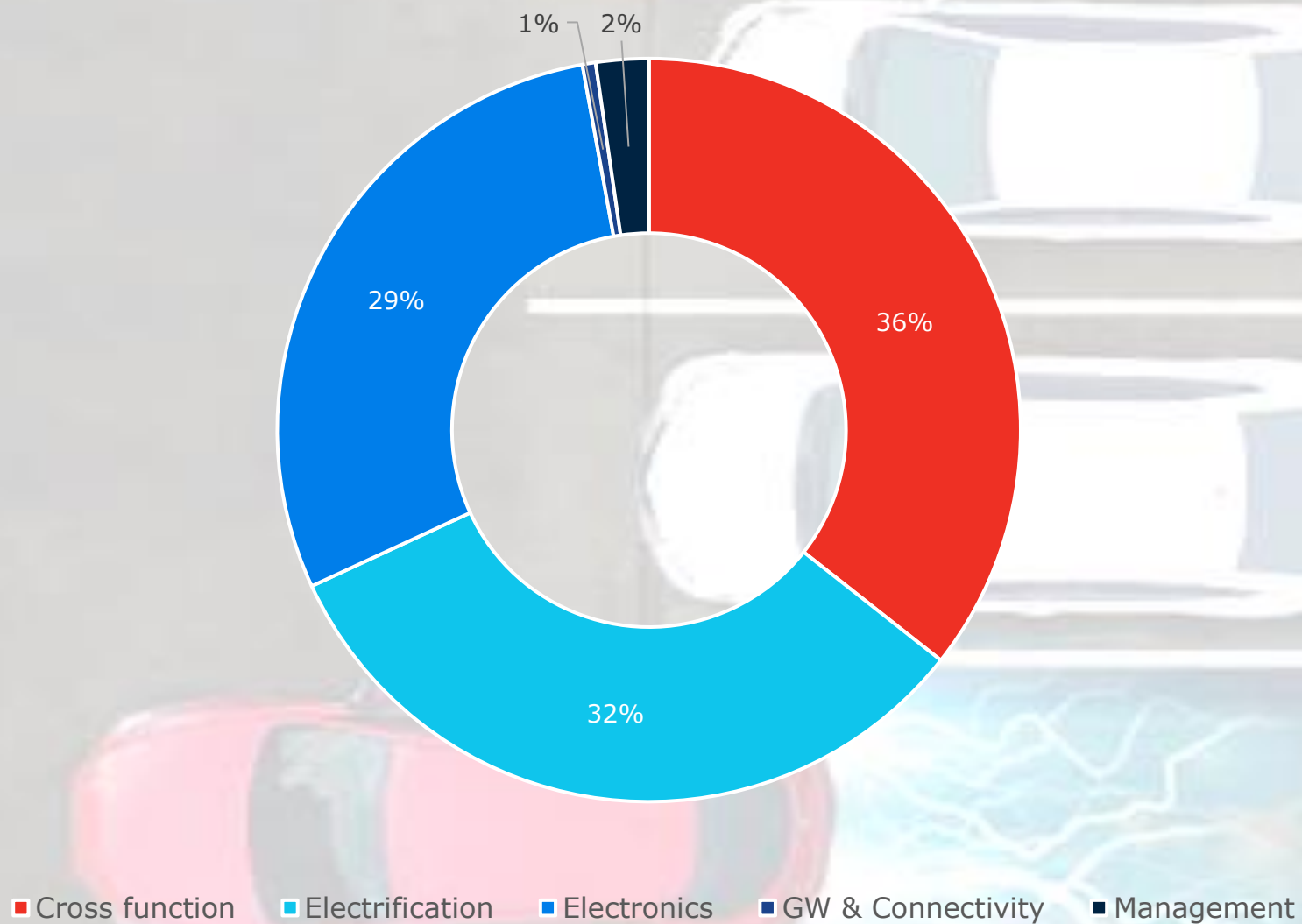


Valls Engineering community

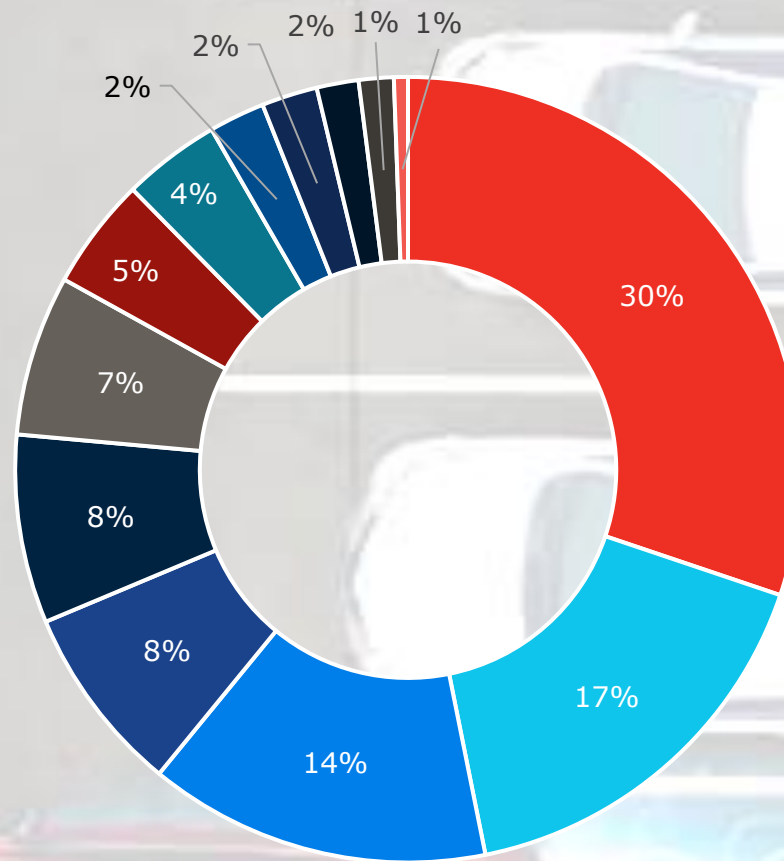
+350



Valls Engineering by Product Line



Valls Engineering by Disciplines



■ SW

■ Operations Eng

■ System Test & Tools

■ Gateway

■ HW

■ Test System

■ Management

■ Systems

■ EPL

■ Advanced Eng

■ ME

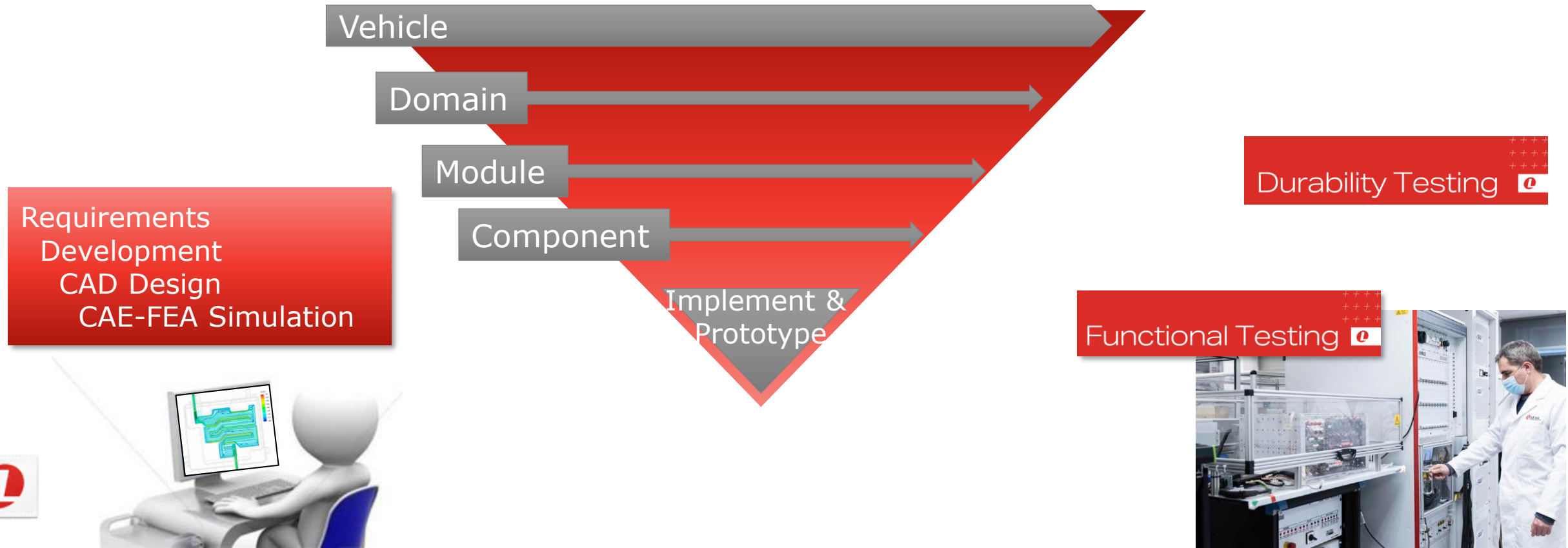
■ Cybersecurity & Func. Safety

■ Resident Eng

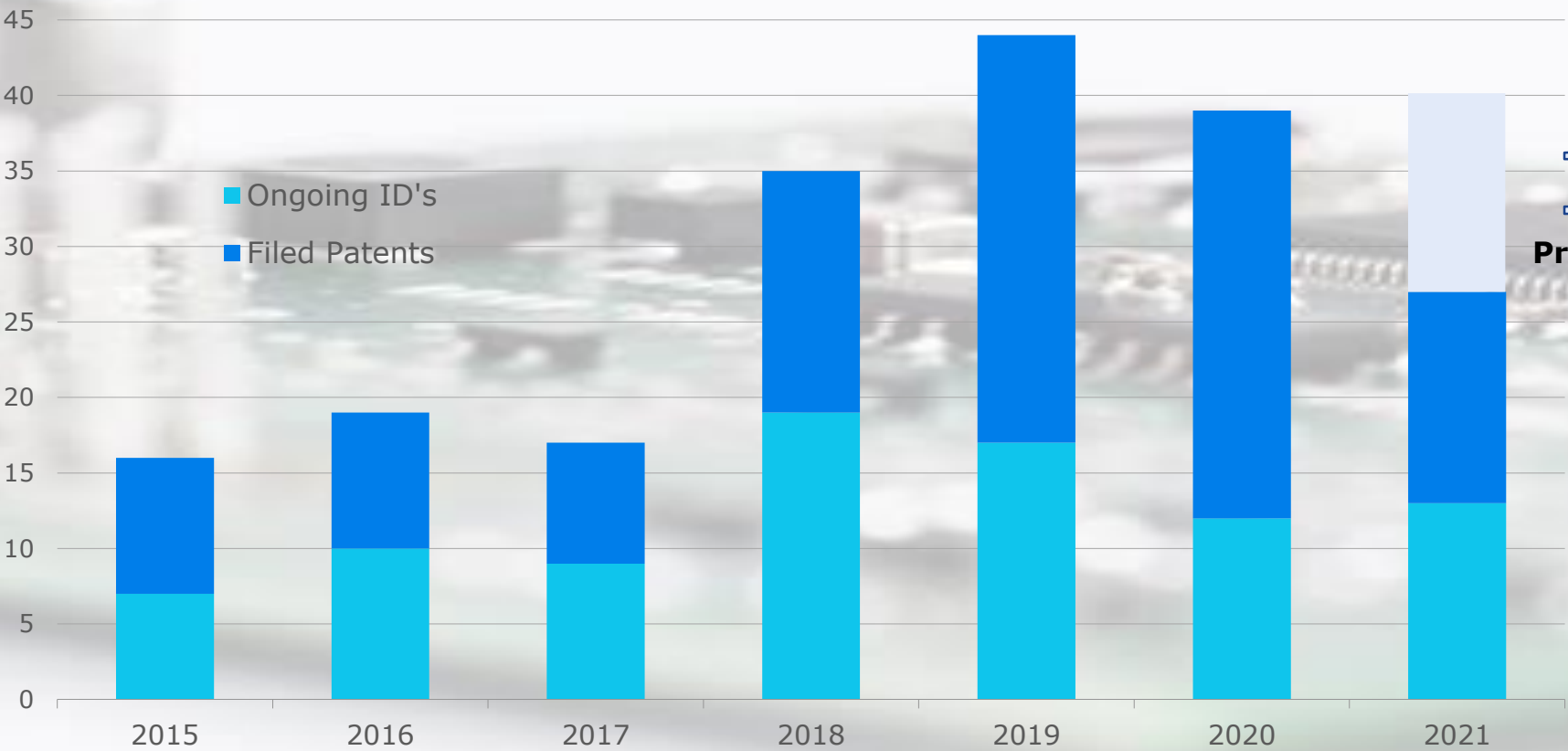
Product Development

Cross functional "V" Model

The same engineering environment from design to physical testing



2021 Inventions Processing



13!
Provisionals



40 inventors



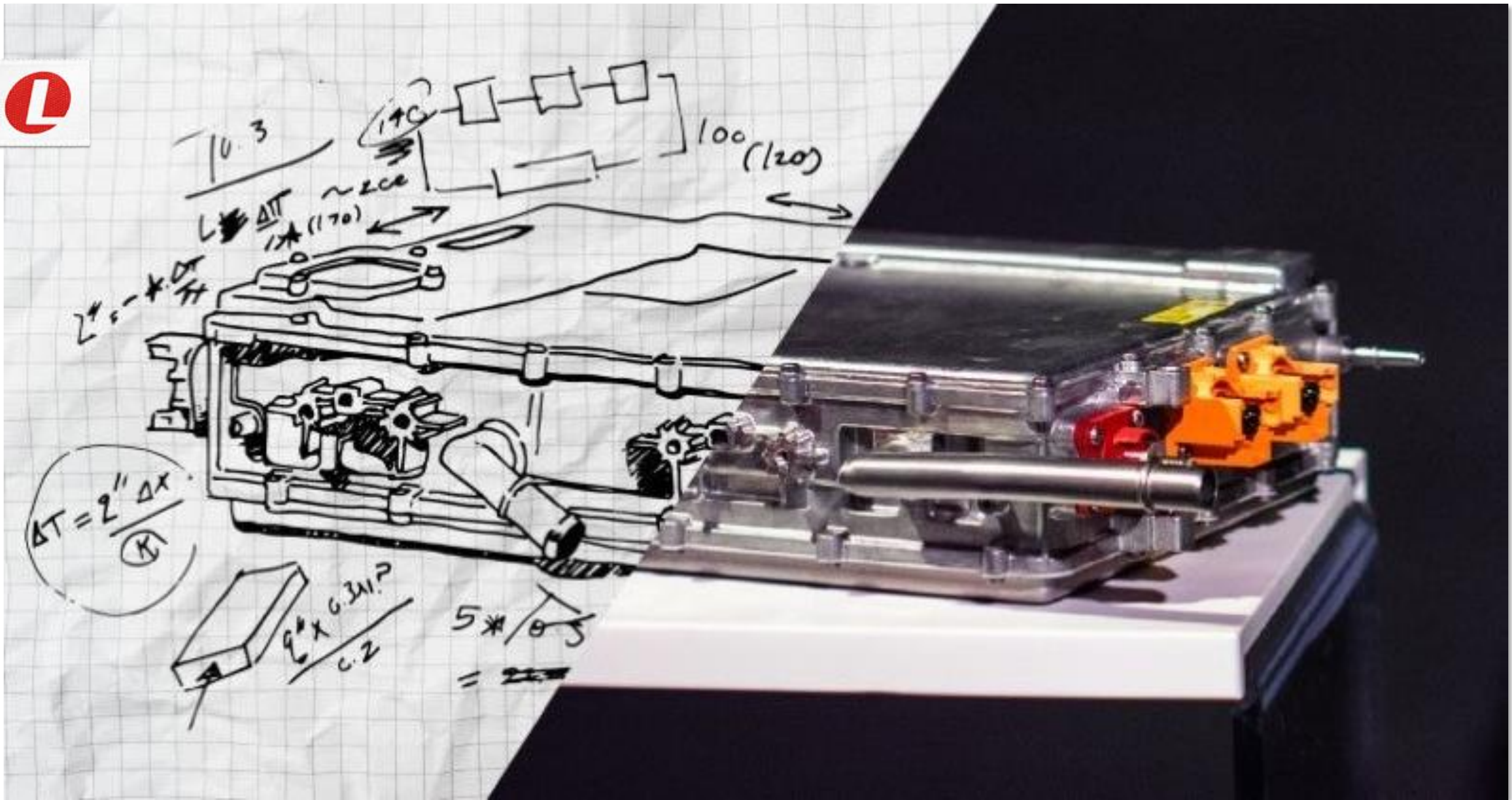
27 Inventions



14 filings



15 grants





Making every drive betterTM

Be Inclusive

Be Inventive

Get Results the Right Way



Moltes Gracies

2022 – Xavier Secall xsecall@lear.com

Making every drive better™