

# Amphenol AUTOMOTIVE



## Interior Lighting Company presentation

July 2022

# About Amphenol



Founded in 1932 by Mr. Arthur J. Schmitt in the Chicago area.



Public company listed in NYSE and traded as APH.



Amphenol's headquarters are in Wallingford, Connecticut.



One of the largest manufacturers of interconnect products in the world.

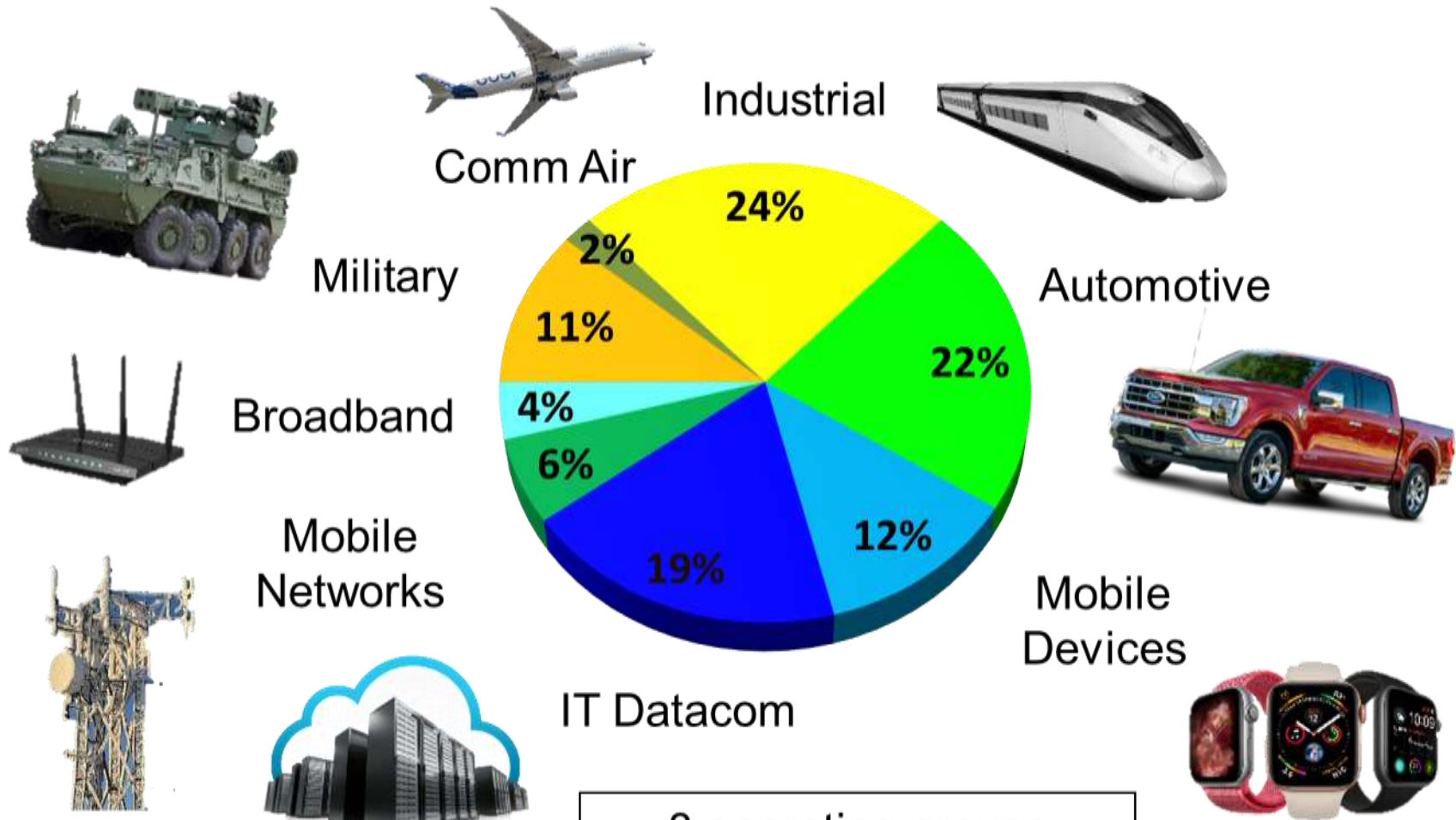


Global sales : >8 bil. USD



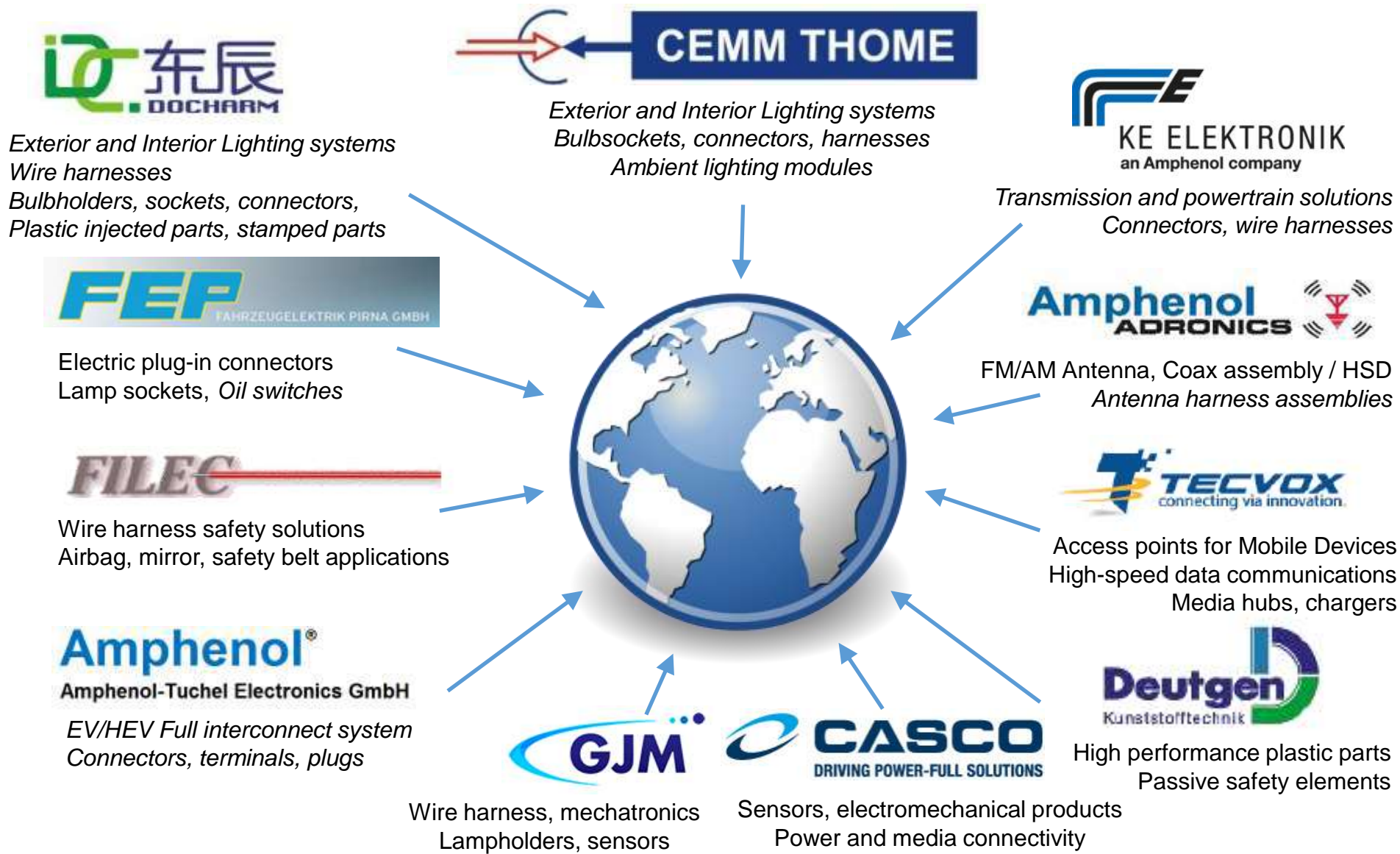
>82 000 employees in more than 100 locations on 6 continents.

# Amphenol global sales by market

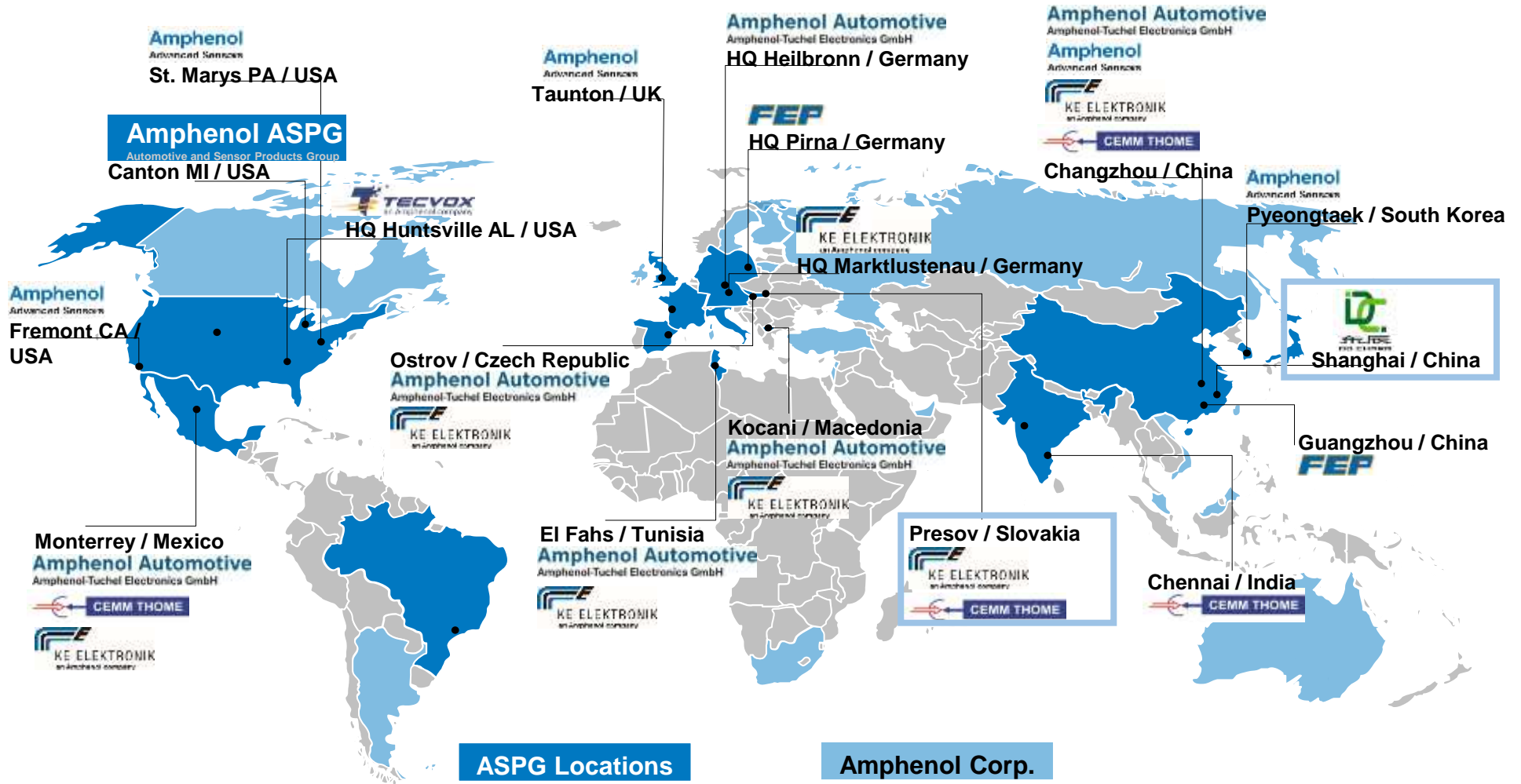


8 operating groups  
\$8.6 Billion sales in 2020

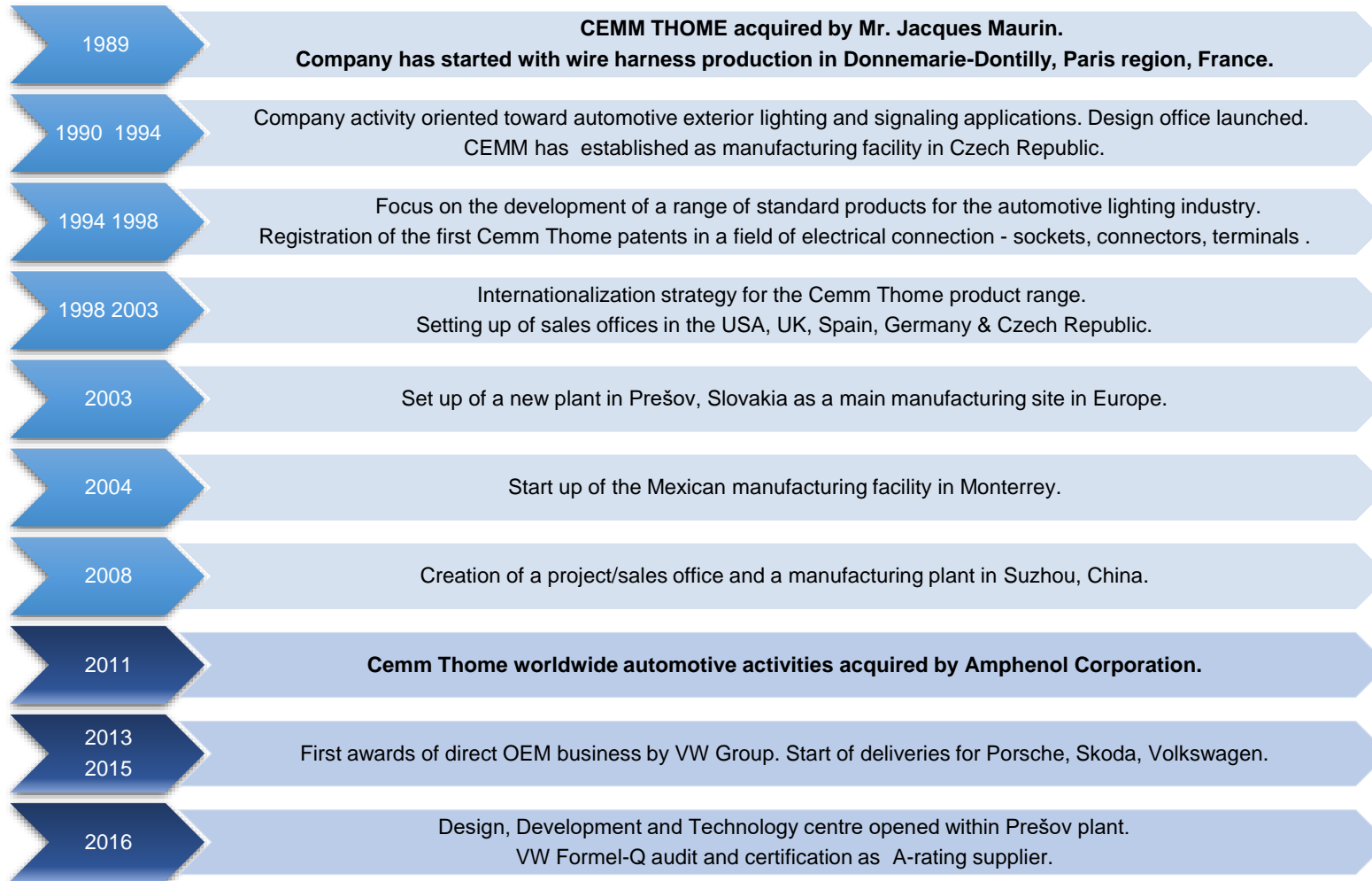
# Amphenol Automotive Product Group (AAPG)



# Amphenol APG Footprint

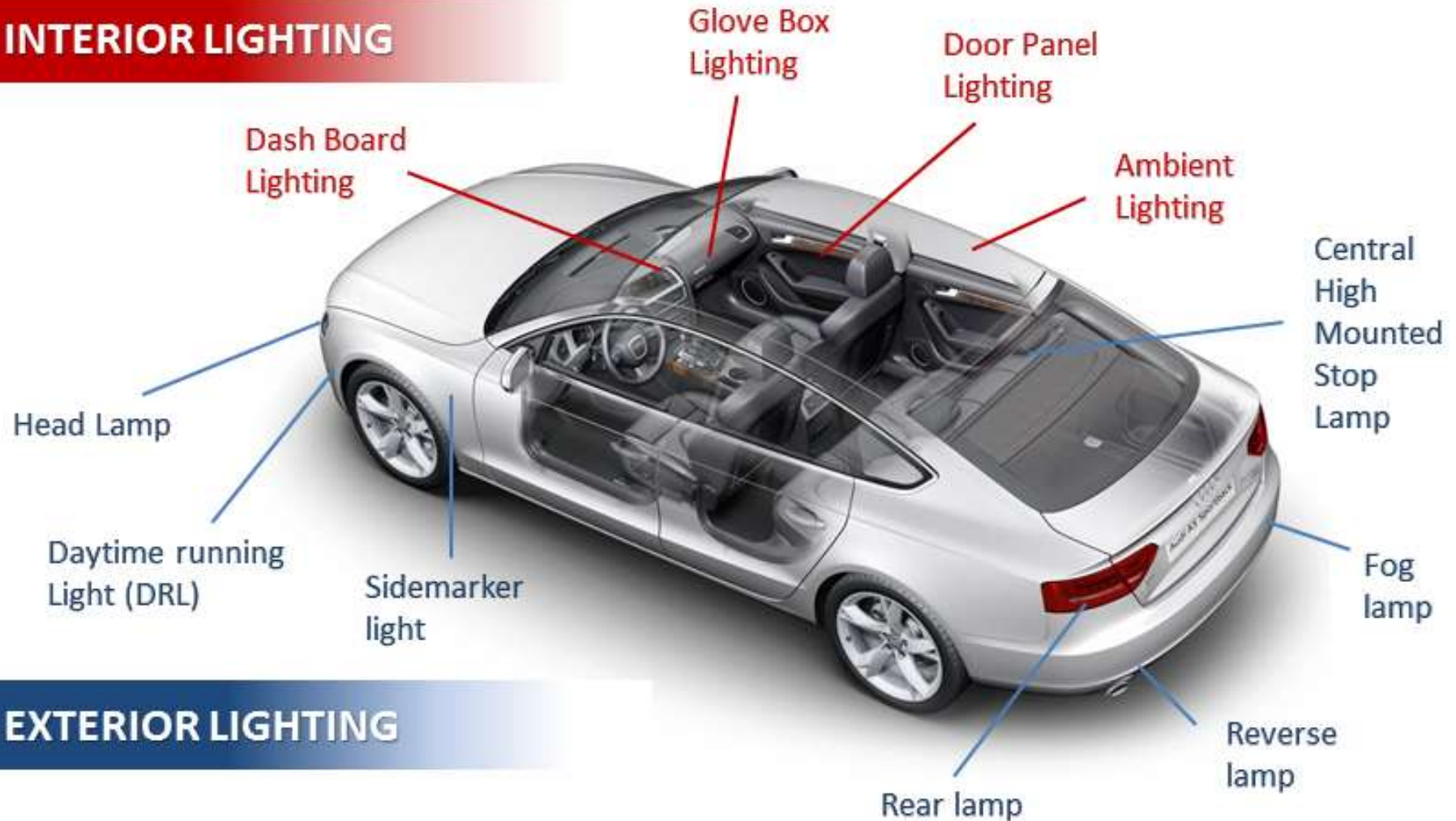


# Cemm Thome - History



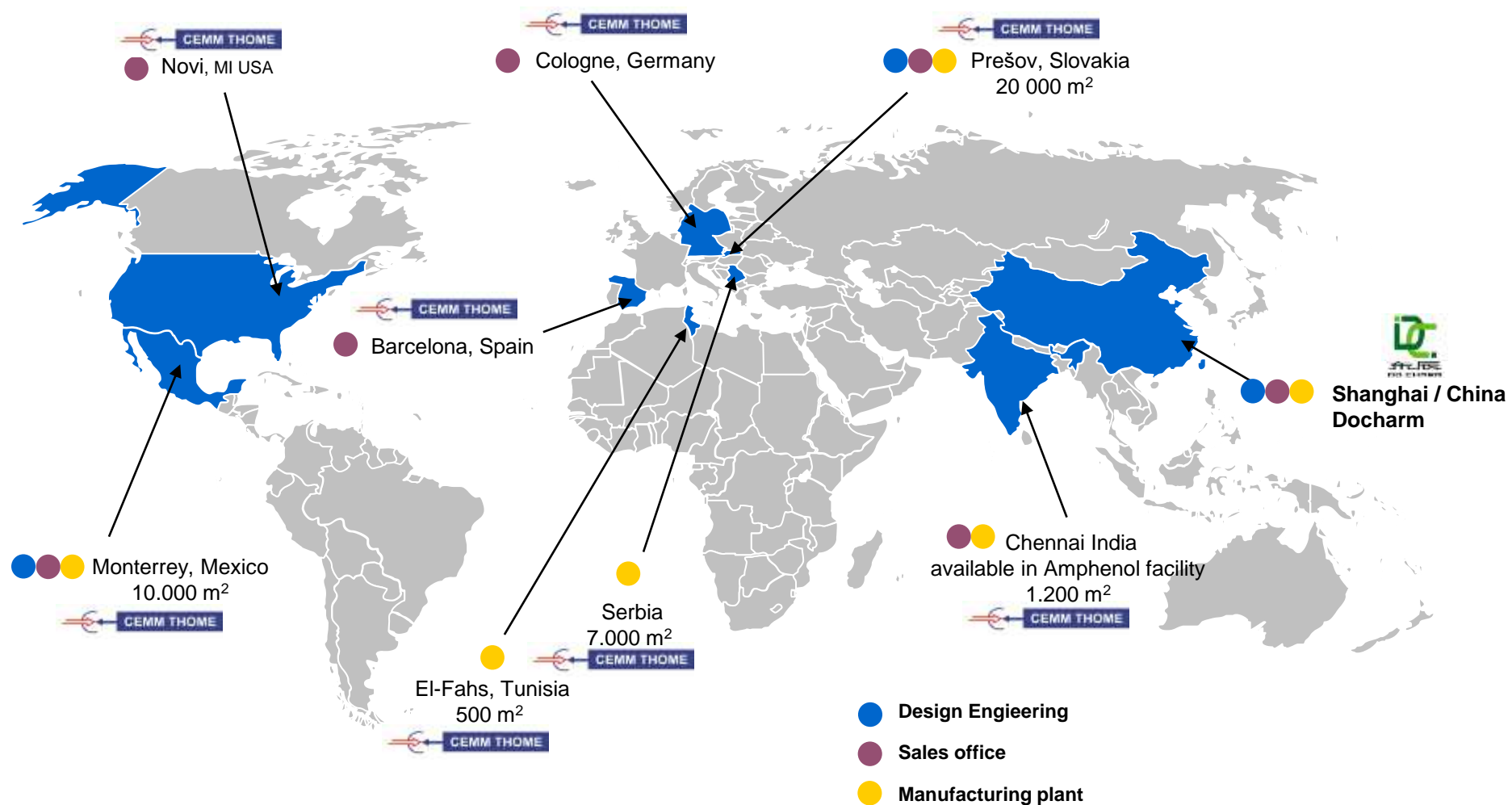
# Our Applications

## INTERIOR LIGHTING



## EXTERIOR LIGHTING

# IL Footprint



Shanghai / China  
Docharm

- Design Engineering
- Sales office
- Manufacturing plant



# INTERIOR LIGHTING PRODUCTS

A brief overview

# Interior lighting products

OEM	Carline	Product	No. Of parts
Porsche	911/Boxster/Cayman	LED blind spot detection	2
Skoda	Superb and Kodiaq	LED armrest box illumination	2
VW	Tiguan (VW326)	Door decor and opener illumination	8
VW	Up	Dashboard illumination	16
VW NAR	Tiguan NAR LWB	Door decor illumination	8
VW	Polo (VW270)	Dashboard, door, and door opener illumination	8
Skoda	Scala and Kamiq	Dashboard illumination	8
VW	ID.3, ID.4 and ID.5	Dashboard, door, and center console illumination	24
VW NAR	Taos	Dashboard and door illumination	6
Skoda	Enyaq	Dashboard and door illumination	6
Audi	eQ4 and eQ5	Dashboard and door illumination	28
Skoda	Fabia	Dashboard illumination	6
VW	ID.Buzz	Dashboard and door illumination	6
VW	Tiguan (VW336)	Dashboard and door illumination	8
VW	Passat (VW492)	Dashboard and door illumination	6
Skoda	Kodiaq (SK336)	Dashboard and door illumination	10
Ford	C-ESUV	Dashboard, door, and center console illumination	5

# DEVELOPMENT AND PRODUCTION

# Development tools

## Optics

- Software: SPEOS, Lucidshape
- Hardware: Spectrometer, Luminance Camera, Luxmeter, etc.

## Electronics

- Software: Altium Designer
- Hardware: IR camera, ESD equipment

## Construction

- Software: Catia V5
- Hardware: 2D/3D coordinate measurement

# SMT Production



# RGB LED module production



- Panel based RGB LED calibration
- Fully automatic process
- Cycle time 3sec



Automatic depaneling station



Semi-automatic soldering station



LED modules assembly montage

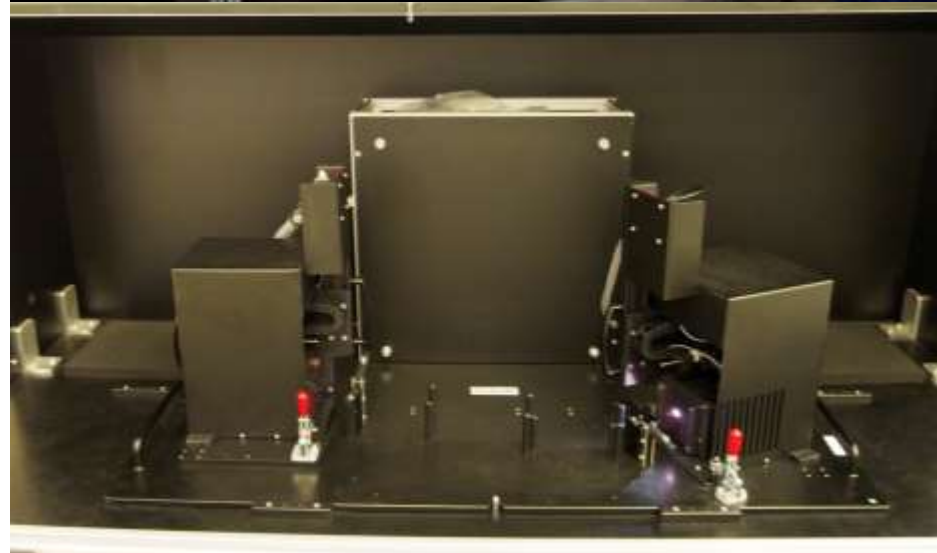
# Optics injection molding in clean environment



# Production and process test



**ESD protected clean room assembly**



**EOL tester**



# Certificates

## IATF 16949 : 2016



**CERTIFICATE**

This is to certify that

**CEMM THOME SK, spol s.r.o.**  
 Budovateľská 38  
 080 01 Prešov  
 Slovakia

has implemented and maintains a **Quality Management System.**

Scope:  
 Design and manufacturing interior and exterior lighting, electrical wiring harnesses and connection systems; manufacturing of plastic parts.

An audit, conducted and documented in a report, has verified that this quality management system fulfills the requirements of the following International Automotive Standard:

**IATF 16949:2016**  
 (with product design)

Certificate registration no.	31120078 IATF 16
Main certificate registration no.	31150078 IATF 16
Issuing date	2019-03-07
This certificate is valid until	2022-03-06
IATF No.	0351300

2-IAO-QMC-01001

For and on behalf of DQS

*Nuraz S. Veritaschalem*  
 Nuraz S. Veritaschalem  
 Corporate Program Manager Automotive, DQS Holding GmbH

*Michael Drechsel*  
 Michael Drechsel  
 Managing Director, DQS Holding GmbH

IATF Contract Office: DQS Holding GmbH, Konrad-Adenauer-Allee 8-10, 61118 Bad Vilbel, Germany

## ISO 14001 : 2015



**SNR CERTIFICATION**

**SNR CERTIFICATION**  
**Environmental Management System**

**Certificate of Approval**  
 This is to certify that the EMS of  
**CEMM THOME SK, spol. s r.o.**  
 Budovateľská 38, Prešov 080 01, Slovakia.  
 Has been assessed and found to meet the requirements of

**ISO 14001:2015**

This certificate is valid for the following scope of operations

Návrh, vývoj a výroba vnútorného osvetlenia, káblových zväzkov a elektrických prepojení; výroba plastových dielov.

Design, development and manufacturing interior lighting, electrical wiring harnesses and connection systems; manufacturing of plastic parts.

Authorised by: *R N Cooke* R N Cooke  
 Director

Date of Certificate Issue: 29 January 2018  
 Certificate Valid Until: 20 December 2019  
Recertification audit before. Certified since 21 December 2015.  
 This certificate is the property of SN Registrars (Holdings) Limited and remains valid subject to satisfactory annual Surveillance audits.

**SN Registrars (Holdings) Limited**  
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 Rushden, Northamptonshire,  
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 Email: enquiries@snregistrars.com  
 Web: www.snregistrars.com  
 Company Number: 07659067

Certificate Number: SNR 10830608/102/E Rev: 001

**IAF**  
 IAF 14001

**UKAS**  
 MANAGEMENT SYSTEMS  
 007

# OEM Certification

## Volkswagen Formel Q

URKUNDE

**VOLKSWAGEN**  
NETZGESELLSCHAFT

**CEMM THOME SK, spol. s  
r.o.**

Budovatel'ska 38  
080 01 PŘESOV  
D&B D-U-N-S® Number: 52-397-4272

achieved during the process audit from 27.4.2022 according to

### Formel Q Fähigkeit

the following result:

Product Group Description	Result
Interior Lights LED	A 96%
Assembled Circuit Boards	A 93%

  
**Carlo Boetger**  
Audit Manager  
Lieferantenmanagement - Audit

  
**Raskin, Daniel**  
Auditor  
Lieferantenmanagement - Audit

# Interior lighting OEM customers





**THANK YOU!**

