

Global Advanced Materials Company

EP Division



EP Division History

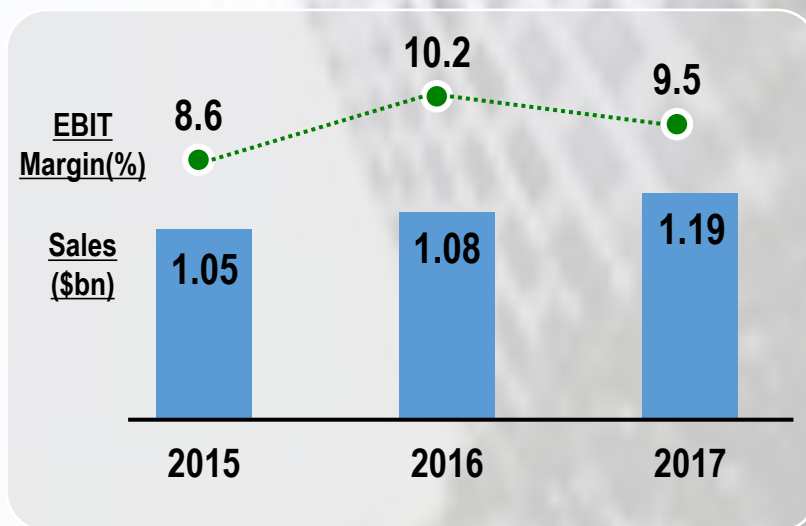


Biz. History ...

(Domestic) (Overseas)

- 1983 Started EPC Biz
- 1992 Started Iksan compound plant
- 2001 Started PC production
(Joint venture with DOW)
- 2003 Guangzhou plant
(China)
- 2005 Tianjin plant
(China)
- 2009 Yongxing plant
(China)
- 2010 Merged DOW
- 2012 Poland plant
(Europe)
- 2016 Chongqing plant
(China)
- 2017 New plant underway
(India, Vietnam, Europe)

Biz. Performance ...



Domestic 400, Overseas 700

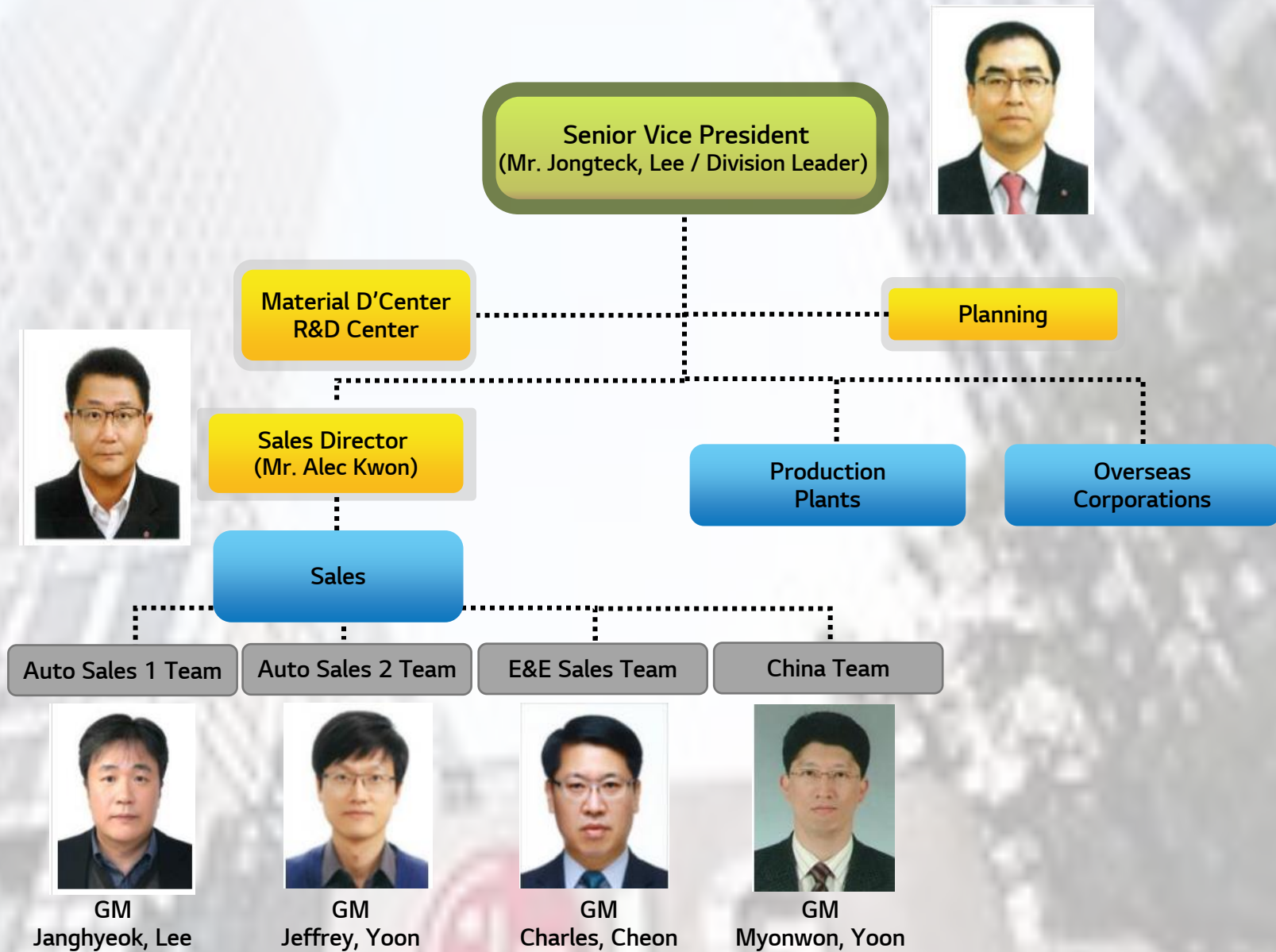


EPC Global Position(5th)

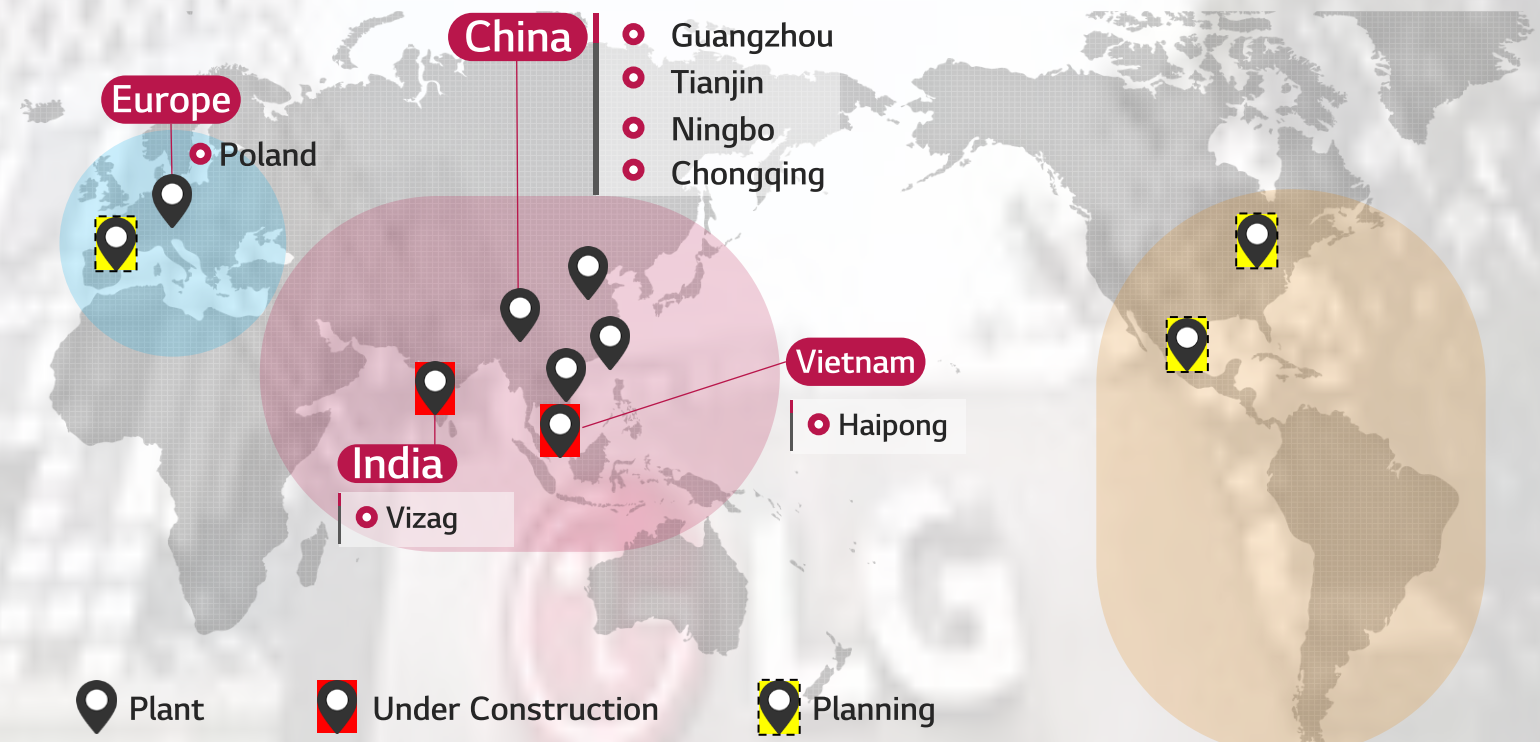


Own an Independent R&D
(Material Development Center)

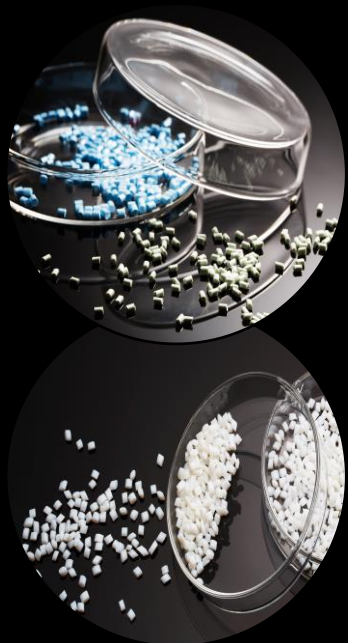
EP Division Organization



EP Division Network



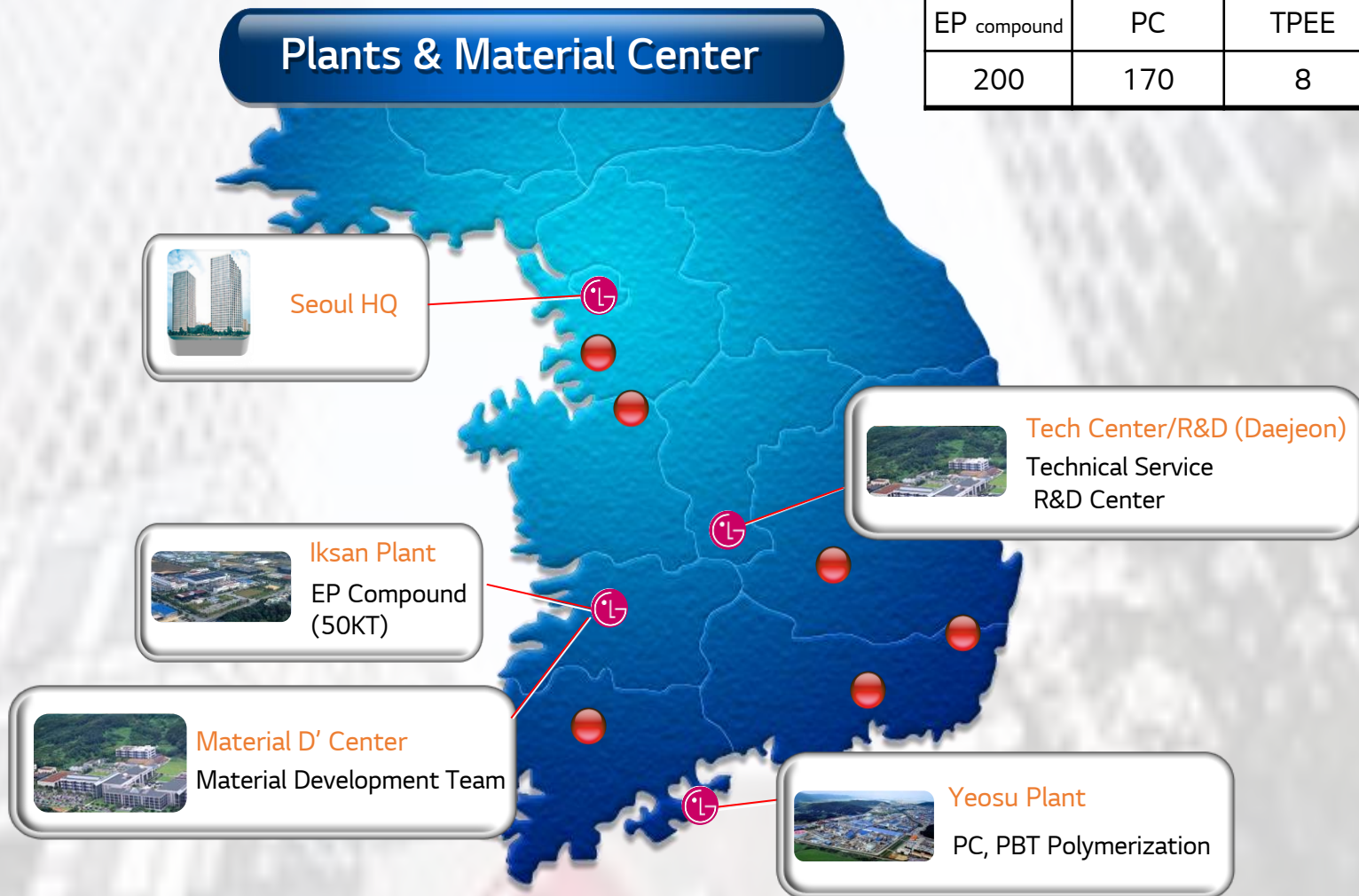
EP Division Network Domestic



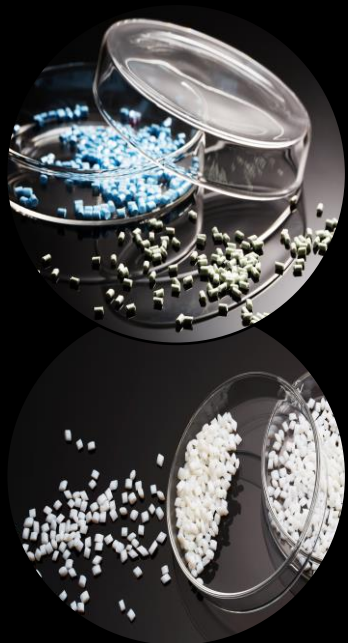
Plants & Material Center

Capacity in Korea (KT)

EP compound	PC	TPEE
200	170	8



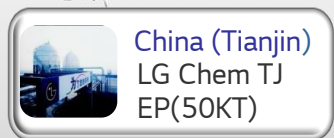
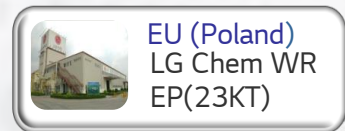
EP Division Network Overseas



Subsidiaries around the world

Capacity in Overseas (KT)

EU	China	Total
23	158	181



 Manufacturing Subsidiaries(5) : China(4), Poland (1)

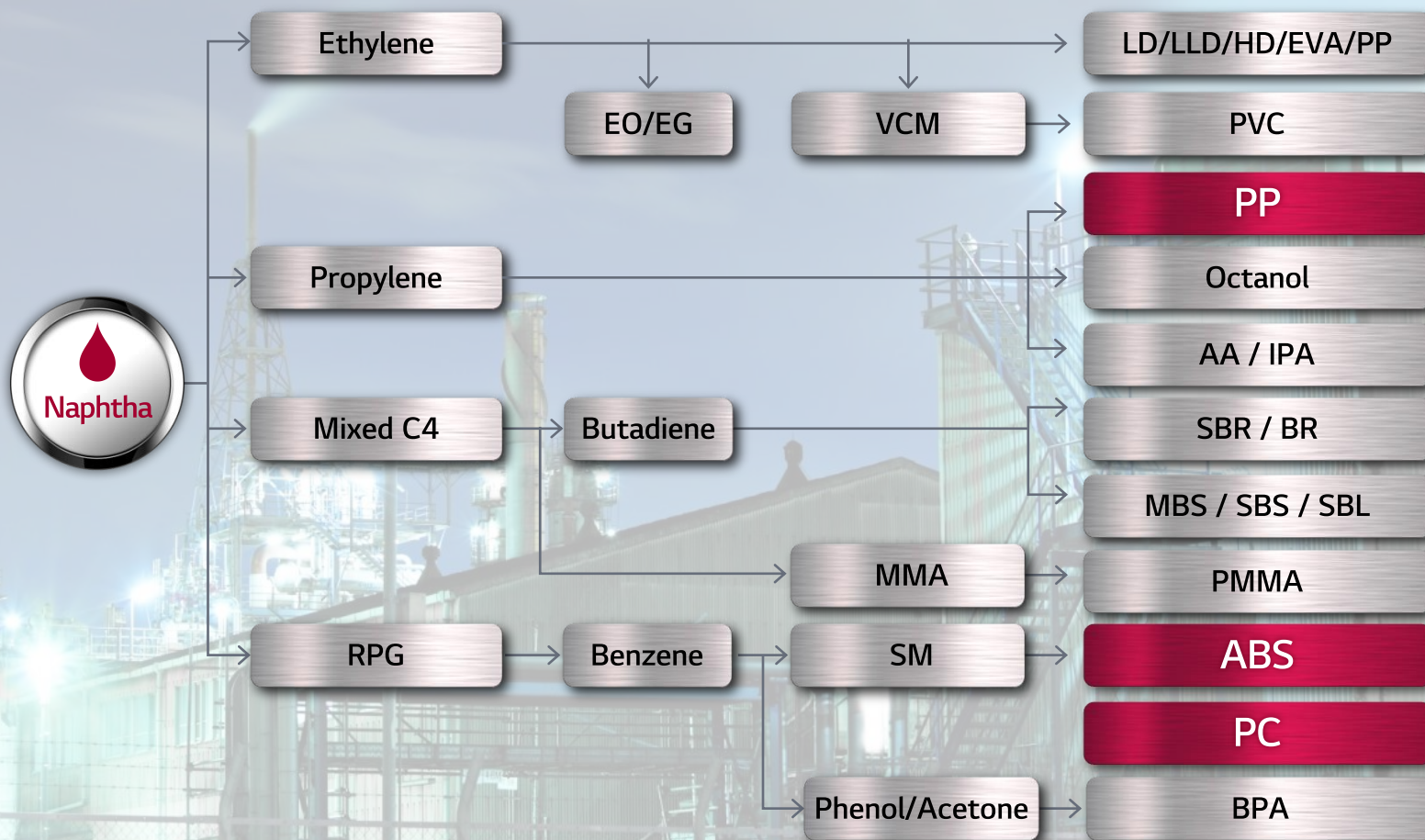
EP Division

Why

LG EP ?



Vertical Integration



EP Division
Why LG EP ?



Product Portfolio

Polycarbonate

PC Compound, PC alloy

LUPOY

Polyester

PBT, PBT Compound, PBT alloy
PBT/Styrenics alloy

**LUPOX
LUMAX**

Polyamide

PA compound, PA alloy

LUMID

Olefin

PP Compound

LUPOL

mPPO

PPO/HIPS, PPO/PA alloy

LUMILOY

Styrenics

Reinforced ABS & SAN

LUPOS

Acetal

POM, POM Compound

LUCEL

TPE

TPEE (Ester Type Elastomer)
TPO (Olefin Type Elastomer)

**KEYFLEX BT
KEYFLEX TO**

Heat Resistance Resin

PPS & SPS Compound

LUSEP

Conductive Resin

ABS, PS, PC, mPPE, PPS Compound

LUCON

EP Division
Why LG EP ?

Various Applications



EP Division

Why LG EP ?



Technical Support

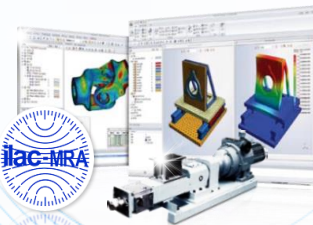
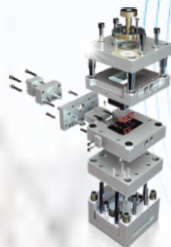
Injection Molding

- Optimization of mold design
- Flow analysis and troubleshooting



Material Properties Evaluation

- Material database
- Long-term material properties/Reliability evaluation
- KOLAS* acquisition
(KOLAS*: Korea Laboratory Accreditation Scheme)



Extrusion

- Screw/die design
- Process analysis by CFD*
(CFD*: Computational Fluid Dynamics)



Product Design

- Structural analysis
- Thermal analysis
- Design of plastic parts



EP Division
Why LG EP ?



Providing Color Solution



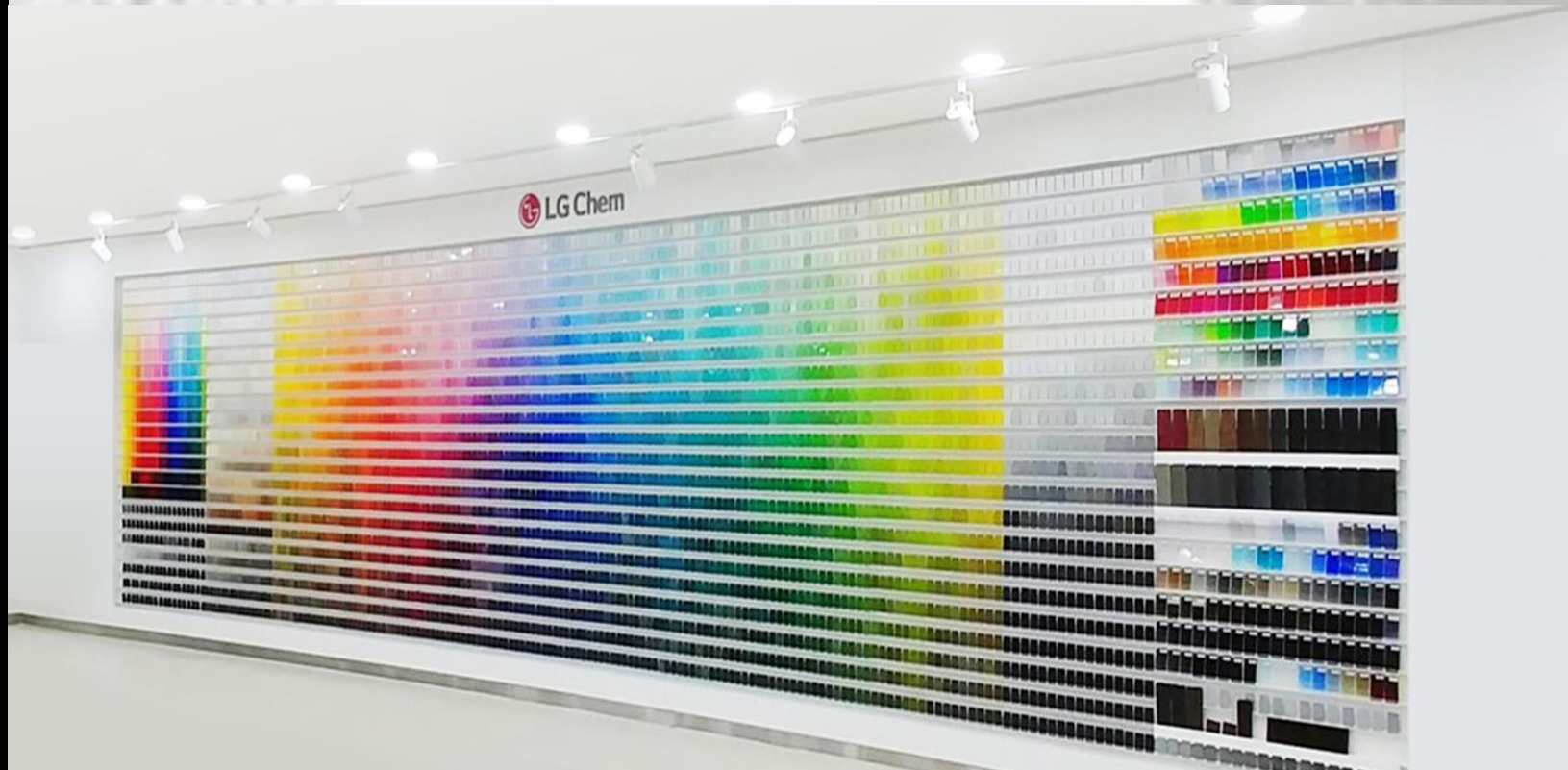
—
25,000 types of
Color development a
year



—
15 tons of
Sample
production a month



—
7 days of Delivery
Time
(2 weeks for
Overseas)



EP Division
Automotive
Interior

Automotive

Door

Trim : LUPOL (PP+M/F+Rubber)
Handle : LUPOY MP5000AM

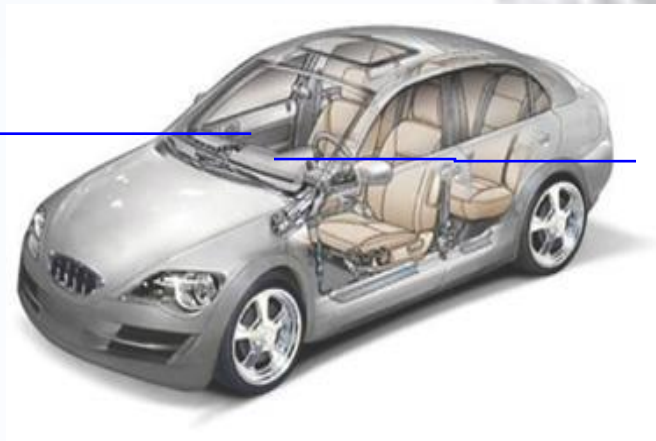


Cluster

Housing : LUPOY NS5000
Cover : LUPOY GP1000ML

Instrument Panel

Core : LUPOL (PP+M/F+Rubber)
Skin : Keyflex TO1192A
Airbag Cover : LUPOL ST5020



Console

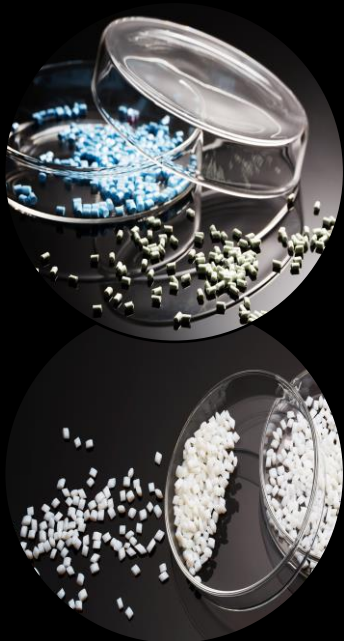
Box: LUPOL (PP+M/F+Rubber)
Cover : LUPOY NS5000



Center Fascia, Air vent Duct
LUPOY NS5000C

Airbag(DAB)

Cover : Keyflex BT S5035
LUPOL ST5010, ST5015
Can Housing : LUMID HI2402A



EP Division
Automotive
Exterior

Automotive

Head Lamp

LUPOX GP1000D
LUPOX SG3250
LUPOX SG3180S



Rear Lamp

LUPOY HR5007A



Door Handle

LUPOX TE5000H
LUPOX TE5000S
LUPOY MP5000AM



Wheel Cover/Cap

LUMID HI3232A
LUPOY HI5002A



Side Sill/Door Garnish

LUPOL RD4252
LUPOL MC4352



Side Mirror

Bracket/Base plate
LUPOX SG5500
LUMID SG2600B



Bumper System

Bumper Fascia : LUPOL (PP+M/F+Rubber)
Radiator Grill : LUPOY MP5000AM



EP Division
Automotive
Under hood

Automotive

Cylinder Head Cover

LUMID LW4403B
LUMID GP2350B



Engine Cover

LUMID LW4203A
LUMID LW4383B



AIM(Air Intake Manifold)

LUMID GP2330A



Air Intake Hose

Keyflex BT HB9255D



Fuel Filler Neck

LUMID HI5001AH



CVJ Boot

Keyflex BT HB9242D



FEM Carrier

LUMID GP2300A



Corrugate tube

LUPOL GP1007FE



Fan & Shroud

LUMID SG4389B



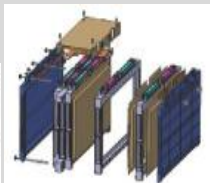
Radiator Tank

LUMID EG2309B



EV Battery Module Housing

LUMID GP3300BW
LUMILOY GP2100
LUMILOY GN2101F



EP Division
Mobile phone

Mobile Phone



Front

LUPOY SC1004, GP2102
LUPOY SC2152, SC2202

Rear

LUPOY GP2102, SC2152
LUPOY SC2202, SC2302
LUXY K3G55

Battery Cover

LUPOY SC1004, GP2102

Mold Frame

LUPOY SR3108F
LUPOY RF3208F

LCD Bracket

LUPOY SC2302
LUXY K3G55

Inner Battery Pack Housing

LUPOY GN1002F
LUPOY GN1008RF



EP Division
Display(TV)



Display

BLU Frame

LUPOY GP1000LC
LUPOY GN2101F, GN2151F
LUPOY GN2106F, GN5159F



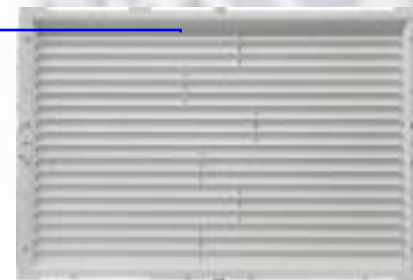
Front Cover

LUPOY GN5001RFT
LUPOY GN5001RFG
LUPOY GN5001RFP
LUPOY EF5001RFT



Mold Frame

LUPOY SR3108F
LUPOY RF3208F



Rear Cover

LUPOY GN5001RFT
LUPOY GN5001RFG
LUPOY GN5001RFP
LUPOY EF5001RFT
LUMILOY GN1306FJ



Stand Neck

LUPOY GN5001RFT
LUPOY GN5001RFG
LUPOY GN5001RFP
LUPOY EF5001RFT
LUMILOY GN1306FJ



Stand Base

LUPOY GN5001RFT
LUPOY GN5001RFG
LUPOY GN5001RFP
LUPOY EF5001RFT
LUMILOY GP2250G



EP Division
Notebook PC



Notebook

LCD Bezel

LUPOY GN5001RFA
LUPOY SG5009F

Keyboard Deck

LUPOY GN5001RFA
LUPOY GN5101RF

LCD Cover

LUPOY GN5151RFA
LUPOY GN5101RF
LUPOY GN2253F (Slim Notebook)
LUPOY GN2403F (Slim Notebook)

Bottom Cover

LUPOY GN5151RFA
LUPOY GN5151RF
LUPOY GN2253F (Slim Notebook)
LUPOY GN2403F (Slim Notebook)

Battery Pack Housing

LUPOY GN1008RF
LUPOY ER1008RF



EP Division
Home Appliance

HA



PCB Supporter
LUMILOY RF3206F



Out-Tub
LUPOL (PP+G/F+M/F)



Steam Generator
LUCON SP9306FL



Door Window
LUPOY GP1000LP

Insulator
LUPOX GP2306FI



Motor Bushing
LUPOY GP2300G



EP Division OA



OA

<Copier>

Upper Cover
LUPOY GN1006F
LUPOY GN5001RF

Inner Part [Paper Guide]
LUCON CP6051F

Copier Housing
LUPOY GN5001RF

Inner Part
LUPOY GN5201F, GN2301F
LUPOS GP2200, GP2206F



<Laser Beam Printer>

Front Cover
LUPOY GN5001RFT

Housing
LUPOY GN5001RF

Base/Side Frame
LUPOY GN5201F, GN2351F
LUMILOY GN2206F, GN4356F

Inner Part
LUPOY GN5201F, GN2301F
LUPOS GP 2050, GP2200, GP2206F



<Projector>



Upper Cover
LUPOY EF1006FP

Lower Cover
LUPOY GN5007FP

<Toner Cartridge>



Housing
LUPOY GN5001RF
LUMILOY GN2206F



Thank you



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