UPT Company Introduction
-2026-

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2026.04.01 Steve Lee

BEYOND EXPECTATION

UniPol™

UPT History

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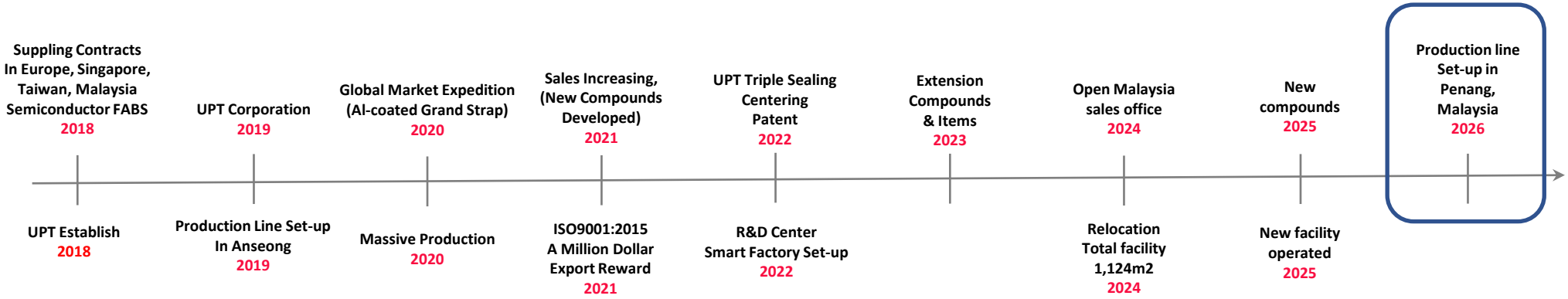

Company	㈜ 유피티, UPT CO., LTD. South Korea
Establish	December, 2018
CEO	Steve Lee
Main Business Items	Semiconductor, Display Spare Parts Production & Sales
Address	Korea Headquater : 4789-43, Seodong-daero, Daedeok-myeon, Anseong-si, Gyeonggi-do, 17544, Republic of Korea Malaysia Branch : 35, Lorong Nagasari 5, Taman Nagasari, 13600 Perai, Pulau Pinang
Home Page	www.uptkr.com
Tel & Fax	Tel : 82-31677-9992, Fax : 82-31677-9993

UPT Sales

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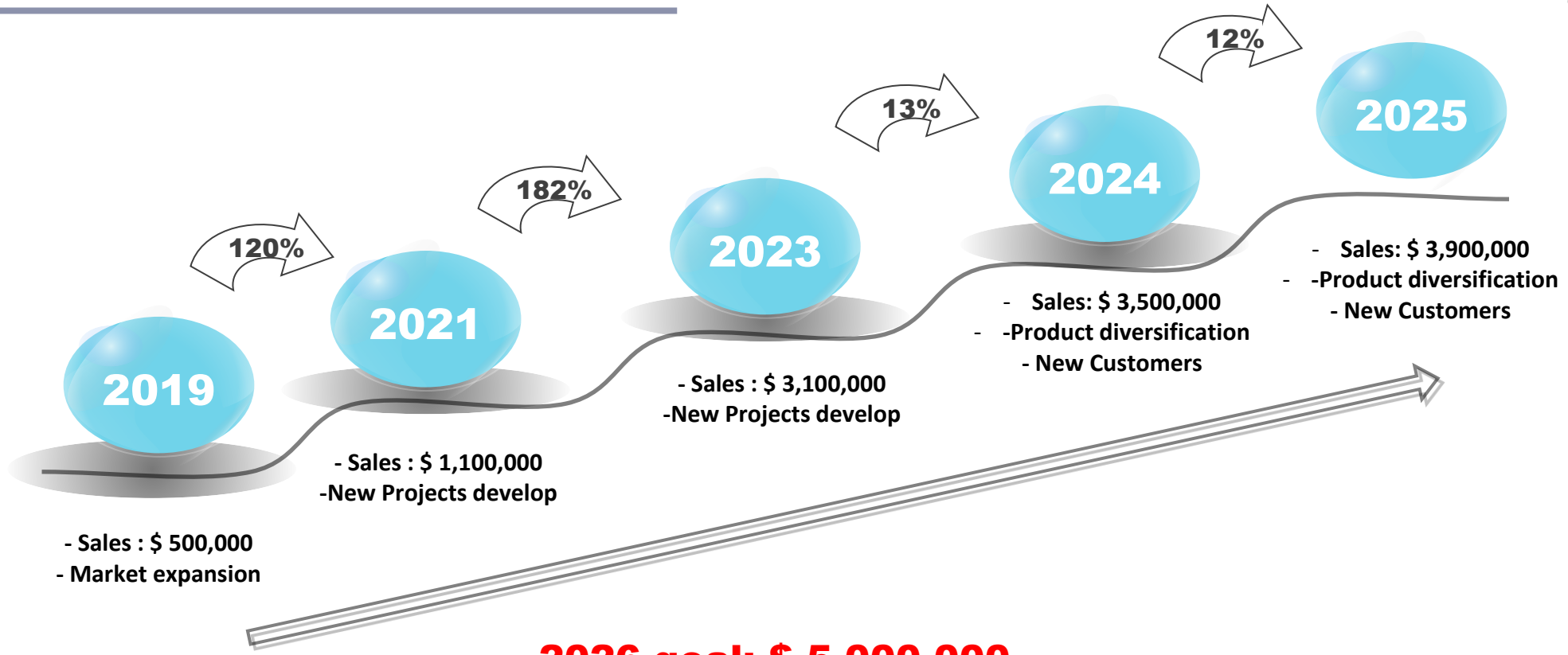

2026 goal: $ 5,000,000

1. Continuous investment in R&D with state-of-the-art technology
2. Continuous research for new items
3. Global market expansion

UPT Organization

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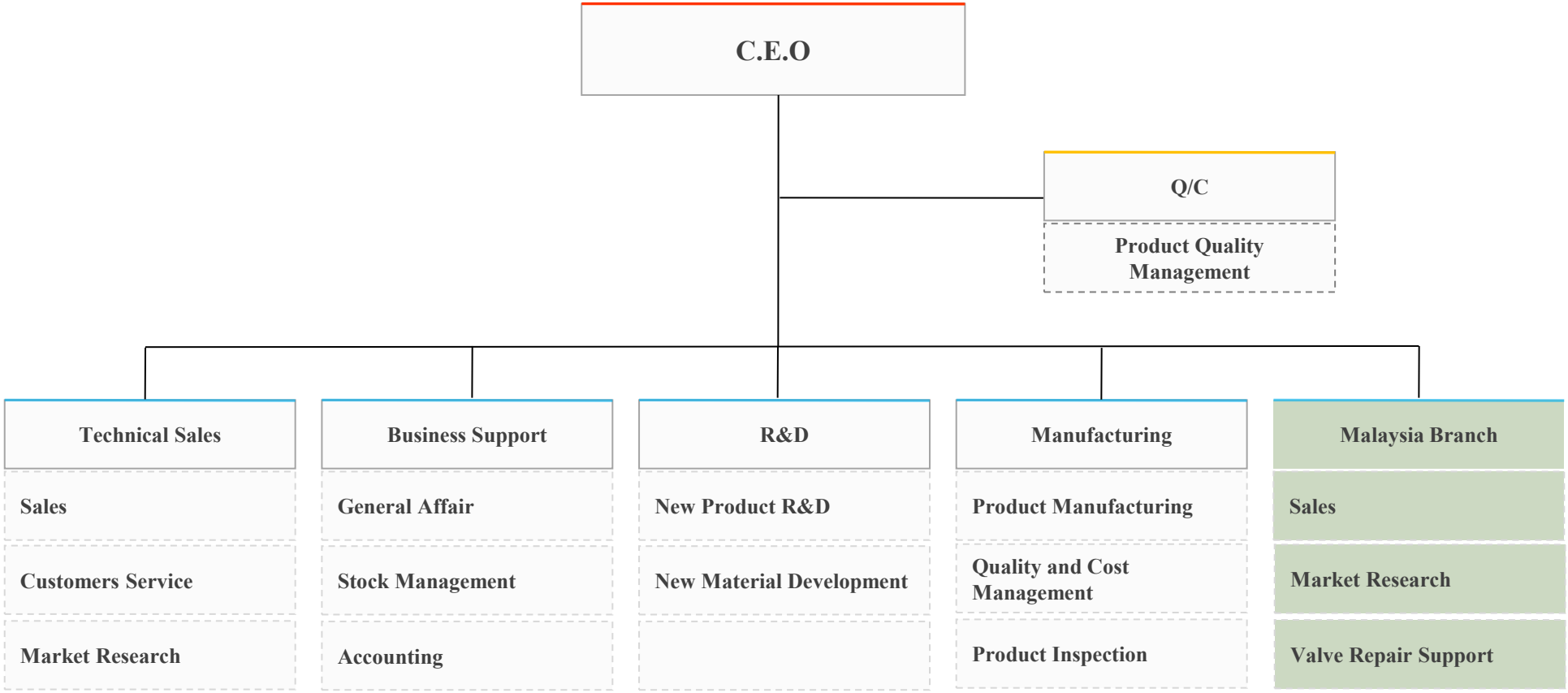
Beyond Expectations with **Best** Quality



Total employees : 18 (2026.04)

UPT Customers

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UPT Business Field

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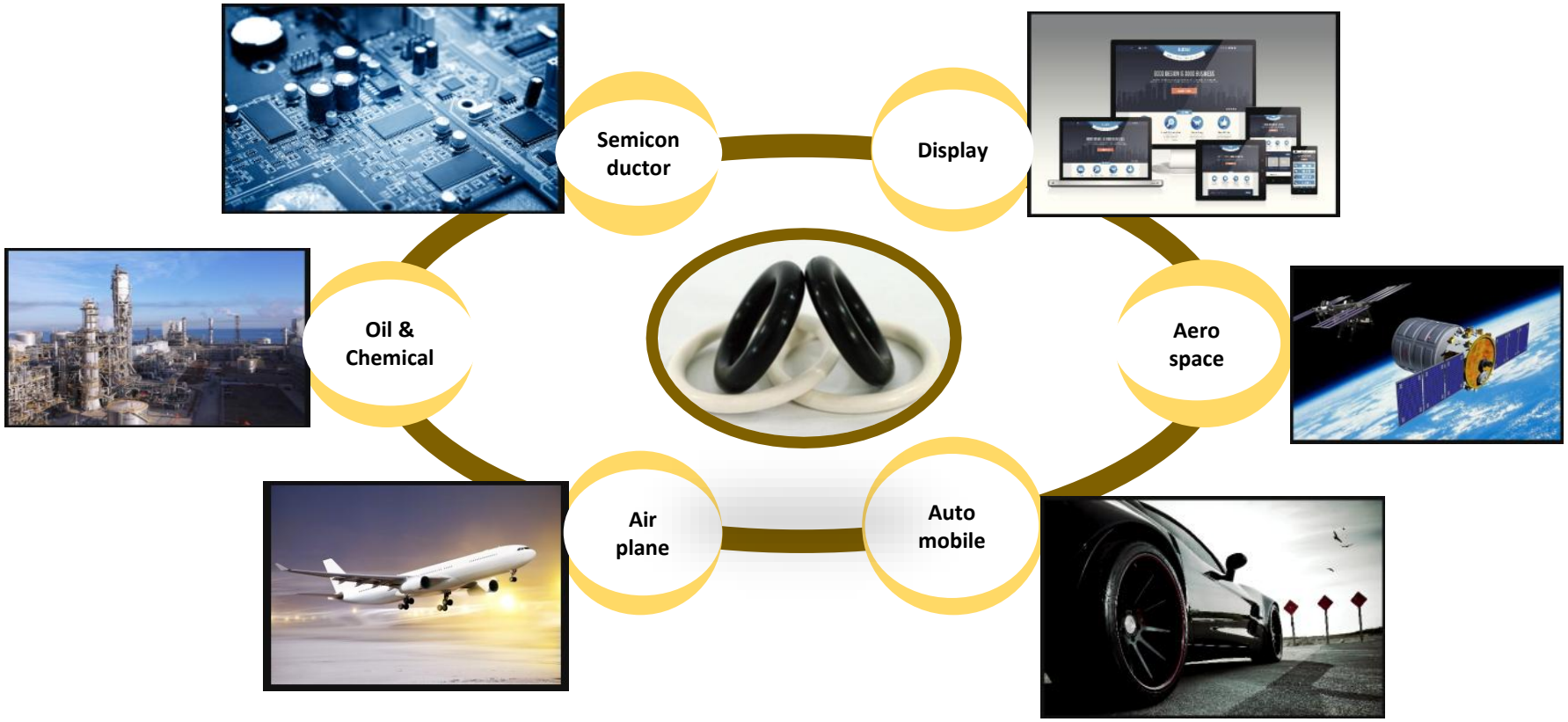

UPT Specialized Product – Sealing product

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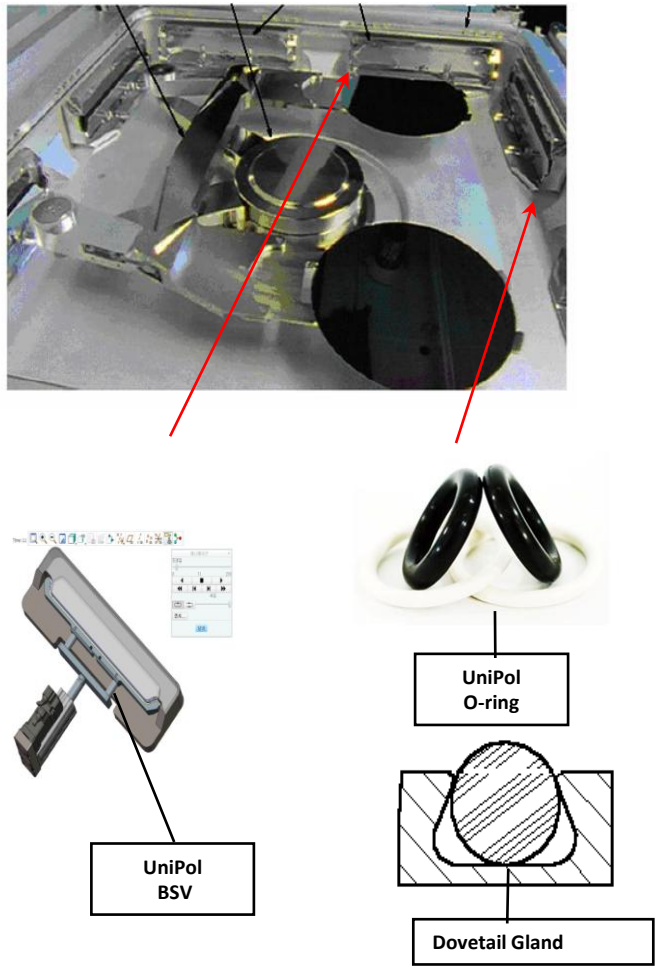

■ PURPOSE

✓**Lower contamination & longer life time seals for vacuum chamber.**

■ APPLICATIONS

✓ Fab (Semiconductor, LCD, LED, OLED, etc…)

- Semiconductor Equipment, LCD, OLED Equipment.
- Chamber Lid o-ring, Gas Inlet, Shower Head, Gate Valve.

■ QUALITY

✓ High purity FFKM (Perfluoroelastomer)
✓ No Metallic contents
✓ Longer life span - > Save cost & Safe
✓ Nano-sized fillers

UPT Specialized Product – FFKM, FKM, ESD Materials

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O-RING (FFKM, FKM)

Customaries Seals

FFKM, FKM, FSI, Conductive Polymers

KF Centering

Robot Pad

UPT Specialized Product – Bonded Door Plates

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Bonded Slit Valve Door Plates (BSV)

LAM E5

VECTOR

ULTIMA & PRODUCER

ULTIMA TURBO GATE

LAM ROCKER

ENDURA

SPEED PENDULUM

INOVA

VECTOR PENDULUM

UPT Specialized Product – Centering

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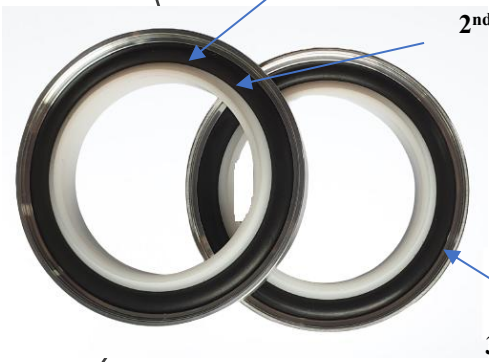
Normal Centering
(Oring + SUS centering)

Triple Sealing
Centering



Special Centerings
(Safety + Longer Life Time)

Polymer Bonded Centering
(Double Sealing)

UPT Specialized Product – Spare Parts

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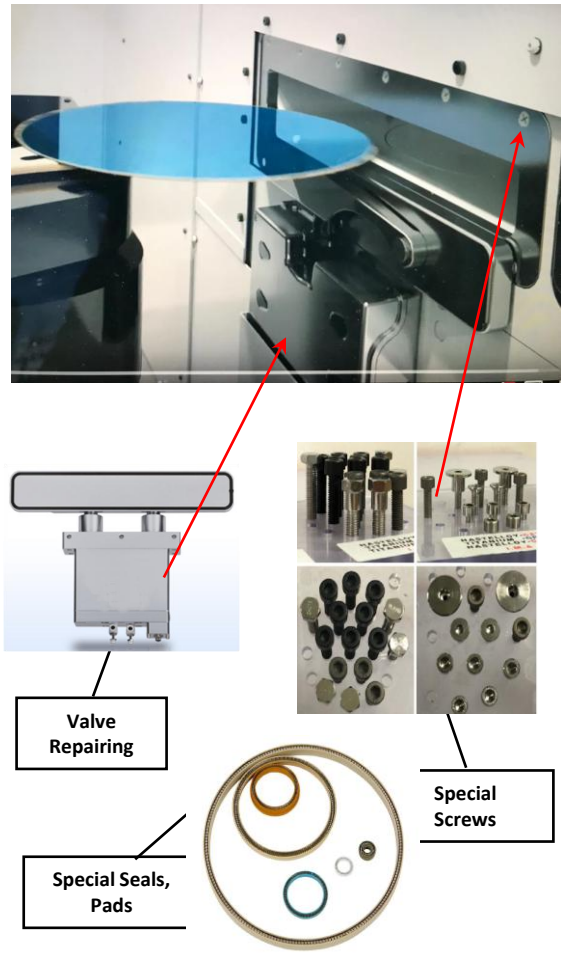

■ PURPOSE

✓**Durable Spare Parts with Competitive Cost & longer life time .**

■ APPLICATIONS

✓ Fab (Semiconductor, LCD, LED, OLED, etc…)

- Semiconductor Equipment, LCD, OLED Equipment.
- Chamber Gate Valve, Slit Valve, Sub-fab facility parts, Pump, Gas Valves, Gas Inlet.

■ QUALITY

✓ High Durability Spare Parts
✓ Cost Effective
✓ Longer life span - > Save cost & Safe
✓ Shorted Lead Time

UPT Specialized Product – Spare Parts

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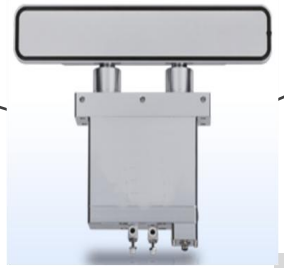
Screws & Washer

Inconel, Hastelloy, SUS, Al, Ni
(Vented, Special Coating)

Energized Seals

PTFE, PFA, PEEK, Polyimide
(Mechanical Seals, Robot PADs)

Valve Repair & Bellows



Valve Repair, Gate Door Plates
(Bellows, Valve Seals)

Engineering Plastic

ESD Polymers
(Conductive Seals, PADs)

UPT Production Steps

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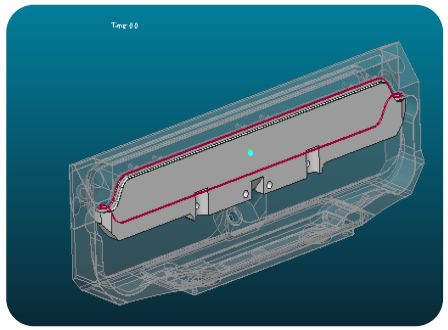
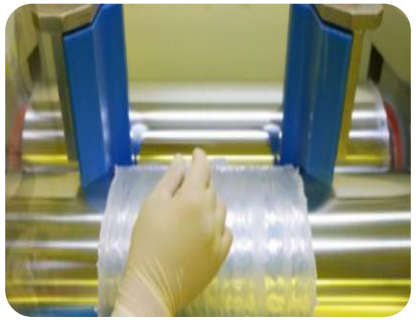


Mold Design

Mold manufacturing



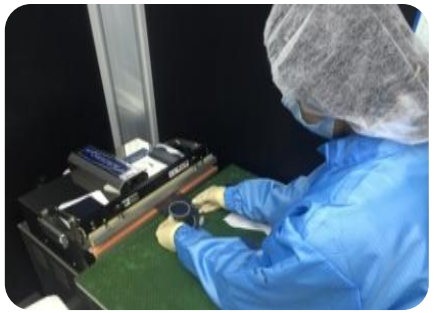
Compound Formulation

Molding

Visual Inspection

Post Curing (Oven)

Inspection



Cleaning & Packing

UPT Production Equipment

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SPEC		
MODEL		1P 1SET
Company		Korea
Volt		380V
Size		3676*1982*2230
Spec	Heat plate	700*700 (4EA) 550*550 (4EA)
	Heater Capacity	28.8Kw
	Motor Capacity	15Kw
Location		Clean Room
Calibration		1 yr.

SPEC		
MODEL		2P 1SET
Company		Korea
Volt		380V
Size		3450*1730*2160
Spec	Heat plate	400*400 (1EA)
	Heater Capacity	21.6Kw
	Motor Capacity	11Kw
Location		Clean Room
Calibration		1 yr.

Press Molding Machine

UPT Production Equipment

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DNM 500

MAZAK 530C

MYNX 7500

VM5400

WIA F400

VERTICAL MACHINING CENTER						
Description	Unit	DNM 500 (1EA)	MAZAK 530C (1EA)	MYNX 7500 (1EA)	VM 5400 (1EA)	WIA F400 (1EA)
Table size	mm	1200X540	1300X550	1600X750	1200X540	1000X450
Speed	rpm	8,000	12,000	12,000	8,000	8,000
Lange (X/Y/Z)	mm	1000/500/500	1020/500/500	1500/750/750	1000/500/500	800/400/400
Table Speed (X/Y/Z)	m/min	18/18/18	42/42/42	15/15/15	15/15/15	32/32/32
Tool Capacity	EA	30	30	30	30	25

UPT Production Equipment

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BAKE OVEN

Specification		
MODEL		QM240 * 4 EA
Company		XX
Volt		220V
Size		750*680*1400
Spec	Volume	450*450*500
	Temp. Range	RT~ 350℃
	Capacity	Max 3Kw
Location		Oven Room
Calibration		1 yr.

Extrusion Machine

Specification		
MODEL		2 Cylinder (1EA), 3 Cylinder (1EA)
Company		xx
Volt		380V
Size		1800*1300*2400
Spec	Extraction Volume	500ml*2
	Temp. Range	1.2Kw
	Capacity	15Kw
Location		Clean Room-Extractor

UPT Analysis & Improvement Capability

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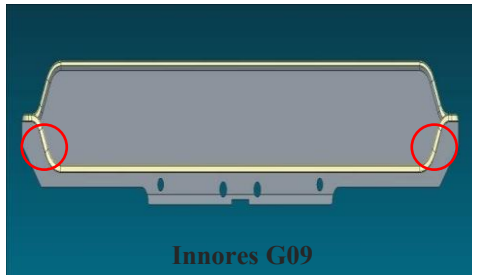
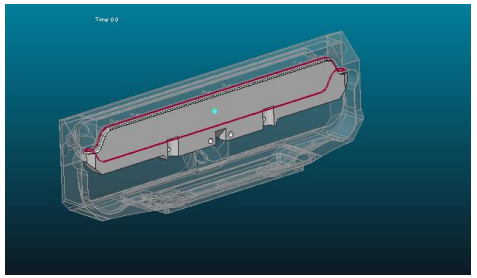
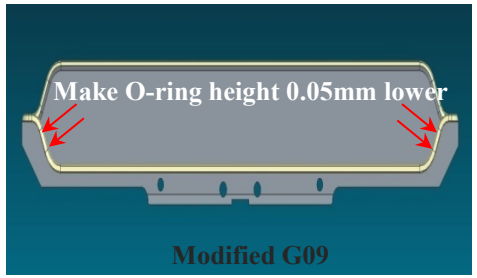
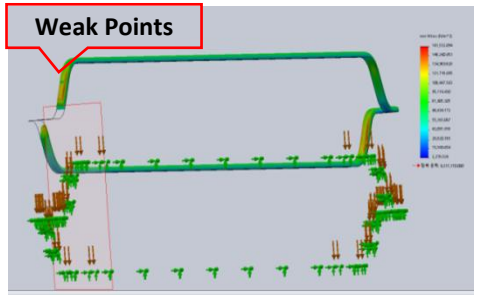
Using Creo 2.0 (Pro-E) 3D Program, the cause of the problem is analyzed and the design is changed accordingly to solve the problem.

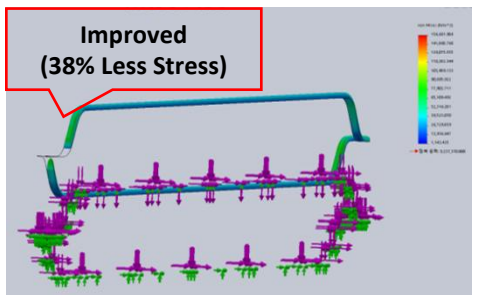
Ex) Ultima & Producer Door Improvement

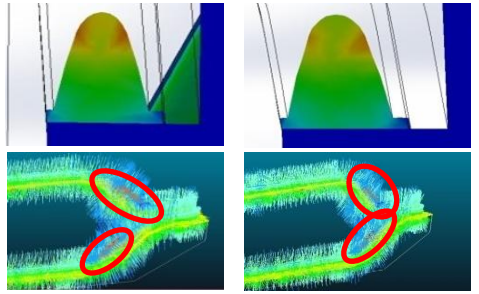












UPT R&D Equipment

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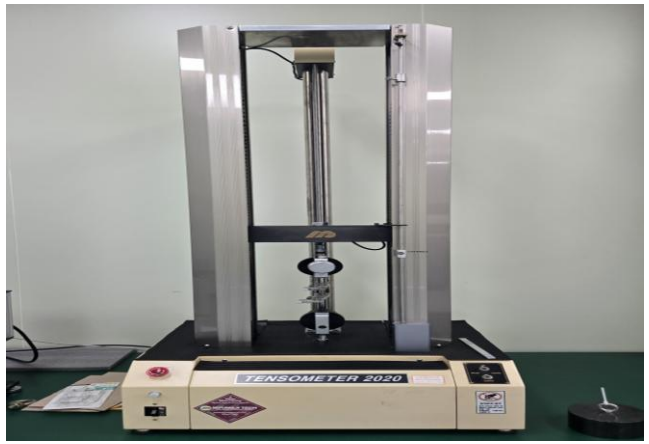
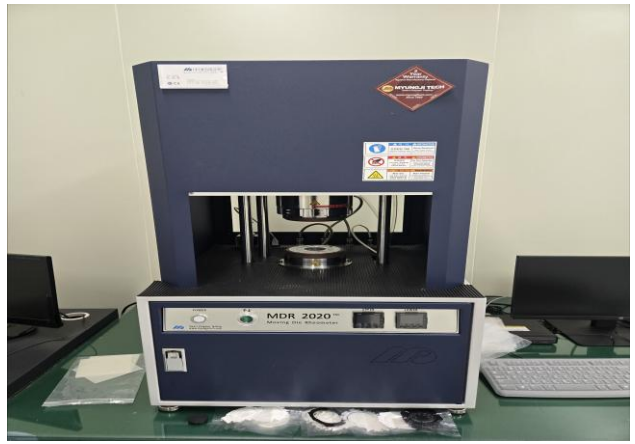


UTM



Rheometer

C/S Test Oven

Raser Resistance Test

UPT R&D Equipment

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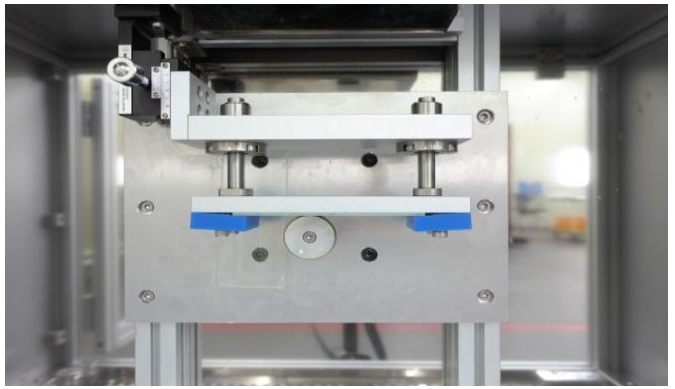

Abrasion Test Machine

Plasma Test Equipment

UPT FFKM Materials

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	Process Type	Typical Seal Temperature	Typical Process Environment	Suggested Compound	Typical Applications
Plasma Processes	HDPCVD PECVD	25~650℃	TMS,TEOS,SiH4, NH3,SiF4,O2,C2F6, N2O,CF4	**UPC-01 (Amber FFKM)**	-Dynamic : Door seals, Gate valves, Pendulum valves - Static : Chamber lid seals, Shower head, RPS, Pedestal (heater) seals, Gas inlets Window seals, Center rings Carrier : Wafer/FPD, Support/Transport
	Etching	25~200℃	CF4,C3F8,CHF3,SF6,O2,H2,HBr, BCl3,CCl4,Cl2	**1160W (White FFKM)** **IK-700 (White FFKM)** **DIR-140 (Clear FFKM)**	
	Ashing/ Stripping	25~250℃	O2,CF4,CHF3, NH3,H2O Vapor Forming Gas	**1160W (White FFKM)** **IK-700 (White FFKM** **UPR-14 (Trancelucent FFKM)**	
Thermal Processes	SACVD	25~350℃	TEP,TEBO, TEOS,O3,NF3	**UPC-01 (Amber FFKM)** **DIR-140 (Clear FFKM)**	
	Metal CVD ALD LPCVD	25~600℃	Organic precursors,WF6,TiCl4,SiH4,HF F2,Cl2,ClF3,NF3,H2O Vapor,O2,O3	**UPC-01 (Amber FFKM)** **DIR-140 (Clear FFKM)**	-Quarts chamber seal -Fittings -Center ring -Pendulum valve seals
	Oxidation Diffusion	150~800℃	N2,O2,H2O, HCl,Cl2	**1160B (Black FFKM)** **UPL-80 (Black FFKM)**	
	Lamp Anneal RTP	150~300℃	Resistance to IR absorption	**UPL-80 (Black FFKM)**	
Wet Processes	Strip, Etch, TMAH, Air Knife , Cleaning	25~180℃	Stripper, Etchant, DI, etc	**1160W (White FFKM)** **UPC-01 (Amber FFKM)**	-Each Conveyor Rollers/side rollers -Drain seals -Seals for chemical containers -Fittings -Seals for filters/connectors
SUB-FAB (Facility)	Exhaust Line Gas Inlets Scrubber	Room Tem~300℃		**1160W (White FFKM)** **IK-78 (Hybrid FFKM)**	Normal Centering (SUS+FKM or FFKM) Bonded Centering (FKM + FKM or FFKM) PTFE Centering (PTFE + FKM or FFKM) + AL outering)

THANK YOU

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