

# TOTAL UV TECHNOLOGY



- » HG(MERCURY) LAMP
- » MTL(METAL HALIDE) LAMP
- » GA(GALLIUM) LAMP
- » UV EXPOSURE LAMP
- » UV CLEANING O<sub>3</sub> LAMP
- » UV LED CURING SYSTEM
- » OPTICAL FILM CURE SYSTEM
- » HORIZONTAL TYPE CURE SYSTEM
- » IMPRINTING UV CURE SYSTEM
- » DOUBLE SIDE UV CURE SYSTEM
- » ONE SIDE UV CURE SYSTEM
- » UV ELECTRONIC BALLAST
- » UV ACCESSORIES PARTS



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# Total UV Technology

MS테크는 UV관련 장비 전문업체로서 새로운 가치창조를 위해 항상 노력하고 있습니다.  
MS TECH作为一家专门制造紫外线设备的企业, 不断致力于创造新的价值.

## 고객을 위한 가치창조실현

저희 MS TECH는 UV LAMP, UV 경화기, UV 세정기 및 전자식안정기를 제조하는 UV전문기업으로서 고객을 위한 품질과 기술을 중시하고 이를 바탕으로 사회에 공헌하는 기업이념을 구현하고자 오늘도 기술개발을 위해 끊임없이 노력해오고 있으며 축적된 경험과 기술력을 바탕으로 차별화된 제품공급을 위해 전 임직원이 매진하고 있습니다.  
고객을 위한 최고의 가치창조를 위해 노력하는 MS TECH가 될 수 있도록 변함없는 관심과 성원 보내주시기 바랍니다.

MS TECH 임직원 일동

## REALIZATION CREATIVE VALUE FOR A CUSTOMER

We MS TECH the UV lamp, UV curing system, UV cleaning system and UV electronic ballast and UV as a professional company to manufacture and technology, emphasis on quality for customers and contribute to society based on this idea to implement an enterprise technology today, has been striving to develop. Based on accumulated experience and technology for the supply of differentiated products are sold in full-time employees.

Creating value for our customers to strive for the best MS TECH to be a constant interest and encouragement, please send.

MS TECH ALL THE STAFF

## 实现客户的价值创造

MS TECH是制造UV LAMP, UV固化设备, UV清洗器与电子镇流器的UV专门企业, 以为客户提供高品质的服务与技术为根本, 以贡献社会为企业理念, 坚持不懈地致力于技术开发, 以丰富的经验与技术力量为基础, 为了提供差别化的产品, 全体员工正不断努力着.

为了使 MS TECH成为不断满足客户创造最高价值需求的企业, 请一如既往地给予我们关心与支持.

MS TECH 全体员工



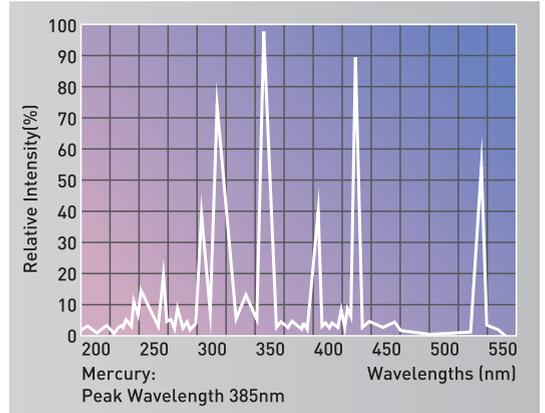
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# 수은램프 · HG(MERCURY)LAMP · 水银灯管 (汞灯)

## Feature

- » 일반적으로 가장 많이 사용되는 램프로써 365nm 파장대의 자외선을 풍부하게 방사함.
- » UV 접착제, 도료건조, 코팅, 인쇄공정등에 사용.
- » High pressure mercury lamps are commonly used lamp which radiated 365nm wavelength uv radiation sufficiently.
- » Mainly used in uv bonding, drying, coating and printing process.
- » 作为最普遍使用的灯管, 充分释放365nm波长范围的紫外线.
- » 主要用于UV粘合剂, 涂料干燥, 涂层, 印刷工程等.



## 상세규격 / SPECIFICATIONS / 详细规格

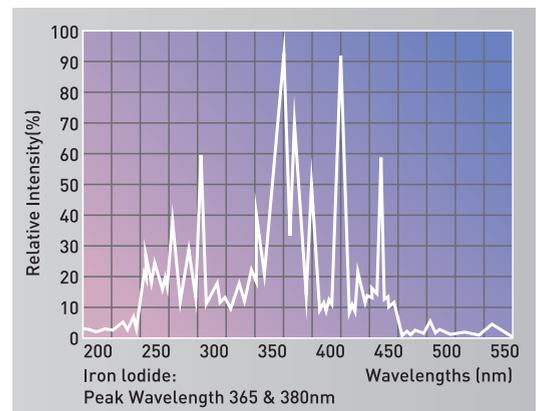
Series	Lamp Type	Power (W)	Overall Length(mm)	Arc Length(mm)	
80W /cm	MSH600/CO	600	178	75	
	MSH1000/CO	1000	225	110	
	MSH2000/CO	2000	376	250	
	MSH3200/CO	3200	550	400	
	MSH4000/CO	4000	626	500	
	MSH5000/CO	5000	670	550	
	MSH5600/CO	5600	826	700	
	MSH6400/CO	6400	950	800	
	MSH8000/CO	8000	1150	1000	
	MSH8800/CO	8800	1226	1100	
	MSH10.0K/CO	10.0K	1400	1250	
	MSH11.2K/CO	11.2K	1526	1400	
	MSH12.8K/CO	12.8K	1726	1600	
	MSH16.9K/CO	16.0K	2150	2000	
	MSH18.0K/CO	18.0K	2400	2250	
	MSH20.0K/CO	20.5K	2650	2500	
	100W /cm	MSH2500/DO	2500	376	250
		MSH5000/DO	5000	626	500
MSH7000/DO		7000	820	700	
MSH8000/DO		8000	926	800	
MSH11.0K/DO		11.0K	1226	1100	
MSH14.0K/DO		14.0K	1526	1400	
MSH16.0K/DO	16.0K	1726	1600		

Series	Lamp Type	Power (W)	Overall Length(mm)	Arc Length(mm)
120W /cm	MSH3000/EO	3000	376	250
	MSH7000/EO	6000	626	500
	MSH8400/EO	8400	826	700
	MSH9600/EO	9600	926	800
	MSH13.2K/EO	13.2K	1126	1100
	MSH16.8K/EO	16.8K	1526	1400
	MSH19.2K/EO	19.2K	1726	1600
	160W /cm	MSH800/FO	800	170
MSH2000/FO		2000	245	125
MSH3000/FO		3000	300	180
MSH4000/FO		4000	370	250
MSH6000/FO		6000	495	375
MSH8000/FO		8000	620	500
MSH9600/FO		9600	720	600
MSH12.0K/FO		12.0K	870	750
MSH13.6K/FO		13.6K	980	860
MSH16.0K/FO		16.0K	1120	1000
MSH17.6K/FO		17.6K	1220	1100
MSH20.0K/FO		20.0K	1370	1250

# 메탈램프 · METAL HALIDE LAMP · 金属卤素灯管

## Feature

- » 265 - 420nm 파장대의 범위에서 연속적인 자외선을 방사하는 램프로서 UV효율이 높다.
- » BLU FILM, WINDOW FILM, 유색이나 두꺼운 도료 건조, 스크린 인쇄 등에 사용.
- » Metal halide lamps radiate mostly between 265nm to 420nm wavelength.
- » Apply to blu film,window film,color drying,paint coating, screen printing, etc mostly.
- » 在265 - 420nm波长范围内连续释放紫外线的灯管, UV效率高.
- » 主要用于BLU FILM, WINDOW FILM, 有色或者厚涂料干燥, 丝网印刷等.



## 상세규격 / SPECIFICATIONS / 详细规格

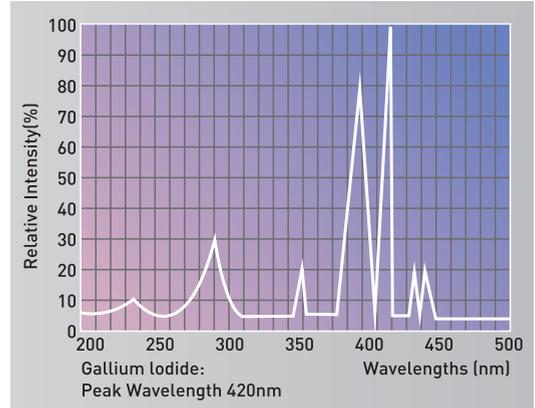
Series	Lamp Type	Power (W)	Overall Length(mm)	Arc Length(mm)
80W /cm	MSM2000/CO	2000	370	250
	MSM3200/CO	3200	520	400
	MSM4000/CO	4000	620	500
	MSM5600/CO	5600	820	700
	MSM6400/CO	6400	920	800
	MSM8000/CO	8000	1120	1000
	MSM10.0K/CO	10.0K	1370	1250
	MSM11.2K/CO	11.2K	1600	1400
100W /cm	MSM1500/EO	1500	145	125
	MSM3000/EO	3000	370	250
	MSM6000/EO	6000	620	500
	MSM8400/EO	8400	820	700
	MSM9000/EO	9000	870	750
	MSM9600/EO	9600	920	800
	MSM12.0K/EO	12000	1120	1000
	MSM13.2K/EO	13200	1220	1100
MSM15.0K/EO	15000	1370	1250	
MSM16.8K/EO	16800	1600	1400	

Series	Lamp Type	Power (W)	Overall Length(mm)	Arc Length(mm)
120W /cm	MSM800/FO	800	170	50
	MSM2000/FO	2000	245	125
	MSM3000/FO	3000	200	180
	MSM4000/FO	4000	370	250
	MSM6000/FO	6000	495	375
	MSM8000/FO	8000	620	500
	MSM9600/FO	9600	720	600
	MSM12.0K/FO	12.0K	870	750
	MSM16.0K/FO	16.0K	1120	1000
	MSM17.6K/FO	17.6K	1220	1100
	MSM20.0K/FO	20.0K	1370	1250

## 갈륨램프 · GA(GALLIUM) LAMP · 镓灯管

### Feature

- » GA LAMP는 장파장대(403nm, 420nm)의 자외선을 방사함.
- » 매우 두꺼운 도료 건조 및 DIAZO FILM현상, 에칭등에 사용.
- » Ga(gallium) lamps ware commonly used lamp which radiation 403nm, 420nm wavelength uv radiation sufficiency.
- » Apply to very thick coatings drying, diazo film and etching.
- » 镓灯(GA LAMP) 释放长波 (403nm, 420nm)紫外线.
- » 用于非常厚的涂料干燥以及DIAZO FILM现象, 蚀刻等.



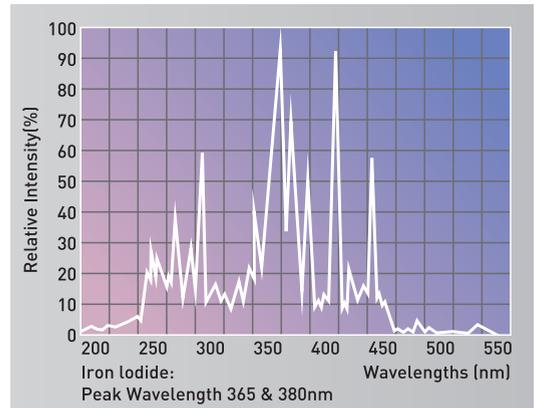
### 상세규격 / SPECIFICATIONS / 详细规格

Purpose	Lamp Type	Power(W)	Voltage(V)	Current(A)	Overall Length (mm)	Arc Length (mm)	Diameter (mm)
DIAZO WOOD	Ga3200	3200	550	6.6	1530	1400	20.5
	Ga4800	4800	945	7	1530	1450	20.5
	Ga11000	11000	1870	6.6	1530	1400	24.5
	Ga11200	11200	1800	6.6	1650	1515	24.5
	Ga16800	16800	2800	6.6	1530	1400	24.5

## 노광램프 · EXPOSURE LAMP · 曝光灯管

### Feature

- » 노광램프는 고해상도 필름이나 광중합 프로세스에서 사용.
- » 마이크로필름,디아조물질, 감광수지등의 노광에 사용.
- » Generally exposure lamps used for high-resolution film exposures and in photo-polymerization processes.
- » Apply to microfilms, diazomaterials, photo-resistant materials etc.
- » 曝光灯应用于高分辨率光学薄膜以及光聚合过程.
- » 如, 显微胶片, 二氮化合物, 感光树脂的曝光.



### 상세규격 / SPECIFICATIONS / 详细规格

Purpose	Lamp Type	Power(W)	Voltage(V)	Current(A)	Overall Length (mm)	Arc Length (mm)	Diameter (mm)
PCB ETCHING	FGQ 5000	5000	360	15	308	200	30
	SMX 7000	7000	550	15	388	280	30
	SPG 4000	4000	290	15	250	142	30
	SPG 5000	5000	360	15	308	200	30
	MXS 7000	7000	550	15	388	280	30

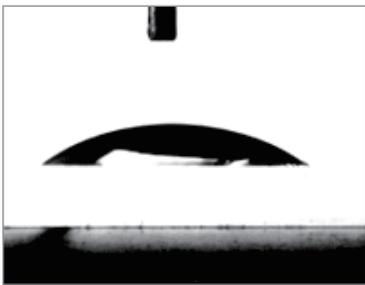
# UV/O<sub>3</sub> CLEANING LAMP · UV清洗灯管

## Feature

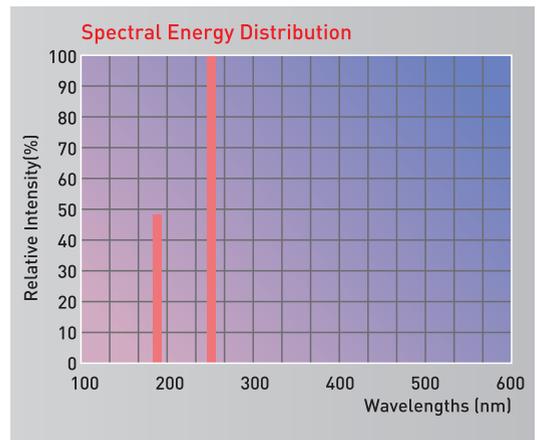
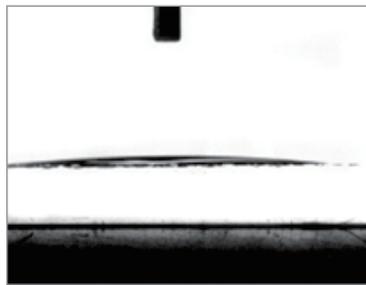
- » 세정용 UV LAMP는 254nm 및 185nm의 자외선을 방사함.
- » LCD, WAFER, GLASS, FILM 등의 표면처리 및 광세정에 적용.
- » UV cleaning/O<sub>3</sub> lamps radiate 185nm to 254nm wavelength.
- » Apply to lcd, wafer, glass, and film etc used for surface treatment uv cleaning.
- » 清洁用UV LAMP释放254nm 与185nm 紫外线.
- » 适用于LCD, WAFER, GLASS, FILM等表面处理与光清洗.



UV/O<sub>3</sub> BEFORE  $\theta = 45^\circ$



UV/O<sub>3</sub> AFTER  $\theta < 5^\circ$



## 상세규격 / SPECIFICATIONS / 详细规格

(D)shape	Overall Length	Arc Length	Wattage
MSUV 40US	270mm	200mm	40
MSUV 90US	530mm	453mm	90
MSUV110US	640mm	563mm	110
MSUV200US	820mm	750mm	200

(D)shape	Overall Length	Arc Length	Wattage
MSUV 90NS	290mm	250mm	90
MSUV110NS	380mm	300mm	110
MSUV200NS	540mm	468mm	200

(D)shape	Overall Length	Arc Length	Wattage
MSUV110MS	300mm	227mm	110
MSUV200MS	390mm	340mm	200

상기규격 이외의 제품에 대해서도 제작가능합니다 / SPECIAL ORDER PRODUCTION IS AVAILABLE / 也可以制作上述以外的制品

# OPTICAL FILM CURE SYSTEM(ROLL TO ROLL) 光学薄膜固化设备.01

Application : prism, diffusion, polarized, window film etc.

## Feature

- » 다양한 COATER MODULE과 조합가능
- » 광범위한 광량 선택가능(40 - 160 W/CM)
- » HG, METAL, GA LAMP 선택적 적용가능
- » BLU용 FILM 제조에 적합
- » 경화폭 2,000mm 이상 대응가능
- » 저온경화에 의한 제품 발열량 감소
  
- » Various coater module is available
- » Can select a wide range of uv intensity
- » Hg,metal, ga lamps can be applied selective
- » Blu film suitable for the manufacture
- » Width of curing : more than 2,000mm
- » By low temperature cure products to reduce heat
  
- » 可以跟各种COATER MODULE组合
- » 可选择大范围的亮度 (40 - 160W/CM)
- » 可选择性的适用HG, METAL, GA LAMP
- » 适合于BLU用FILM制造
- » 可应对 2,000mm以上的固化幅度
- » 减少低温固化条件下的产品发热量



## 상세규격 / SPECIFICATIONS / 详细规格

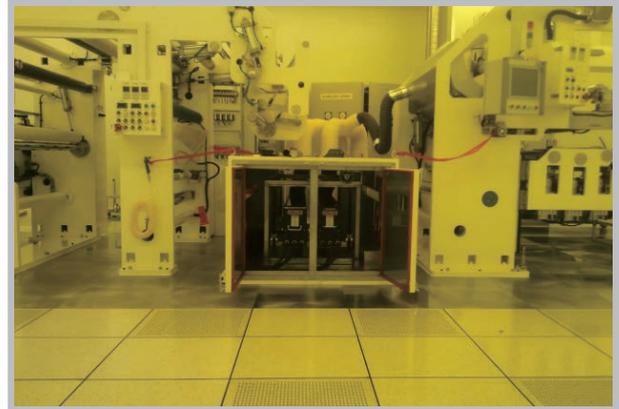
APPLICATIONS	각종 FILM 코팅 및 경화 (各种 FILM 涂层 及 固化)
Model No.	MSRTR-25KO
Light Source	General UV Lamp + Metal Halide UV Lamp
Power Supply	AC 3Φ/ 220V/380V 50Hz/60Hz
Cooling System	Forced Air Cooling 및 Water
Valid Exposure Width	2,000mm
Reflector	Cold Mirror
Option	Cold mirror, Hot mirror, UV Sensor

# OPTICAL FILM CURE SYSTEM(HORIZONTAL TYPE) 光学薄膜固化设备.02

Application : prism, diffusion, polarized, window film, gravure etc.

## Feature

- » 다양한 COATER MODULE과 조합가능
- » BLU용 FILM 제조에 적합
- » 광범위한 광량 선택가능(40 - 160 W/CM)
- » 경화폭 2,000mm 이상 대응 가능
- » HG, METAL, GA LAMP 선택적 적용가능
- » 저온경화에 의한 제품 발열량 감소
  
- » Various coater module is available
- » Blu film suitable for the manufacture
- » Can select a wide range of uv intensity
- » With of curing : more than 2,000mm
- » Hg,metal,ga lamps can be applied selective
- » By low temperature cure products to reduce heat
  
- » 可以跟各种COATER MODULE组合
- » 适合于BLU用FILM制造
- » 可选择大范围的亮度 (40 - 160W/CM)
- » 可应对2,000mm以上的固化幅度
- » 可选择性的适用HG, METAL, GA LAMP
- » 减少低温固化条件下的产品发热量



## 상세규격 / SPECIFICATIONS / 详细规格

APPLICATIONS	각종 FILM 광학 코팅 GRAVURE COATING (各种 FILM 光学涂层)
Model No.	MSSTS-M28KO
Light Source	General UV Lamp + Metal Halide UV Lamp
Power Supply	AC 3Φ/ 220V/380V 50Hz/60Hz
Cooling System	Forced Air Cooling 및 Water
Valid Exposure Width	2,000mm
Reflector	Cold Mirror
Option	Cold mirror, Hot mirror, UV Sensor

# SHEET TO SHEET UV CURE SYSTEM (NANO PRINTED ELECTRONIC)

## SHEET TO SHEET UV固化机

Application : lcd, led, glass, oled, blu, pcb, composition sheet etc.

### Feature

- » 저온경화에 적합한 설계
- » 광범위한 광량 선택가능(40 - 160 W/CM)
- » 소형, 경량화로 장비내 삽입 설치가능
- » IN-LINE자동화설비에 최적화
- » ROLL TO ROLL, SHEET TO SHEET 방식선택적용
- » 조도 관리 SYSTEM적용(OPTION)
  
- » Design for low temperature curing
- » In-line applied optimize automated equipment
- » Can select a wide range of uv intensity
- » RTR, SHEET TO SHEET selection method used
- » Small lightweight, insert can be installed
- » Uv intensity management system application (option)
  
- » 适合于低温固化的设计
- » 可选择大范围的亮度 (40 - 160W/CM)
- » 以其小型, 轻型化, 可以插入装备内安装
- » 最适合于IN-LINE自动化设备
- » 适用于ROLL TO ROLL, SHEET TO SHEET方式选择
- » 适用亮度管理系统 (选项)



### 상세규격 / SPECIFICATIONS / 详细规格

APPLICATIONS	NANO IMPRINTING UV SYSTEM (UV 코팅 & 프린팅) (UV 涂层 & 印刷)
Model No.	MSSTS-20KO
Light Source	MERCURY+METAL HALIDE+GENERAL UV LAMP
Power Supply	AC 3Ø / 220.380.440V / 50.60HZ
Cooling System	AIR COOLING
IRRADIATION	STS CONVEYOR TYPE. (SHEET TO SHEET)
Valid Exposure Width	1,000~2,000mm
Reflector	COLD MIRROR , HOT MIRROR
OPTION	COLD MIRROR , HOT MIRROR, UV SENSOR

**특수제품용 RTR UV 경화기 . FOR SPECIAL PRODUCTS RTR UV CURE SYSTEM . 特殊产品用 RTR UV 固化机**  
**Application : lcd, oled, led, sap, pcb, optic film, etc.**

**Feature**

- » 다양한 COATER MODULE과 조합가능
- » BLU용 FILM 제조에 적합
- » 광범위한 광량 선택가능(40 - 160 W/CM)
- » 경화폭 2,000mm 이상 대응 가능
- » HG, METAL, GA LAMP 선택적 적용가능
- » 저온경화에 의한 제품 발열량 감소
- » 특수필름 및 SAP 생산용
  
- » Various coater module is available
- » Blu film suitable for the manufacture
- » Can select a wide range of uv intensity
- » With of curing : more than 2,000mm
- » Hg,metal,ga lamps can be applied selective
- » By low temperature cure products to reduce heat
- » Special film & sap for production
  
- » 可以跟各种COATER MODULE组合
- » 适合于BLU用FILM制造
- » 可选择大范围的亮度 (40 - 160W/CM)
- » 可应对2,000mm以上的固化幅度
- » 可选择性的适用HG, METAL, GA LAMP
- » 减少低温固化条件下的产品发热量
- » 特殊菲林 及 SAP 生产用



**상세규격 / SPECIFICATIONS / 详细规格**

APPLICATIONS	OPTICAL FILM & SAP COATING & PRINTING
Model No.	MSRTR-24KOP
Light Source	MERCURY+METAL HALIDE+GENERAL UV LAMP
Power Supply	AC 3Ø / 220.380.440V/50.60HZ
Cooling System	AIR COOLING
IRRADIATION	RTR TYPE
Valid Exposure Width	1,000~2,000mm
Reflector	COLD MIRROR , HOT MIRROR
OPTION	COLD MIRROR , HOT MIRROR, UV SENSOR

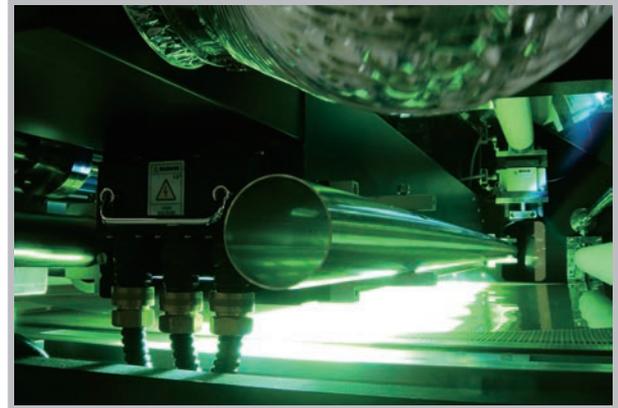
# IMPRINTING UV CURE SYSTEM(FLAT SHEET)

## 平版刻印方式固化设备

Application : lcd, led, pdp, oled blu unit, composition sheet etc.

### Feature

- » 저온경화에 적합한 설계
- » 광범위한 광량 선택가능(40 - 160 W/CM)
- » 소형, 경량화로 장비내 삽입 설치가능
- » IN-LINE자동화설비에 최적화
- » ROLL TO ROLL, SHEET TO SHEET 방식 선택적용
- » 조도 관리 SYSTEM적용(OPTION)
  
- » Design for low temperature curing
- » In-line applied optimize automated equipment
- » Can select a wide range of uv intensity
- » RTR, SHEET TO SHEET selection method used
- » Small lightweight, insert can be installed
- » Uv intensity management system application (option)
  
- » 适合于低温固化的设计
- » 可选择大范围的亮度 (40 - 160W/CM)
- » 以其小型, 轻型化, 可以插入装备内安装
- » 最适合于IN-LINE自动化设备
- » 适用于ROLL TO ROLL, SHEET TO SHEET方式选择
- » 适用亮度管理系统 (选项)



### 상세규격 / SPECIFICATIONS / 详细规格

APPLICATIONS	LGP IMPRINTING OPTICAL SHEET
Model No.	MSIMP-M20KO
Light Source	General UV Lamp + Metal Halide UV Lamp
Power Supply	AC 3Φ/ 220V/380V 50Hz/60Hz
Cooling System	Forced Air Cooling 및 Water
Valid Exposure Width	2,000mm
Reflector	Cold Mirror
Option	Cold mirror, Hot mirror, UV Sensor

# 양면경화기 · DOUBLE SIDE UV CURE SYSTEM 双面固化设备

Application : flexible pcb(bga, pkg), rigid, pcb, lcd, oled, led, etc.

## Feature

- » 저온경화에 적합한 설계
- » IN-LINE자동화설비에 최적화
- » 광범위한 광량 선택가능(40 - 160 W/CM)
- » UV 조사거리 및 속도 조절방식
- » 간단한 램프 교환방식(인출식)
- » 양면 동시 경화방식
  
- » Design for low temperature curing
- » In-line applied optimize automated equipment
- » Can select a wide range of uv intensity
- » UV irradiated and speed control methods
- » A simple lamp replacement method(draw type)
- » Double-sided concurrent curing methods
  
- » 适合于低温固化的设计
- » 最适合于IN-LINE自动化设备
- » 可选择大范围的亮度(40 - 160W/CM)
- » UV照射距离与速度调节方式
- » 简单的换灯方式(抽出式)
- » 双面同时固化方式



## 상세규격 / SPECIFICATIONS / 详细规格

APPLICATIONS	PCB, FPCB, OPTICAL FILM
Model No.	MSCOM-9KO
Light Source	General UV Lamp + Metal Halide UV Lamp
Power Supply	AC 3Φ/ 220V/380V 60Hz/50Hz
Cooling System	Air Cooling
Valid Exposure Width	510mm x 610mm
Reflector	COLD Mirror, HOT Mirror
Dimension( W x D x H )	2,000 x 800 x 1,300

# ROLL CURE UV SYSTEM ROLL CURE UV固化机

Application : prism, diffision, polarized, window film, etc.

## Feature

- » 다양한 COATER MODULE과 조합가능
- » 광범위한 광량 선택가능(40 - 160 W/CM)
- » HG, METAL, GA LAMP 선택적 적용가능
- » BLU용 FILM 제조에 적합
- » 경화폭 2,000mm 이상 대응가능
- » 저온경화에 의한 제품 발열량 감소
  
- » Various coater module is available
- » Can select a wide range of uv intensity
- » Hg,metal, ga lamps can be applied selective
- » Blu film suitable for the manufacture
- » Width of curing : more than 2,000mm
- » By low temperature cure products to reduce heat
  
- » 可以跟各种COATER MODULE组合
- » 可选择大范围的亮度 (40 - 160W/CM)
- » 可选择性的适用HG, METAL, GA LAMP
- » 适合于BLU用FILM制造
- » 可应对 2,000mm以上的固化幅度
- » 减少低温固化条件下的产品发热量



## 상세규격 / SPECIFICATIONS / 详细规格

APPLICATIONS	FOR OPTICAL FILM COATING & PRINTING
Model No.	MSRTR-30KO
Light Source	MERCURY+METAL HALIDE+GENERAL UV LAMP
Power Supply	AC 3Ø / 220.380.440V/50.60HZ
Cooling System	AIR COOLING
IRRADIATION	RTR TYPE
Valid Exposure Width	1,000~2,000mm
Reflector	COLD MIRROR , HOT MIRROR
OPTION	COLD MIRROR , HOT MIRROR, UV SENSOR

# FOR FILM (OPTICAL, WINDOW FILM) UV CURE SYSTEM

## 各种 FILM (光学, WINDOW FILM 等) UV固化机

Application : prism, diffraction, polarized, window film, deco film, etc.

### Feature

- » 다양한 COATER MODULE과 조합가능
- » 광범위한 광량 선택가능(40 - 160 W/CM)
- » HG, METAL, GA LAMP 선택적 적용가능
- » BLU용 FILM 제조에 적합
- » 경화폭 2,000mm 이상 대응가능
- » 저온경화에 의한 제품 발열량 감소
  
- » Various coater module is available
- » Can select a wide range of uv intensity
- » Hg,metal, ga lamps can be applied selective
- » Blu film suitable for the manufacture
- » Width of curing : more than 2,000mm
- » By low temperature cure products to reduce heat
  
- » 可以跟各种COATER MODULE组合
- » 可选择大范围的亮度 (40 - 160W/CM)
- » 可选择性的适用HG, METAL, GA LAMP
- » 适合于BLU用FILM制造
- » 可应对 2,000mm以上的固化幅度
- » 减少低温固化条件下的产品发热量



### 상세규격 / SPECIFICATIONS / 详细规格

APPLICATIONS	FOR OPTICAL FILM, WINDOW FILM COATING & PRINTING
Model No.	MSRTR-24KOR
Light Source	MERCURY+METAL HALIDE+GENERAL UV LAMP
Power Supply	AC 3Ø / 220.380.440V/50.60HZ
Cooling System	AIR COOLING
IRRADIATION	RTR TYPE
Valid Exposure Width	1,000~2,000mm
Reflector	COLD MIRROR , HOT MIRROR
OPTION	COLD MIRROR , HOT MIRROR, UV SENSOR

상기규격 이외의 제품에 대해서도 제작가능합니다 / SPECIAL ORDER PRODUCTION IS AVAILABLE / 也可以制作上述以外的制品

# 단면경화기 · ONE SIDE UV CURE SYSTEM(UNIVERSAL TYPE) 单面固化设备

Application : lcd, led, pcb, lens, steel, wood, glass, paper coating, etc.

## Feature

- » 저온경화에 적합한 설계
- » IN-LINE자동화설비에 최적화
- » 광범위한 광량 선택가능(40 - 160 W/CM)
- » UV 조사거리 및 속도 조절방식
- » 간단한 램프 교환방식(인출식)
- » 다양한 용도로 적용가능
  
- » Design for low temperature curing
- » In-line applied optimize automated equipment
- » Can select a wide range of uv intensity
- » UV irradiated and speed control methods
- » A simple lamp replacement method(draw type)
- » Be applied to a variety of purposes
  
- » 适合于低温固化的设计
- » 最适合于IN - LINE自动化设备
- » 可选择大范围的亮度(40 - 160 W / C M)
- » UV照射距离与速度调节方式
- » 简单的换灯方式(抽出式)
- » 可适用于各种用途



## 상세규격 / SPECIFICATIONS / 详细规格

APPLICATIONS	각종 종이, 철판 등 UV인쇄 및 코팅 (各种纸张,凹版等 UV印刷及涂层)
Model No.	MSCOM-20KO
Light Source	General UV Lamp + Metal Halide UV Lamp
Power Supply	AC 3Φ/ 220V/380V 60Hz/50Hz
Cooling System	Air Cooling
Valid Exposure Width	200 or 250
Reflector	Focused Aluminum Mirror / COLD Mirror
Dimension( W x D x H )	4000 x 1500 x 800 Quartz Mirror

# UV세정기 · UV CLEANING/O<sub>3</sub> · UV清洗器

Application : lcd, pdp, oled, led, wafer, film, class, mask etc.

## Feature

- » 각종 PANEL 유기물 세정효과 탁월
- » IN-LINE자동화설비에 최적화
- » 높은 에너지에 의한 탁월한 세정효과
- » 강력한 개질효과에 의한 접착력 증대
- » 다양한 용도로 적용가능
  
- » Organic cleaning of various panel
- » In-line applied optimize automated equipment
- » Excellent cleaning effect due to high energy
- » Strong adhesion increased by modification the effect
- » Be applied to a variety of purposes
  
- » 清洗各种面板有机物的功效卓越
- » 最适合于IN - LINE自动化设备
- » 以其高能量, 具有卓越的清洗功效
- » 以其强力的改质效果, 增加粘合力
- » 可适用于各种用途



## 상세규격 / SPECIFICATIONS / 详细规格

APPLICATIONS	UV/O <sub>3</sub> 표면 세정 ,개질 (UV/O <sub>3</sub> 表面清洗, 鑠质)
Model No.	MSOCON-110KO
Light Source	UV/O <sub>3</sub> Cleaning Lamp
Power Supply	AC 3Φ/ 220V/380V 60Hz
Cooling System	Air Cooling
Valid Exposure Width	ALUMINUM Mirror
Reflector	( W x D x H ) 1200 x 500 x 700
Dimension( W x D x H )	4000 x 1500 x 800 Quartz Mirror

**UV복합기(표면세정+표면경화) . UV All-IN-ONE (SURFACE CLEANING + CURING)**  
**UV复合机(表面清洗+表面固化)**  
 Application : lcd, led, oled, wafer, glass, mask film, etc.



**Feature**

- » 각종 PANEL 유기물 세정효과 탁월
- » IN-LINE자동화설비에 최적화
- » 높은 에너지에 의한 탁월한 세정효과
- » 강력한 개질효과에 의한 접착력 증대
- » 다양한 용도로 적용가능
- » 저압UV세정기와 고압 UV경화기 동시적용

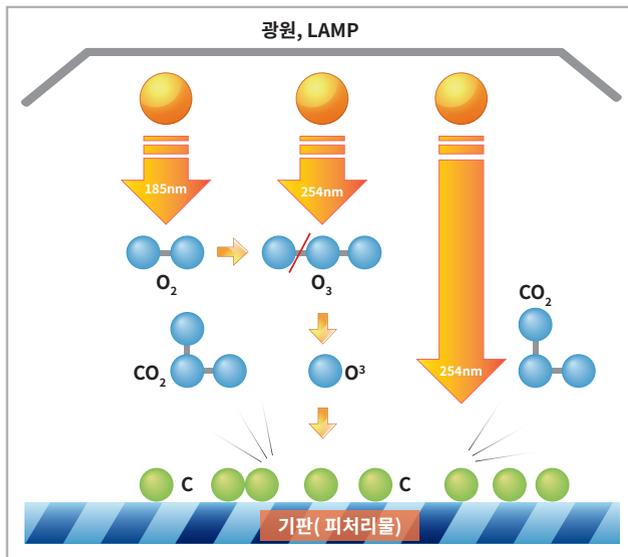
- » Organic cleaning of various panel
- » In-line applied optimize automated equipment
- » Excellent cleaning effect due to high energy
- » Strong adhesion increased by modification the effect
- » Be applied to a variety of purposes
- » UV Cleaner and UV cure machine applied

- » 清洗各种面板有机物的功效卓越
- » 最适合于IN-LINE自动化设备
- » 以其高能量, 具有卓越的清洗功效

- » 以其强力的改质效果, 增加粘合力
- » 可适用于各种用途
- » 低压UV清洗器和高压UV清洗器同时适用

**자외선 표면 개질의 원리**

» 185nm선이 산소분자를 분해하여 O<sub>3</sub>가 합성되고 254nm선이 O<sub>3</sub>를 분해하여 높은 에너지의 활성산소를 만들며 또한, CH, COO, CO, COOH등의 라디칼이 형성되어 친수성을 향상시키는 표면 개질은 물론 표면 에너지 변화를 줄 수 있습니다.



**자외선 표면 개질의 원리**

» 185nm선將氧分子分解合成为O<sub>3</sub>, 254nm선將O<sub>3</sub>分解, 制成高能量的活性氧, 另外, 形成CH, COO, CO, COOH 等不仅进行提高亲水性的表面改质, 也可变化表面能量.

- CO<sub>2</sub> : 휘발 Gas (挥发 Gas)
- H<sub>2</sub> : 휘발 Gas (挥发 Gas)
- =CO : 친수기 (亲水性)
- =COOH : 친수기 (亲水性)

특징	FEATURES	特征
Never- Damage	Never- Damage	Never- Damage
높은 라인 신뢰성 / Trouble Free	High Reliability/ Trouble Free	很高的信赖性 / Trouble Free
균일한 세정효과	Even Cleaning Effect	均匀的清洗效果
최소의 시설 투자	Minimal equipment investment	最小的设施投资
저렴한 유지비용	Low Maintenance Cost	低廉的维持费用
진공, 대기압 Plasma 대체	Replaceable between Vacuum and Atmospheric Plasma	代替真空,大气压Plasma
확장성 용이 Up to 1,450mm	Easy Extension Up to over 1,450mm	容易扩张 Up to 1,450mm
Applications	Applications	Applications
LCD, PDP, OLED 등 표면 세정과 표면 개질 및 UV경화	Surface Cleaning and Modification of LCD, PDP and OLED	LCD, PDP, OLED 等 表面清洗和表面改质 及 UV固化.
광학 유리, 리드 프레임	Optical Glass, Lead Frame	光学 玻璃, 引线框
LCP, P-Aectal, 아크릴, PP, PE, PPO, PEEK, PPS	LCP, PET, Acryl, PP, PE, PPO, PEEK, PPS	LCP, P-Aectal, 丙烯酸, PP, PE, PPO, PEEK, PPS
기능성 플라스틱 신소재	Functional Plastic New Materials	功能性塑料新素材

### 상세규격 / SPECIFICATIONS / 详细规格

APPLICATIONS	Surface Cleaning and Modification of UV/O3
MODEL NO	MSOCON-110KO
LIGHT SOURCE	UV/O3 Cleaning Lamp+METAL HALIDE UV LAMP
Power Supply	AC 3Φ/ 220V/380V 50/60Hz
Cooling System	AIR COOLING
REFLECTOR	ALUMINUM MIRROR + COLD, HOT MIRROR
Dimension( W x D x H )	1,200 x 2,000 x 1,000

# UV LED CURING SYSTEM



점광원 点光源(SPOT)



선광원 线光源(LINEAR)

### [ UV경화의 특징/UV固化的特征 ]

- » 순간경화 : 생산성 향상, 저비용, 설비의 소형화
- » 저온경화 : 열 변형 최소화
- » 경화강도향상 : 품질 향상
- » 무용제, 무취형 : 무공해, 안전
- » 瞬间固化 : 生产性提高, 低费用, 设备的小型化
- » 低温固化 : 热变形 最小化
- » 固化强度提高 : 品质提高
- » 无溶剂, 无味型 : 无公害, 安全

### [ UV경화의 용도/UV固化的用途 ]

- » 접착 : 유리, LCD Panel, Touch Panel, PCB 등
- » 코팅 : 필름, 금속, 플라스틱 등
- » 의료 : 치과용 보형물 경화 등
- » 인쇄 : 포장, 라벨, 프린터 등
- » 粘合 : 玻璃, LCD Panel, TouchPanel, PCB 等
- » 涂层 : 菲林, 金属, 塑料 等
- » 医疗 : 牙科用 保形物固化 等
- » 印刷 : 包装, 标签, 打印 等

조도 (intensity) (光照度)	UV파장 (波长)	열변형 (热变形)	소비전력 (消耗电力)	광원수명 (光源寿命)	워밍업 (预热)	UV HEAD TYPE
높음(高)	365nm,385nm,405nm (이외 특수파장 문의요망) (其他特殊波长, 望咨询)	없음(无)	적음(少)	20,000hr 이상 (以上)	불필요 (즉시점등) (不必要) (立即点灯)	SPOT (점광원), 点光源 LINEAR(선광원), 线光源 SURFACE(면광원), 面光源

구분 区分	LED HEAD MODEL	냉각방식 冷却方式	조사광원 照射光源 규격 规格	조사높이 照射高度(mm)	최대출력 最大功率 (mW/cm2)
SPOTTYPE (점광원) (点光源)	MS L-03SH	공냉식(空冷)	3 ϕ	9	
	MS L-04SH	//	4 ϕ	10	5,000
	MS L-06SH	//	6 ϕ	17	2,300
	MS L-08SH	//	8 ϕ	20	1,200
	MS L-10SH	//	10 ϕ	25	700
	MS L-12SH	//	W12 ϕ	30	450
LINEAR TYPE (선광원) (线光源)	MS L-50LH	//	50 x 3mm	10-14	400-1000
	MS L-100LH	//	100 x 3mm	10-14	400-1000
	MS L-350LH	공냉,수냉 (空冷,水冷)	350 x 3mm	10-14	400-1000
SURFACE TYPE (면광원) (面光源)	MS L-20FH	공냉식 (空冷式)	20 x 20mm	5-10	200-500
	MS L-50FH	//	50 x 50mm	5	400

## 소형(HANDY TYPE) UV경화기



MSHD-1KO

- » 본 제품은 손으로 작업하기 용이하게 설계가 되어 있음
- » 좁은 공간에서 작업이 용이함
- » 고조도 반사판 적용으로 램프 효율 극대화 함
- » 노광 범위가 넓어서 큰 제품에도 용이하게 사용할 수 있음



MSHD-250W

- »本产品为了作业方便设计
- »在狭小的空间作业时比较方便
- »适用了高照度反射板, LAMP效率极大化
- »曝光范围大, 大尺寸产品使用时, 也很方便

APPLICATIONS	형 제품 및 실험테스트용 (小型产品以及试验测试用)
MODEL NO	MSHD-1KO
LIGHT SOURCE	MrcuryUV Lamp + Metal Halide UV Lamp
POWER SUPPLY	AC 1Ø/ 220V/ 50/60Hz
COOLING SYSTEM	공냉식 (空气冷却方式)
VALID EXPOSURE WIDTH	150mm x 150mm
REFLECTOR	ALUMINUM Mirror or Hot Mirror
DIMENSION (W x D x H)	145mm x 200mm x 150mm

APPLICATIONS	형 제품 및 실험테스트용 (小型产品以及试验测试用)
MODEL NO	MSHD-250W
LIGHT SOURCE	MrcuryUV Lamp + Metal Halide UV Lamp
POWER SUPPLY	AC 1Ø/ 220V/ 50/60Hz
COOLING SYSTEM	공냉식 (空气冷却方式)
VALID EXPOSURE WIDTH	60mm x 50mm
REFLECTOR	ALUMINUM Mirror or Hot Mirror
DIMENSION (W x D x H)	100mm x 100mm x 50mm

- » 초고출력 SPOT조사용(점광원), LINE조사용(선광원), SURFACE조사용(면광원)등 다양한 제품군을유하고 있으며, 상세 사양은 문의 바랍니다. 상기 규격 이외 의 제품도 주문 제작 가능합니다.
- » 拥有最高功率SPOT照射用-点光源,LINE照射用-线光源,SURFACE照射用-面光源 等多样产品群, 请咨询详细规格. 上述规格以外产品也可以制作.

# 전자식 안정기 · UV ELECTRONIC BALLAST SYSTEM

## UV电子镇流器

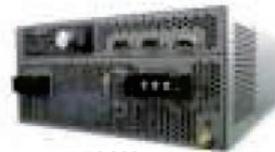
application : uv system power supply

### Feature

- » 연속 가변식 UV출력조절
  - » IN-LINE자동화설비에 최적화
  - » UV LAMP 수명 극대화
  - » CLEAN ROOM 규격의 소형 경량화
  - » 안정된 UV LAMP 전력 제어 실현
  - » 93% 이상의 고효율, 고품률 실현
  - » 실시간 감시장치 구현
- 
- » Continuously variable output uv control
  - » In-line applied optimize automated equipment
  - » UV lamp lifetime maximization
  - » Clean room standards small and light weight
  - » Achieve a stable uv lamp power control
  - » High efficiency and high power factor of 93%
  - » Real time digital monitoring
- 
- » 连续可变式UV输出调节
  - » 最适合于IN-LINE自动化设备
  - » UV LAMP寿命最大化
  - » UV LAMP寿命最大化
  - » CLEAN ROOM规格的小型轻量化
  - » 实现稳定的UV LAMP电力控制
  - » 实现93%以上的高效率, 高功率因数
  - » 实现实时监测装置



3kW



5kW



15kW



20kW



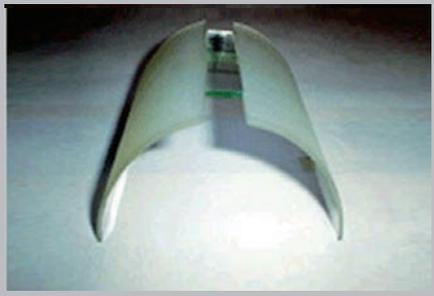
30kW

### 상세규격 / SPECIFICATIONS / 详细规格

Product	Power (kW)	Input (V)	Output (V)	Output (A)	Weight (kg)	Dimensions (W x H x D)
PSUV-02030PA	2kW	1Ø 220VAC	Max.300	Max.12	7	140X132x394
PSUV-03040PA	3kW	1Ø 220VAC	Max.400	Max.10	7	140X132x394
PSUV-03060PA	3kW	1Ø 220VAC	Max.600	Max.6	7	140X132x394
PSUV-05050PB	5kW	3Ø 220VAC	Max.500	Max.12	13	342x132x416
PSUV-05060PC	5kW	3Ø 380VAC	Max.600	Max.10	13	342x132x416
PSUV-05060PD	5kW	3Ø 440VAC	Max.600	Max.10	13	342x132x416
PSUV-12120PC	12kW	3Ø 380VAC	Max.1200	Max.12		TBD[개발중]
PSUV-15120PC	15kW	3Ø 380VAC	Max.1200	Max.15	37	480x132x649
PSUV-15120PD	15kW	3Ø 440VAC	Max.1200	Max.15	37	480x132x649
PSUV-20160PC	20kW	3Ø 380VAC	Max.1600	Max.15	37	480x132x649[검토중]
PSUV-20120PD	20kW	3Ø 440VAC	Max.1200	Max.20	37	480x132x649
PSUV-30240PB	30kW	3Ø 220VAC	Max.2400	Max.15	47	480x176x745

# UV 악세서리 · UV ACCESSORIES · UV零配件

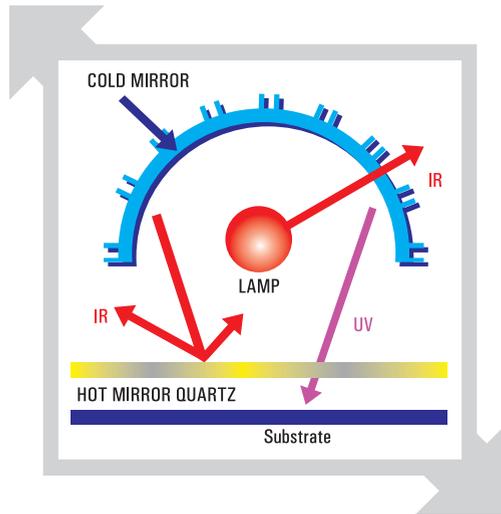
## Cold Mirror



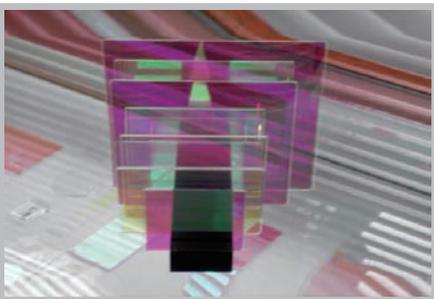
콜드미러는 자외선광원을 최대한 반사시키고 열을 제거하기 때문에 필름 프로세서와 같이 열을 제거하고 자외선만을 최대한 사용하는 작업에 사용한다.

Cold Mirrors are used in applications such as film processing, ultraviolet curing and ultraviolet fluorescence to reflect a maximizes beam of ultraviolet light and remove the heat by transmissions.

冷镜通过最大限度的反射紫外线光源散热z用于像胶片处理(film processing)一样, 散热并最大限度使用紫外线的作业。



## Hot Mirror(ir Filter)



핫미러는 반사갓에서 반사된 가시광선으로부터 적외선을 분리할 때 사용된다. 이 가시광선은 물체에 통과되고 열은 흡수되지 않고 반사되어 외부로 방출시키게 된다.

Hot Mirriors are used in any application where there is a need to separate heat from the visible light through reflection. in this type of application, visible light is transmitted through to the object, while the heat is reflectedrather than absorbed

热镜用于从反射镜反射的可视光线分离红外线,,该可 视光可透过物体, 不吸收热量, 通过反射释放于外部.

## UV 광량계 (UV irradiation meter)



## 자기식 안정기 (Chock type power unit)

