# hõnle group





# **Products and Applications**

UV curing of inks and varnishes

UV curing of coatings

UV curing of adhesives and plastics

Sun simulation and sun simulation for photovoltaics Surface disinfection of packaging materials

Fluorescence simulation for quality control and for detection of micro-contamination in clean room services

**UV** measurement

# **Products and Applications**

#### **Product overview**

- **UVAPRINT** Product line for UV printing and UV coating applications
- Inert UV systems Wide range of inert UV chambers
- UVATEC Compact UV system with CAD-optimized reflector geometry for surface disinfection of packaging materials
- **bluepoint** High-intensity UV point sources for curing adhesives and plastics within seconds
- UVAHAND Portable UV hand lamps covering a wide range of applications
- UVASPOT Versatile and modular UV curing units for large surface areas
- UVACUBE UV curing chambers for manufacturing and laboratory use















- **bluepoint LED** UV LED point source with up to four LED heads
- LED Spot, air- and watercooled version High intensive UV irradiation on a larger area
- LED Powerline High performance arrays suitable for printing and adhesives applications
- LED Pen and Power Pen Point source based on LED technology
- UV Scan Reliable UV test system for dose measurement with photosensitve strips on the object surface
- UV-Meter Premium UV meters for the UVA-, UVB-, UVC- and VIS- range for irradiance control
- EPS Electronic power supplies with stepless power control from 2 up to 34 kW















# UV curing of inks and varnishes

**UVAPRINT – the product line for printing applications;** available in a wide range of power ratings, sizes and spectra, with option for **Advanced Cold Mirror (ACM)** reflector

# Applications

- Sheet-fed offset printing
- Inkjet
- Flexo
- Rotary offset printing
- Coating
- Screen printing
- Book printing
- Gravure printing

# UV curing of coatings

**UVAPRINT – the product line for coating applications;** high intensity, available in a wide range of power ratings, sizes and spectra

# Applications

- Headlights and design parts for the automative industrie
- CD/DVD
- Housings for electrical industry
- Covers/housings for mobile phones
- Outdoor and indoor panels
- Furniture
- Musical instruments
- Screw plugs in the cosmetics industry



# Curing of UV reactive adhesives and sealants

The use of UV reactive adhesives and sealants is state of the art in many different industrial manufacturing processes.

The advantages for users are obvious: using of UV irradiation devices shortest curing times can be defined and realized.

# Applications

- Electronics / Optoelectronics
- Precision mechanics
- Glass industry
- Medical technology
- Optics



#### UVC-disinfection: without chemicals and within fractions of seconds

**UVATEC** – modular high intensity UVC systems for surface disinfection of packaging materials in the food, cosmetic and medical industry.



# Fluorescence simulation for quality control and for detection of micro-contamination in clean-room services

- UVASPOT 400/T BL high intensity UV fluorescence units for large surface areas
- UVAHAND compact, portable hand lamps for small surface areas





#### Sun simulation for photovoltaik

Sun simulation and UV irradiation - test systems for Photovoltaic modules

Quality tests such as light soaking, hotspot or UV preconditioning regarding the artificial load of the materials used for PV modules, applying to the guidelines IEC 61215 and IEC 61646.



# Bands of UV irradiation and their typical application

UVA light (315 nm - 380 nm) - for curing UV adhesives and plastics and for fluorescent inspection

UVB light (280 nm - 315 nm) - the most energetic region of natural sunlight and used in conjunction with UVA light for artificial accelerated ageing of materials

UVC light (200 nm - 280 nm) – for rapid polymerisation of UV inks and lacquers as well as for surface disinfection and sterilization of air, water and packaging material



# Sun simulation

- SOL 2 Sun simulation testing cabinets for accelerated ageing of plastics, textiles, colour-fast and photochemical reactions
- SOL 500/1200/2000 High intensity modular units suitable for large surface areas and for the use in climate chambers





**UV light:** part of the electromagnetic spectrum





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