



ALPHA-PURIFY

Specialists in UV Technology



UV Disinfection Clean & Safe Future

About Us

At Alpha-Purify we know what it takes to deliver the highest quality UV lamps to customers around the world, which means you can concentrate on running your UV disinfection systems, knowing that the lamps are doing exactly what they should.

Alpha-Purify is a division of Alpha-Cure, a global leader in the manufacture of medium-pressure UV lamps, and is dedicated to the sales of UV disinfection lamps and UV system accessories.

Alpha-Purify has been created to cater for the increasing number of enquiries from companies in industries around the world who use germicidal UV lamps for the disinfection of water, air and surfaces.



The new division manufactures and supplies replacement lamps for most major system manufacturers, and benefits from Alpha-Cure's extensive experience since 1996, in UV lamp manufacturing expertise and responsive global distribution network. We're proud to have gained global recognition for delivering the highest quality product and outstanding customer service. Every lamp is individually handmade and developed using the most advanced components and cutting-edge manufacturing processes.

Applications & Range



Aquatics



Waste Water



Mining



Horticulture



Drinking Water



Packaging & Processing



Aquaculture



Laboratories



Marine



Oil & Gas



Healthcare



Food & Beverages

Alpha-Purify manufactures and supplies bespoke lamp designs and cost-effective UV lamp solutions to meet your exact requirements. Our product range includes:

- ✓ **UV Disinfection Systems**
- ✓ **Medium/High Pressure Mercury UV Lamps**
- ✓ **Low Pressure, High Output Mercury UV Lamps (Amalgam Lamps)**
- ✓ **Low Pressure, Low Output (LPLO) Mercury UV Lamps**
- ✓ **Microwave Lamps**
- ✓ **Lamp Ballasts**
- ✓ **Electronic Power Supplies**
- ✓ **Quartz Sleeves**
- ✓ **UV Measuring Equipment**
- ✓ **Lamp and System Accessories**



“The quality of their ultraviolet lamps and customer service over the years has exceeded our expectations and led us to become market leaders in the UV purification industry”

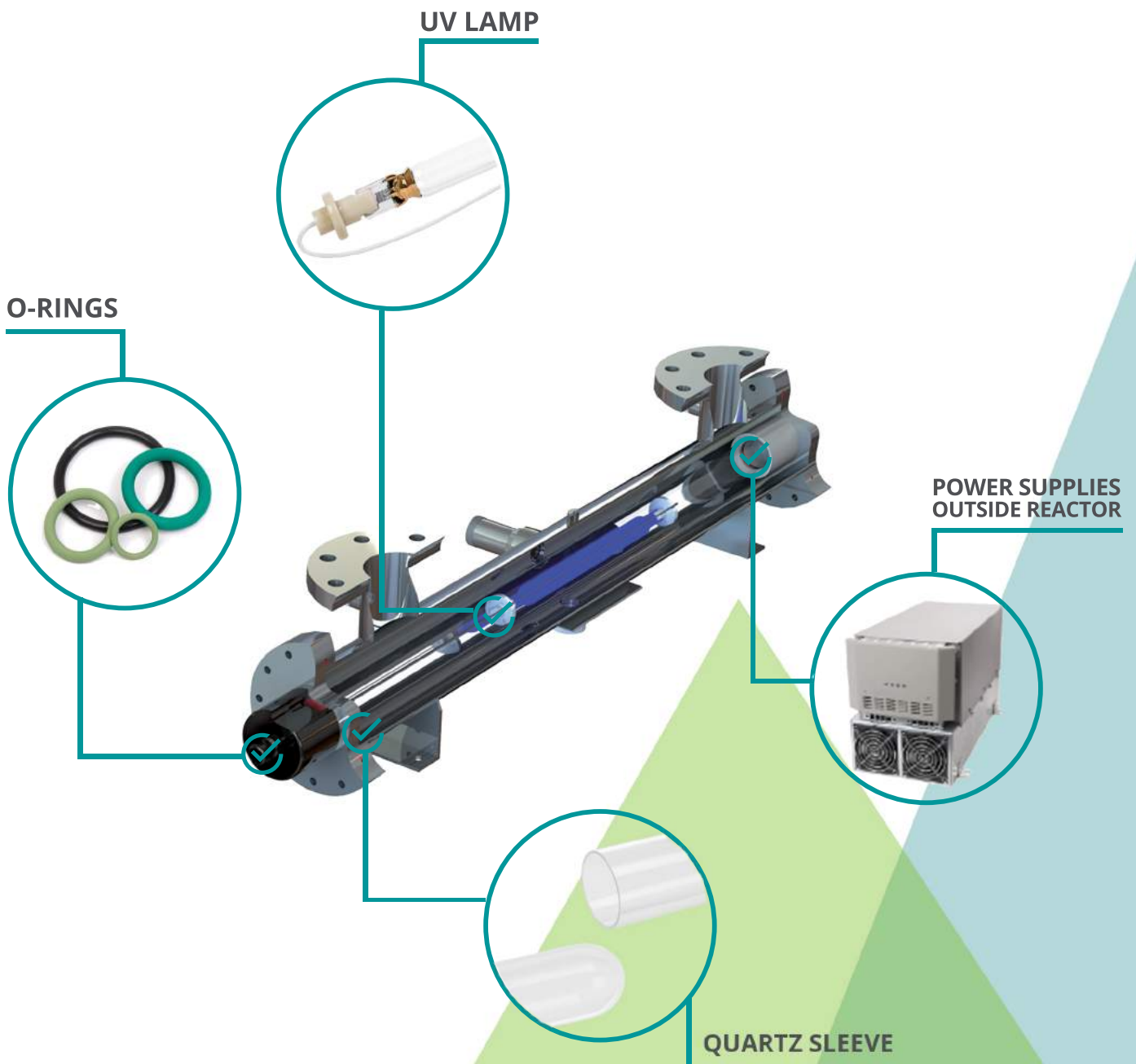
Radoslaw Sadowski
General Director

RAAN LIGHTING SOLUTIONS Sp. z o.o.

UV System

Alpha-Purify manufactures and supplies major components for the most common UV systems available on the market. Our dedicated research and development department is committed to delivering constant innovation in partnership with leading UV disinfection system manufacturers throughout the world.

THE MAJOR COMPONENTS OF A UV SYSTEM



OEM / Proprietary Lamps

From prototype to finished product Alpha-Purify partners with leading OEMs to design, engineer, test and deliver bespoke high-quality UV lamps. Our state-of-the-art facilities, coupled with a highly experienced team of UV engineers and production staff, ensure the highest level of customer satisfaction and support. With Alpha-Purify's innovative customised solutions OEM customers have a high level of flexibility in system design. Instead of adapting system design around the lamp, our R&D team work closely with OEMs to find perfect solution for their UV system.



Proprietary products and private labeling offer OEM customers unique brand recognition and greater control over pricing, which opens up an unrestricted revenue base.

Medium Pressure UV Lamps

Alpha-Purify's medium-pressure disinfection lamps are available in a wide range of specifications including:

- ✓ 50 to 550 W/cm
- ✓ 200 watts to 50 kilowatts
- ✓ 3cm to 3.5m arc length
- ✓ 10mm to 46mm diameter
- ✓ Round and pinch seal options
- ✓ Double and single-ended lamps
- ✓ Return wire and framed lamps
- ✓ 150 socket types, both ceramic and metal



Medium pressure UV disinfection systems use far fewer lamps than a low-pressure system, giving the operator a potential cost and maintenance saving where a large amount of water may need to be treated (for example in a municipal water treatment facility) as there are fewer lamps to monitor and maintain.

For special applications, in addition to the usual mercury lamps, Alpha-Purify has developed a series of UV Lamps (Metal Halide) adding doping elements that change the spectrum of ultraviolet radiation, thus optimising it for different possible applications.

Alpha-Purify's UV disinfection lamps are manufactured with high-grade vacuum-baked quartz, high-purity noble gasses and mercury reach 99.995%.

Amalgam Low Pressure UV Lamps

Amalgam lamps (also known as high output, low pressure lamps) contain mercury like other UV germicidal lamps, but it is in the form of an alloy with another metal – creating an amalgam.

This means the mercury is fixed to amalgam spots on the lamp body or contained in amalgam pellets, altering the way the lamp works in two ways. Firstly, the amalgam spots work as a pressure regulator, absorbing and releasing mercury as the lamp pressure fluctuates. As a result, the lamp's UV output remains constant and will not be affected by changes in the temperature of the water or air around it. Secondly, the amalgam allows the lamp to operate effectively at up to 90°C, so that the lamp can be powered at a higher wattage and therefore generate up to ten times the UV power density of conventional low-pressure mercury lamps.

Alpha-Purify's amalgam lamps are an excellent choice for ultraviolet disinfection and the oxidation of water, air and surfaces because they combine a very long working life with excellent UVC efficiency at 254 nm.



Main features of the amalgam lamps offered by Alpha-Purify are:

- ☑ Quartz tubes: Natural Quartz (OF) - efficiency at 254 nm , Natural Quartz (OG) , Synthetic Quartz (OG)
- ☑ Outer diameter (OD) of the quartz tubes from 10 mm to 38 mm
- ☑ Arc length from L. 100 mm up to L. 2600 mm and power range from 50 W to 1500 W

Quartz Sleeves

The quartz sleeve in a UV disinfection system protects the lamp itself from water, pressurised airflow, accidental breakage or leakage, dramatic temperature fluctuations and other hazards. Alpha-Purify can supply premium-quality replacement quartz sleeves for use in conjunction with ultraviolet lamps for all UV disinfection systems, whether they are for air, surface or water applications, as well as photochemical reactors and other specialised equipment.

Alpha-Purify quartz sleeves are available in a wide range of sizes and different materials:

- Natural quartz
- Synthetic Quartz
- Doped Quartz (Ozone Free)

Our customers can choose from open ended or closed ended (domed) sleeves, which are also available in a fire polished finish.



Other UV System Accessories

Alpha-Purify can supply electronic power supplies as well as chokes, ignitors, transformers and capacitors to suit the specific overall power requirement and switching needs of most power supplies available around the world.



O-rings are a critical component of any UV system, as they prevent water from coming in contact with the UV lamp. Alpha-Purify supplies high quality replacement O-rings in a wide range of sizes to fit UV systems from around the world.

A UV sensor will give you a real time reading of the effectiveness of your UV unit, whereas a UV temperature sensor function is to stop hot water coming out of the outlet connected to the UV unit. Alpha-Purify offer a range of sensors depending on your disinfection needs.

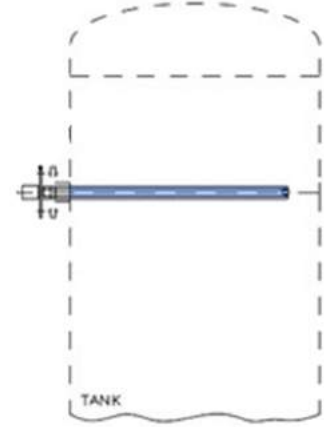
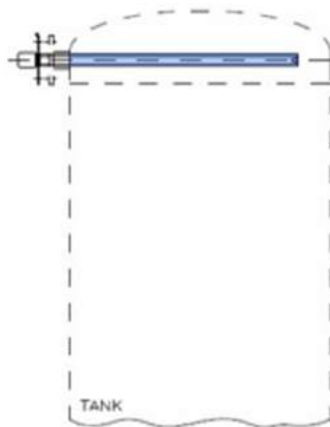
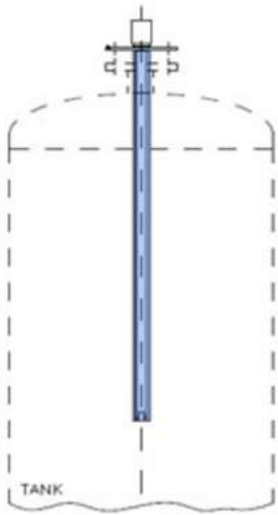


Control panels are vital for monitoring your UV system as well as an effective alarm to alert you when problems occur. We offer a range of control panels which have hour meters, timers, remote on and off functions, and alarms.

Tank Disinfection

Alpha-Purify's Tank range has been designed to provide headroom disinfection in water storage tanks as well as water disinfection and the prevention of bacteria growth in water tanks.

Possible Installations



Benifits

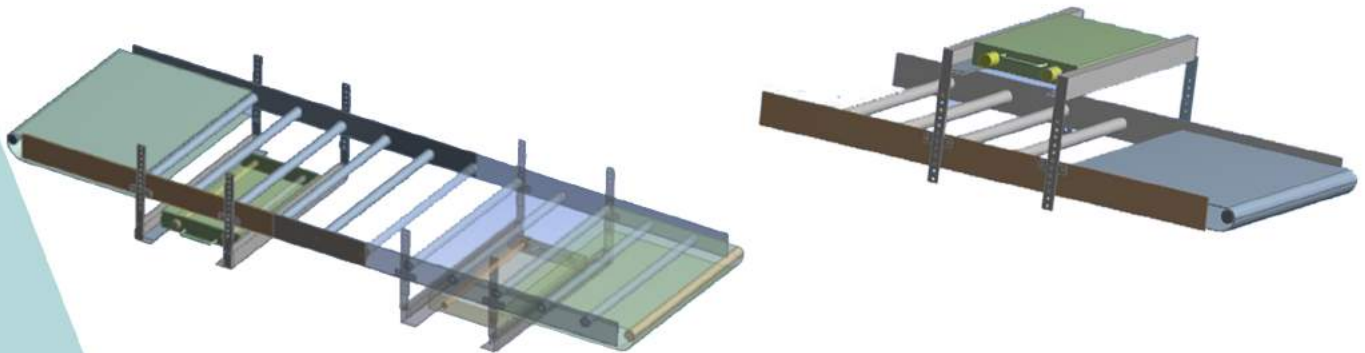
- Chemical-free
- Safe and reliable
- Natural process
- Highly effective
- Energy efficient
- Cost-effective
- Easy maintenance



Surface Disinfection

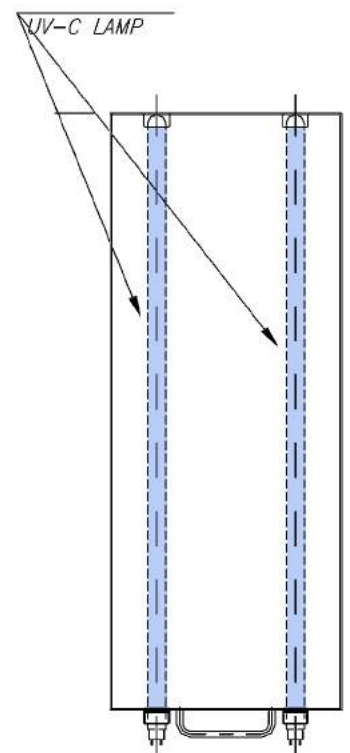
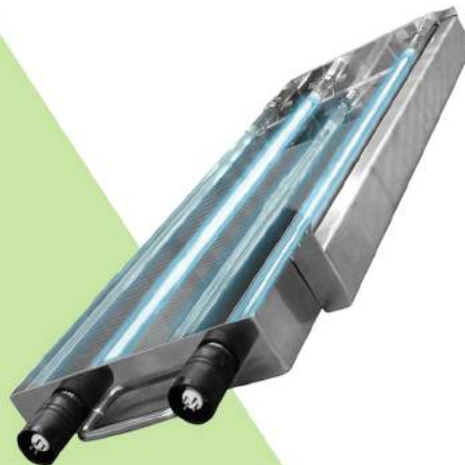
Alpha-Purify's Surface Range has been designed to provide effective and efficient disinfection of roller conveyor belts. The products consist of a simple stainless steel box. The UV box is supplied with an adjustable rail frame so the unit can be installed at the top or at the bottom of the rollers. Its main function is the effective disinfection of the conveyors or the products transported by the rollers. The specific design of this product makes it flexible and adaptable to any type of roller conveyor plant.

Possible Installations



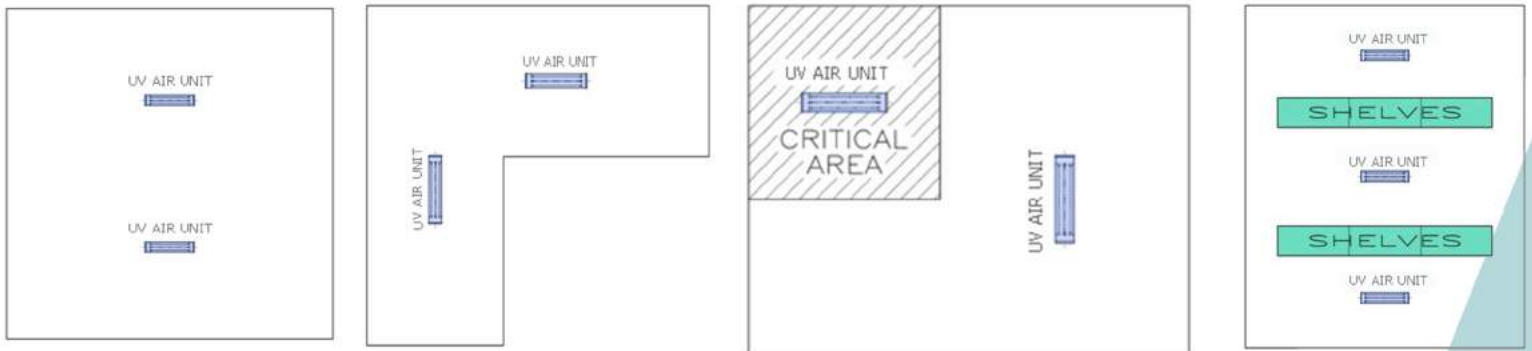
Benifits

- ☑ Chemical-free
- ☑ Prevents cross-contamination
- ☑ Reduces belt germ count
- ☑ Achieves hygiene regulations
- ☑ Easy maintenance
- ☑ Cost-effective



Air Disinfection

The AP-A Range disinfects airborne micro-organisms, reduces bad odours and prevents bacteria build-up in HVAC systems. UV disinfection lowers the concentration of spores and harmful bacteria to reduce cross-contamination and extend product shelf life.



AP-A Range



APA-Jet



APA-Evo



APA-Flo

Benifits

- ✓ Extend product shelf life.
- ✓ Reduces cross-contamination
- ✓ Reduces bad odours in the room
- ✓ HACCP hygiene compliant
- ✓ Increases productivity
- ✓ Cost-effective.

Our Services



Sales & Technical Support

Our sales and technical staff deliver the very best combination of expert industry knowledge and great customer service.



Manufacture

Alpha-Purify has experience since 1996 in the manufacture of ultraviolet lamps. We know what it takes to deliver the highest quality UV lamps to customers around the world.



Dispatch

Our global network provides a worldwide distribution platform. We strive to offer the highest level of customer satisfaction and support.



Worldwide Distribution



Contact Us

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