



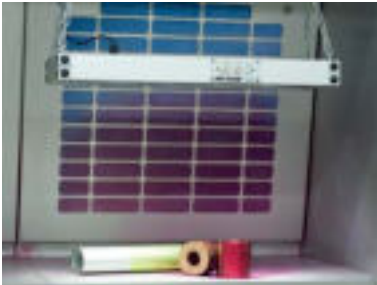
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Front Page – Large Area LED Light

UV L.E.D Large Area Light

- for Stationary use in Fluorescent Particle Inspection



UV LED large area lamps for stationary use

The multifunctional UV LED large area lamps are ideal for stationary use in fluorescent penetrant and magnetic particle inspection. Several lamps can be linked in series and offer the possibility to change between UV light and white light.

The most important characteristics of the UV LED large area lamp at a glance:



- **The best constructed light we have ever seen!**
- UV LED technology with long life illuminates (> 10,000 hours)
- 20 high power UV LED's guarantee high UV intensity
- **UV intensity of approx. 40 W/m² or 4000 μW/cm² at a distance of 400 mm**
- **White light intensity of approx. 2500 lux at a distance of 400 mm**
- **Illuminated area of 650 mm x 260 mm at a distance of 400 mm**
- **No measurable white light in UV light**
- Risk class 2 according to German standard EM 6
- Switchable from UV to white light
- Immediately ready-to-operate
- No risk by UV-B and UV-C irradiation (**no filter glasses are required**)
- UV-A radiation exclusively at 365 nm wavelength
- Fulfils all standards of the German Society for Non-Destructive Testing (DGZfP) especially regarding wavelength and intensity
- Heat flow via housing without a fan – and therefore **no noise**
- Solid aluminium housing in aluminium profile system
- Standard power unit supplies up to two lamps – a power supply for up to six lamps is available

**For further features or a price, reply to this email or contact us on
02 88503755 or www.kks.com.au**

Special - Hardness Testing

10% OFF

SonoDur Hardness Testers



New Sonic GmbH

- SonoDur – Made in Germany

*“The better Way of
Hardness Testing”*

- ✓ Standardized,
- ✓ Robust,
- ✓ Simple,
- ✓ Fast,
- ✓ Precise.

Contact us with Your Application and get 10% off for the Month of March 2014
Simply reply to this email or phone on 02 88503755

News - Helmut Fischer Laboratory

Now Open

Helmut Fischer's new Testing & Calibration Lab - Certified to ISO 17025

Services Available

- Measurement with all Fischer instruments
- Analyses of elemental composition by ICP-OES, EDX, XRF
- Preparation of high-quality cross-sections by ion-beam polishing
(not just a regular cross section!)
- Microscopic analyses in cross-sections or other objects by electron microscopy SEM, optical microscopy or AFM including analytics of coatings or small objects by EDX



Instruments on Site

- XRF measurements - XDV-SDD
- XRF measurements - XDLM 237
- XRF measurements - XUV 773, XDV-u
- Betascope measurements - Various
- Coulometric measurements - V18
- Other coating thickness meas. - All Probes
- SEM microscopy - Jeol JSM 6510
- SEM + EDX analyses - JSM 6510, Bruker X-flash
- ICP-OES analysis - Varian ES 725
- HM testing on samples - Picodentor HM2000
- AFM microscopy - Bruker Nanos N8
- Optical microscopy - Rathenow (max. 1000x)
- mechanical pre-treatment - various
- Ion polishing cross-sections - Jeol IB 09010
- Microwave solution preparation - Ethos One T



Have any questions, Got an Interesting Application
or like a price, contact us on -

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Application-Anti-Fouling Thickness

Measuring anti-fouling coatings on marine Craft

The related costs of bio-fouling are so high that even expensive prevention technologies quickly pay for themselves: some sources put the savings in fuel consumption alone at 40%. Properly applied antifouling systems can significantly reduce a variety of operating costs, including downtime at dry dock. High-tech inspection instruments equipped to handle the wide variety of materials and thickness ranges typical of anti-fouling paints help ensure that the finished coatings can indeed fulfil their expected service lifetimes.

Any craft surface submerged under water will fall victim to bio-fouling, This affects performance by increasing drag and contributing to corrosive processes.

The solution was once an easy decision: the marine paint containing the highly effective tributyltin (TBT). But due to toxic effects on marine life, the International Maritime Organization (IMO) banned it in 2003. In response, a variety of alternatives has come on the market, each employing very different approaches to the problem.



Fig.1: Biofouling on a boat hull increase drag in the water, negatively impacting the vessel's hydrodynamics

One feature that the new multi-layer anti-fouling coating systems all have in common is that they tend to be rather thick, sometimes even more than 1 mm in total,

the principle behind some anti-fouling paints is ablation or sloughing, meaning the controlled and sustained loss of material over time: coatings of this sort cannot start out thin! Others are partially soluble, still others self polishing.

Since there is no "silver bullet" anymore that addresses all potential bio-fouling scenarios, marine service providers and dry docks need to be able to monitor a wide range of coating types, on both Steel and Aluminium hulls.

For just such measurement tasks, FISCHER developed the FD13H probe with an especially robust hard-metal probe tip. Used with the mobile DUALSCOPE® FMP handheld, the underlying substrate material is automatically detected and the correct measurement principle applied; this greatly simplifies the task of inspecting anti-fouling coatings because the probe and gauge are suited for measuring the coating materials.



Fig. 2: Applying a new coating requires consistent thickness readings.

To inspect typical anti-fouling coatings, FISCHER offers the FD13H probe together with the DUALSCOPE® FMP instruments, which can measure a wide variety of non-conductive coatings over magnetic and non-magnetic substrates like steel or aluminium.

Have any questions or like further details, contact us now !

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