

# vitaLED® 2.0 offers dynamics, health and quality of life

## Smart lighting technology from Brumberg

Sundern, March 2016 More dynamics, health and quality of life with a smart lighting solution from Sundern: vitaLED® 2.0 provides light for supporting the productivity curve in harmony with human biorhythms. 'Artificial light doesn't just make a room bright, but it can also positively influence human hormone regulation', explains Johannes Brumberg, owner and managing director of the company of the same name. 'Light is life – we developed vitaLED® according to this guiding principle. What is special is that vitaLED® 2.0 not only can display the full RGB colour spectrum, but also the entire range of white light can be controlled from 2000 to 10000 Kelvin', Brumberg emphasizes.

The world has changed significantly, and people have to withstand this change. In particular, the advent of modern technologies such as the Internet or mobile phone ensure a permanent flood of communication. It is therefore particularly important to minimize the daily flood of stimuli and remain focused on creating quiet zones and intentional moments of relaxation. Light plays a special role in this process. Especially the non-visual effects of light can influence such things as our blood pressure, body temperature, metabolic processes as well as all other processes that affect our body's internal 'clock'.

### The vitaLED® lighting system has a wide colour spectrum

Different situations require different requirements for the lighting system. Classic light sources, such as incandescent or halogen lamps, cannot fully reproduce the full colour spectrum required for these demands.

The vitaLED<sup>®</sup> lighting system from Brumberg changes that: human biorhythms will be positively influenced by the significantly wider colour spectrum and the option to adjust the vital daily progression of light. This means that people can



become more productive and their concentration increased, and that healing processes can even be accelerated.

#### Scientific findings used

The fact that vital light brings the productivity curve into line with human biorhythms has been scientifically proven. To take advantage of this positive effect, the vitaLED® colour lighting system from Brumberg has been developed under the direction of Professor Ulrich Kuipers in collaboration with the South Westphalia University of Applied Sciences. New LED-based lighting technologies not only make significant savings of electrical energy and the reduction of CO2 emissions possible, they also provide healthy light that will positively influence a person's sense of well-being and performance. This requires a lighting system which will change the artificial light throughout the day based on the model of natural light. vitaLED® 2.0 makes such a spectral light control possible. The human retina contains photo-receptors that are sensitive to blue light and regulate the production of important hormones in the brain such as melatonin, serotonin and cortisol. Melatonin affects our sleep cycles, making us tired and lowering our activity, whereas cortisol is a stress hormone and serotonin brightens our moods and motivates us.

### A variable amount of blue light affects human hormones

The key to the success of vitaLED<sup>®</sup> 2.0 lies in the white light. It can positively influence a person's moods through its variable amount of blue light. The regulation of the production of human hormones is affected by the proportion of blue light. Cool light has a very high level of blue light and has an activating effect; melatonin production is suppressed and serotonin is produced instead. Warm light has a low level of blue light and a high level of red light, and it has a calming, relaxing effect. It is possible under these conditions that light develops its scientifically proven effect and provides a pleasant and natural atmosphere.

#### Easy and versatile control options

The vitaLED<sup>®</sup> lighting system furthermore captivates with its ease of use. Several options are technologically available to the user of vitaLED<sup>®</sup> 2.0: the vitaLED<sup>®</sup>



Master with various additional modules is absolutely required for all control options. The first control option is the integration into the building system control (KNX) using all current interfaces (Dali, DMX, 1-10V). Brumberg offers two additional solutions: first, a LAN module-based solution, which can be controlled using a browser (via PC, smartphone or tablet) by means of a fully visualised user interface and in addition using buttons, a sensor touch panel or radio remote control. These user interfaces, which are certified by the German Society for Gerontological Technology (GGT), offer eight different control modes such as the vital progression, colour choice using a colour triangle or an individual colour control. The second lighting solution, which can be retrofitted particularly easily, is the vitaLED® smart, which scores points with its intuitive use via Bluetooth: Only an app has to be installed on your smartphone or tablet device to control the system. Signal transmission is via a Bluetooth connection so that not even a wireless WLAN network has to be available.

## vitaLED® 2.0 offers a great variety of products and designs

vitaLED® 2.0 creates a new diversity of luminaires as well new design options with downlights in various sizes and artistic form concepts. Brumberg thus offers smart light technology in diverse recessed and surface-mounted luminaires for both walls and ceilings. Furthermore, there is in the product line a high quality flex strip for indirect and accent lighting. Outdoor lights – such as recessed ground luminaires and panel lights as well as LED inserts that can be used in recessed spots with various ceiling cut-out dimensions – complete the portfolio of the professional light manufacturer for vitaLED® 2.0. In short: The variety of products and designs of vitaLED® 2.0 is as varied as the possible applications

#### **BRUMBERG Leuchten GmbH & Co. KG**

The family-owned company, founded in 1873 by Hermann Josef Brumberg under the same name in Sundern – since 1985 known under the name Brumberg Leuchten GmbH & Co. KG – has established itself as a professional lighting manufacturer in the high quality smart lighting technology sector. It is among the leading suppliers and offers professional lighting solutions for almost all application areas. In its portfolio there is a broad spectrum of LED lights and lighting fixtures with conventional light sources in various designs and power ratings. The company, family-run for five generations, is headed by the brothers Johannes and Benedikt Brumberg. In 2015, Brumberg became a partner of "eNet-Allianz with GIRA/JUNG" as well as of "FEELSMART". In 2016, Brumberg joined the strong brand alliance "Connected Comfort" as well as the "Initiative Elektromarken. Starke Partner." You can find further information at http://www.brumberg.com.



#### Contacts for the press:

Ines Hanstein

Marketing & Communication

Tel: +49 2934 9611-94 | Fax: +49 2934 9611-7135

Thomas Piorko
Manager, Marketing
Tel: +49 2934 9611-571 | Fax: +49 2934 9611-7125
thomas.piorko@brumberg.com | www.brumberg.com

ines.hanstein@brumberg.com | www.brumberg.com