

# BERCHTOLD Corporation Launches Unique New Chromophare Light Lineup

CHARLESTON, SC – BERCHTOLD Corporation, the South Carolina-based medical equipment maker, is unveiling its complete family of CHROMOPHARE E Series surgical lights. Using a comprehensive array of advanced lighting technologies, BERCHTOLD's E Series enhances existing standards in OR lights to offer bigger, brighter, and more uniform spots with best-in-class shadow control and depth of field.

## Choose Your Technology from BERCHTOLD's new E-Series Family

As the only US market company to currently offer all three major lighting technologies, BERCHTOLD helps you select the technology that best fits your specific OR needs:

- Premium HID (high intensity discharge) technology is all about **maximum performance**. Both HID models feature maximum intensity across a range of spot sizes, great deep cavity spot characteristics, and long-life light elements.
- BERCHTOLD's new LED units are also long-life, with cool 25,000 hour LED elements. These units mix **good performance and low-profile design** with the latest technical innovations in the market.
- Finally, BRITe halogen, the **value leader**, remains an excellent choice for OR's that need high quality light for short to medium-length cases

## Longevity & Quality of Light: Anticipating Clinician and Surgeon Needs

At each stage of development for the CHROMOPHARE E Series, BERCHTOLD studied the needs of clinicians and surgeons. "We take pride in designing **lights that intuitively respond to the needs of the clinicians**," said Jim Wetzel, the director of marketing and corporate accounts at BERCHTOLD in Charleston, SC. "We ask surgeons and clinicians what they want in a surgical light. Then we refine our optics, handling and efficiency in response."

"BERCHTOLD's new HID lights (E 805 and E655) are rapidly gaining a reputation for trial-winning performance with **huge 13"**, **uniform spots** that look bright across their entire width and depth," said Alan Campbell, product manager at BERCHTOLD. "Such qualities lead to 'set and forget' operation, as the surgeon moves around in the surgical site without having to reach up and adjust the spot." Also, with HID, there's no filament to break, meaning it lasts over five times longer than standard halogen.

As a global leader in surgical lighting, BERCHTOLD strives to continually invigorate the technology. What distinguishes BERCHTOLD's high-end E 805, with HID technology, is its Autolux intensity leveling. It's sensitivity to when surgeons need light the most means that light increases as the patterns size expands. Surgeons report that they no longer need to wait for their eyes to acclimate.

Both HID and LED lights balance upfront and maintenance costs with high performance and future-ready longevity. As Campbell notes, "The extended life operation of both HID and LED share the common advantage of allowing clinicians to keep their focus on the patient, rather than on maintaining the lights."

### **Cost-Effective Excellence**

BERCHTOLD's E 650 and E 550 models, with the value-driven, second-generation BRITe™ halogen technology, expand the options in the CHROMOPHARE family of lights. Both HID and BRITe™ create a new type of plateau-shaped illumination, called **intensity smoothing optics**, that provide uniform illumination through the entire light field. And since the E 650 and E550 filter the ultraviolet and infrared rays, BRITe™ lights have a 50% greater light intensity at the same level of energy consumption, with no increase in temperature at the lighthouse.

### **The Necessity of Consistent Light Intensity**

One of the main features sought after by surgical staff in their OR lighting is light intensity. With one of the biggest spots on the market, the HID E Series 805 controls the distribution of light through a variable output technology called Autolux, which **maintains set light intensity in the field as the pattern size expands**. "Autolux is the humanistic property built into the light," said Wetzel. "We are particularly proud of how the Autolux feature allows the OR staff to transition from the large pattern to the concentrated spot—one twist of the wrist—with *consistent* light intensity. The surgeon's eyes don't have to acclimate to the change in light."

While the surgical staff needs a high-intensity light to visualize the surgical site, they don't want to compromise on the quality of light or the degree of shadows. The high CRI color temperature created by an HID lamp offers the user a vivid, non-glaring, true-to-life light. Further, controlling the direction of that crisp, white light helps to minimize shadows. "The single bulb/reflector approach—also standard in our BRITe™ lights—allows us to concentrate light in the center of the head, for deep cavity penetration and fewer shadows," Campbell said.

For the comfort of the patient and the surgical staff, it's essential not to flood the surgical site with surplus light. BERCHTOLD's HID uses the **most efficient light source available in OR lights**, generating 160,000 lux of maximum intensity from a mere 102 watts of input power (E655). Because BERCHTOLD's

HID requires less wattage to produce high-intensity light, while also emitting almost no infrared or ultraviolet wavelength, it provides a much **cooler environment for surgeons and patients.**

### **Future Ready**

Since the CHROMOPHARE lights will be a fixture in an OR for many years to come, OR administrators are justifiably concerned that it accommodate future upgrades and be able to incorporate emerging technologies. BERCHTOLD refers to their E Series as “future ready,” meaning, as Campbell said, that it’s “easy to anticipate future costs. See it as BERCHTOLD’s commitment to technologies that don’t even exist today. Our universal suspension and ‘plug-and-play’ design means you’re always open to innovations in the field.” HID, LED, and halogen units all use the same suspension systems and electronics

### **About BERCHTOLD**

Founded in 1922 in Tuttlingen, Germany, BERCHTOLD Corporation’s North American headquarters are located in Charleston, SC. The company designs, manufactures and assembles products and technologies including SUPERSUITE® Custom Surgical Environments, CHROMOPHARE® Surgical Lights, TELETOM® Equipment Management Systems, and OPERON® Surgical Tables.