

“At Khatod, we are well prepared to meet and exceed the needs of the ever-evolving LED Market globally.”



Giuseppe Vasta, C.E.O. and President of Khatod Optoelectronic S.r.l., has many years in the electronic component field as well as decades of experience in lighting specifications, matured internationally. His long experience ranges from commercial business to design and realization of the most advanced optical systems as well as the implementation of cutting-edge technologies who first applied to the manufacturing processes of secondary optics for LEDs.

Comment on the status and growth of LED Lighting market?

LED Lighting continues to be an important frontier for illumination and is expected to grow and develop hugely in the coming years by delivering specialties for more and more targeted applications. By nature, LED lighting perfectly meets the ever-growing requirements for reducing

Khatod Optical Solutions have made the mark in the LED Industry for over 25 years.

Unique on the international scene, Khatod holds all of its operations in house, Milano, Italy.

As a world class manufacturer of optics for High Power LEDs, Khatod invests its best engineering and economical efforts in new projects. This not only includes innovative products but also the development of cutting-edge technologies customized by Khatod Engineering, in order to realize high technical optics for the most advanced specifications of the LED Industry.

From Project to Object, Khatod is able to provide a full service that combines all of the manufacturing processes, from initial design to time to market, as well as a proven capability to develop custom optics. It offers the widest range of standard refractive lenses; TIR lenses; Reflectors; innovative Optical Systems for any applications in Wide Area Lighting, Indoor/Outdoor and Street Lighting.

As a fully integrated company, Khatod manages directly all the design and manufacturing processes: optical design; mechanical design; mould fabrication; injection moulding; vacuum coating process; test & inspection.

Interview with Giuseppe Vasta, C.E.O. and President, Khatod Optoelectronic S.r.l., Italy on LED Market and growth.

the environmental impact caused by light pollution. The significantly reduced energy costs achieved with LEDs, along with the possibility of pairing with the new technologies like the ones developed by Khatod for LED Lighting applications, make LEDs and Khatod Optical Systems the perfect match.

What are the key market trends?

The requests from the market are more and more demanding : high efficiency in Lighting, long-life products along with the utmost necessity of energy conservation. This has led the product developers to project and realize SSL systems able to deliver excellent performances in terms of lighting flux , long lasting, energy conservation , cost-efficiency , while guaranteeing the best Return-On-Investment.

What is driving this market?

Responsibility for Energy conservation, great result in lighting efficiency, satisfaction of the customer while minimizing his engineering and application costs with the guarantee of great Return-On-Investment.

What are the challenges to market growth?

The challenges to market growth are many, and most of all the quickest changes in LED technology and performances are something we will have to face every day in the next future. If times change quickly in the SSL world, likewise whatever is concerned with the LED technology, i.e. the Optics, needs to change just as quickly. In order to be able to face properly these perspectives, great experience and capability are required. Khatod is the Company that can boast such capabilities because Khatod products leverage nearly three decades of hands-on experience with the toughest challenges in making lenses in a wide range of applications and environments. This knowledge and continuous research enable to release new and more innovative applications. Khatod boasts a valuable Intellectual Property resulting from our long experience in LED Lighting, such as Patents issued or pending in Europe, USA and China; EP Designs issued for most of the optics designed for General Lighting; ... just to name a few.

Please discuss your company, technology solutions for this market.

Khatod Optoelectronic is a real innovator of LED Lighting Systems, able to deliver immediate solutions when new requirements from the ever-evolving LED Industry are posed. Since our start in 1985, all of our products are invented, designed, and manufactured in our own facility, by employing the latest in designing, production methods, testing and control. Unique on the international scene, Khatod specifies and develops the entire product

process 100% in-house, Milano, Italy.

Khatod has recently expanded its facility into a nearly double surface including cutting-edge equipments for the optics technology. All the operations are held on site. This makes our quality control as well as the time to market, under our full control. A full optical service – from project to object - encompassing all the product development processes based on the latest in technology:

- Know-how based on skill, expertise, capability, competence: Largest team of R&D Engineers;
- New technologies and production methods: first to use the NJC Technology™ for the manufacturing of secondary optics for Power LEDs; first to create a TIR lens made of Silicone that led to the further development of the cold-injection process technology and creation of a specific mould and tooling; customization of the vacuum treatment technology for the specific coating of optical reflectors created for HB and COB LED Lighting.
- Continuous scientific research and development
- Specialized engineering for optical and mechanical studies and developments
- High-Tech software and equipments for R&D, Production, Quality, Services
- Moulds fabrication
- Injecting machines running 24-h cycle and 100% robotized - customized specifically for optical use with special high-tech software for thermoplastic injection moulding
- Superior quality polymers specific for optical, mechanical, and technical properties
- Vacuum treatment plant based on the most advanced Vacuum Coating Technology, customized for specific optical treatments
- 150 sqm dark room provided with high-tech photogoniometer for accurate light measurements
- Testing and experimentations
- 3D inspection - quality control system
- Automated packaging system

Khatod is able to meet the expectations of the most demanding individuals looking for the latest in LED Technology .They can always count on exclusive products as well as cutting-edge engineering, advanced technologies, continuous research and experimentation. The result is the highest in technology, the easiest in usability, the most efficient in LED lighting, the most cost-effective in business.

