QUALITY CONTROL

High Quality means High Performance Products

All Ektor products are engineered and designed by one of the largest lighting engineering teams in Australia.

With more than 100,000 hours spent in design and engineering production, the Ektor Professional is the best product range we have produced.

ISO9001 MANUFACTURED

The Ektor Ektor Professional products are manufactured completely under an ISO9001 quality system, providing reliability and repeatability. It is audited and certified by TÜV Reinhart who provide a benchmark in quality systems..

QUALITY DESIGN

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HOLISTIC DESIGN

Ektor Ektor Professional products are designed using a holistic design approach which considers the products being interconnected and integrated to part of a much larger system.

This approach benefits both the installer and service persons by promoting familiarity due to improved commonality between products saving time at the work site.

All Ektor Ektor products have a family aesthetics essential for multiple product installations where consistency is important.

MODULAR DESIGN

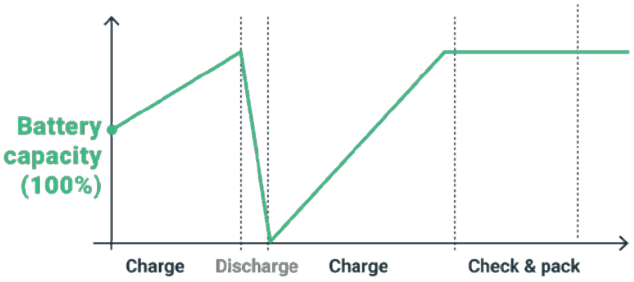
All products are modularly designed consisting of universal parts or modules that can be easily assembled in factory, upgraded (future proofing) and serviced. Construction is simplified leading to improved quality with reduced assembly variation.

SHARED DESIGN FEATURES

Products share common features. For example such as terminal block mounts cable entries compatible plugs and common layouts. These assist the installer as common tools that can be used when installing products on site.

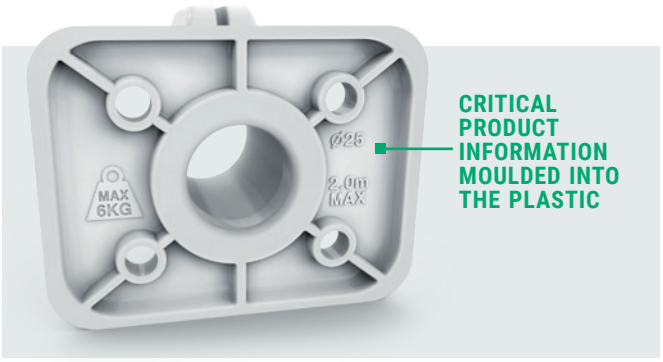
100% MULTI-HOUR BURN-IN AND EXTENDED DURATION TEST

To ensure our products will meet your needs, the Ektor Professional products go through an extended burn-in and test where the products are monitored and recorded. During burning full charge and discharge cycles are tested and recorded.



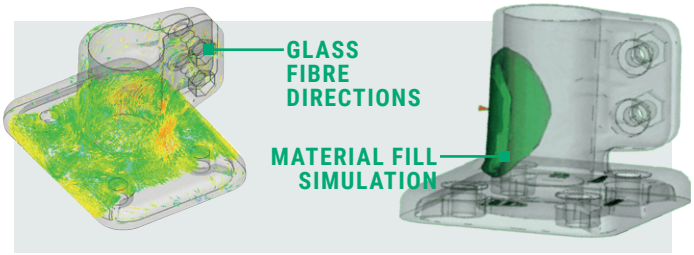
MOULDED INFORMATION

Where possible, plastic components include moulded information essential for product installation and it's rated usage, assisting installers on busy work sites to get it right, saving time and removing guess work.



CLOUD BASED REPORTING

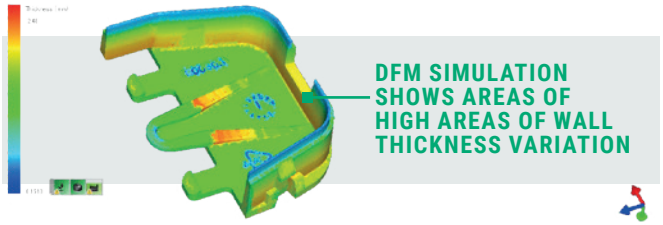
All Ektor Professional devices are tracked using the zencontrol Cloud. In the time of the product's manufacturing, the devices are added to the Cloud. During it's life, depending on it's use, the devices can add lifetime data to the Cloud allowing you to understand and improve on the product's reliability.



PLASTIC RHEOLOGY

All Ektor plastic products have had predictive material analysis conducted, investigating the plastic rheology (material flow in the tool). This is done to optimise the part design, improve part quality, reduce development production costs and improve time to market.

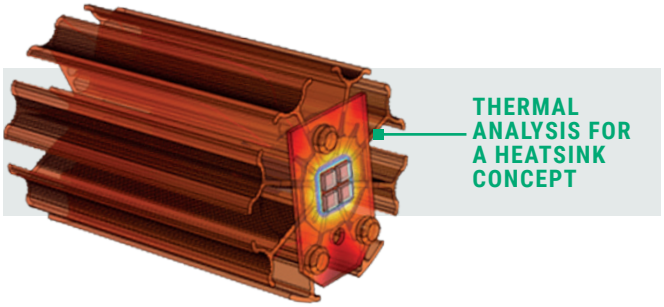
Component fill, fibre direction, stresses, sink marks, shrinkage, cycle-times and warp-age are simulated in a virtual 3D environment and manufacturing issues can be sorted prior to tooling being manufactured.



DESIGNED FOR MANUFACTURE (DFM)

All parts created for Ektor Professional are designed for manufacture.

Simulation tools within the 3D computer aided design software (CAD) provide on demand prompts for engineers on manufacturability, cost efficiency and plastic material impact (sustainability). Based on this information engineers are able to avoid manufacturing issues prior to the products being manufactured.



THERMAL FINITE ELEMENT ANALYSIS (FEA)

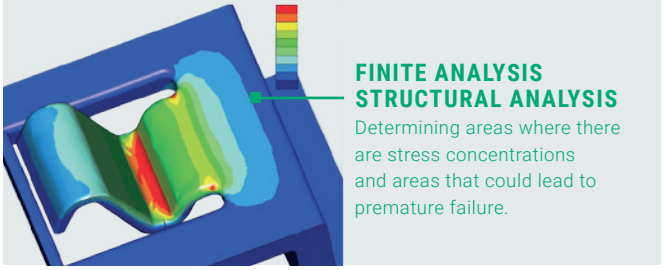
High temperatures can lead to reduced life of components and a reduction of performance. All Ektor products using heatsinks, or have a thermal requirement, have thermal simulations conducted prior to manufacture to optimise the design.

Results are correlated with high resolution thermal imaging to ensure that products are engineered to be best in it's class.

STRUCTURAL FINITE ELEMENT ANALYSIS (FEA)

In the past, many items were over-designed to avoid risks of failure using empirical assumptions in the design phase. This methodology is no longer a viable solution as this increases the material used and costs which are ultimately passed to the customer.

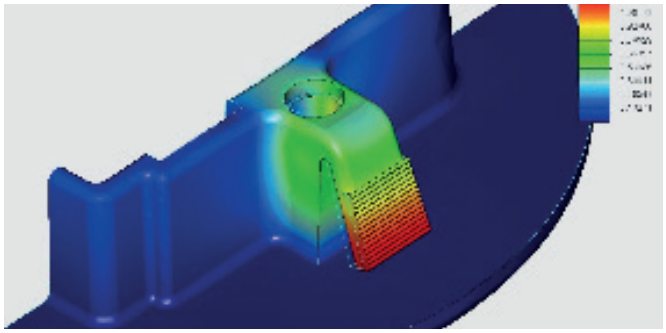
All Ektor Ektor Professional products use finite element analysis simulations on all components to assess performance and safety, identify potential problems, minimise weight and optimise strength.



MANUAL CALCULATIONS

Ektor engineers use many calculations to quickly determine component and feature feasibility, tolerances and compliance. This is done during conceptual, design and development stages to provide design direction for the 3D computer aided design models.

Combined with the FEA simulations calculations are verified as correct prior to component tooling and during testing.



CONTACT US TO DISCUSS THE BEST SOLUTION FOR YOUR PROJECT

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