



# Hand-held Power Tools & Garden Equipment

## Product safety & compliance

### Eurofins E&E

Eurofins Electrical and Electronics (E&E), part of Eurofins Consumer Product Testing (CPT) Division, is a global network of accredited laboratories offering electronic compliance testing, inspection, certification and market access services allowing product developers, manufacturers, brand owners and retailers to deliver compliant products to international markets quickly and cost-effectively.

Our teams of highly experienced engineers understand both the technical and administrative regulatory requirements of the compliance process and can help you ensuring that your hand-held and cordless power tools such as electric screwdrivers, drills & saws and garden equipment such as lawn mowers, trimmers and trimmers, meet the concerned electrical, mechanical, performance, reliability and safety requirements.

### Service scope

#### Product testing

Our range of testing services for hand-held and cordless power tools and garden tools include, but are not limited to:

- Electromagnetic compatibility
  - IEC/EN 55014/CISPR 14 series\*
  - IEC/EN 61000 series\*
- Electrical safety
  - IEC/EN 60335 series\*
  - IEC/EN/UL 60745-1 & IEC/EN/UL 60745-2 series\*
  - IEC/EN 62841-2 & IEC/EN 62841-3 series\*
  - MET NRTL for the US & Canada
- Machinery safety
  - Directive 2006/42/EC
- Acoustic & vibration
  - Sound level, power & intensity
  - Vibration levels
  - Outdoor noise directive 2000/14/EC
- Wireless connectivity
  - Bluetooth®, Wi-Fi, RFID & NFC
- Battery performance & safety for cordless devices & chargers
- Energy efficiency including:
  - ENERGY STAR®, Energy Labelling & Ecodesign Directives
  - Power consumption limits
- Environmental performance including:
  - Dust and water Ingress Protection (IP)
  - Impact protection (IK) rate testing
  - Temperature, humidity & flame testing
  - Battery charge and discharge performance

\* Please contact your local Eurofins E&E laboratory for details of the available and applicable standards.

- Chemical testing including:
  - RoHS 2 & REACH Annex XVII and SVHC

## Performance & fit-for-use testing

Ensuring that your products are fit for use and meet the usability requirements of consumers is essential. Eurofins E&E provides a range of performance verification and fit-for-use services to ensure that your products satisfy these requirements.

Our services include, but are not limited to:

- Suitability for intended use
- Lifetime tests, product endurance & temperature dependency
- Product failure analysis
- Ergonomic testing for handling and manoeuvrability and user-friendly functionality
- Functionality checks against user documentation such as:
  - User manuals & quick start guides

- Technical documentation reviews including:
  - Declarations of Conformity and TCFs
- Verification of labelling, product packaging & performance claims

## Inspection & audits

Alongside the testing and certification of products, the ongoing inspection and auditing of manufacturing facilities, locations, production lines, and products before, during or after production is a vital part of the process of delivering and continuing to deliver compliant products to market.

Eurofins offers a range of auditing and inspection services in manufacturing countries, such as raw material inspection, production line and postproduction sampling, and pre-shipment inspections for all types of electrical consumer products.

