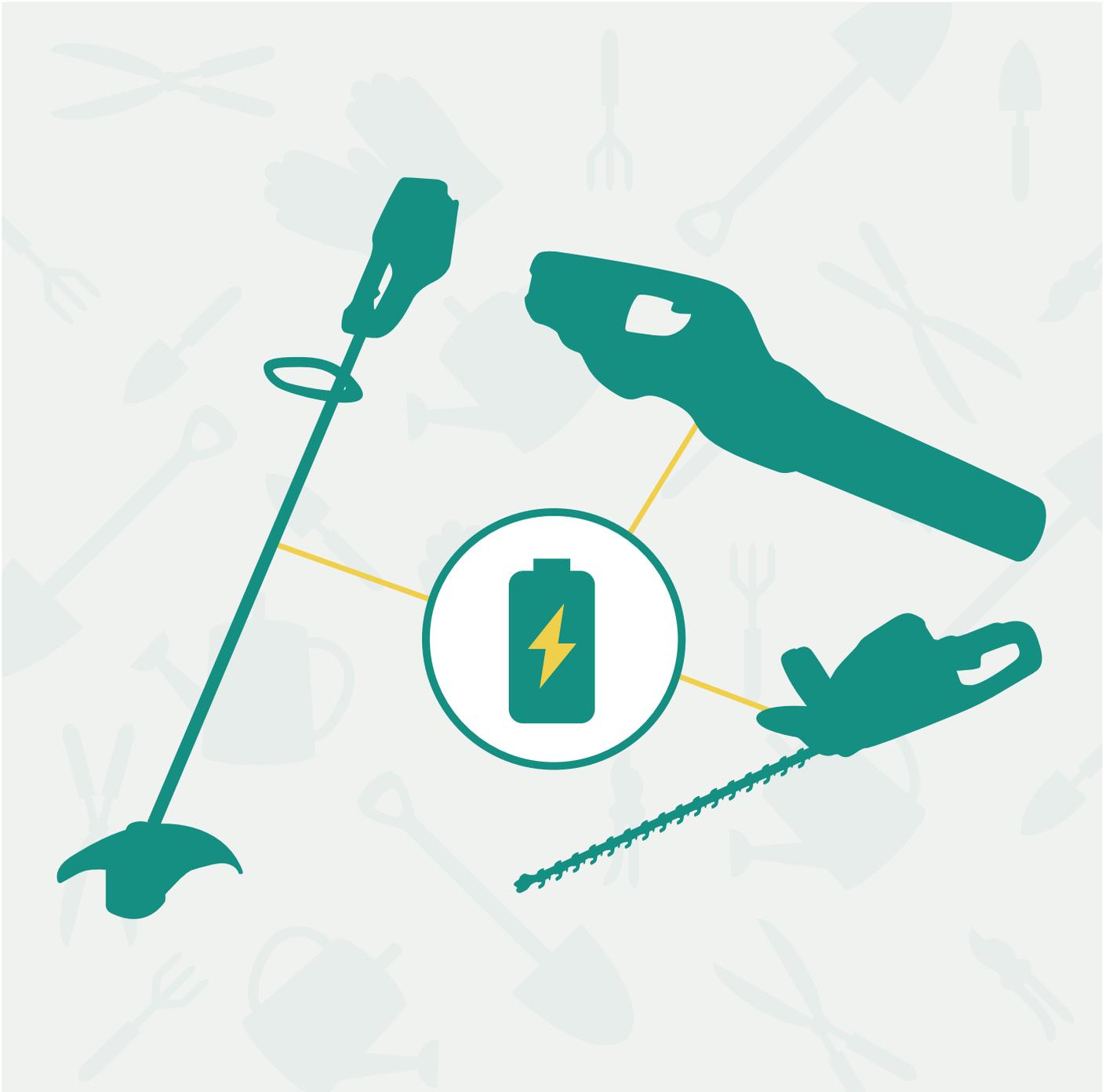


# Battery Lawn Tools



## Summary

New product design contest on Desall.com: Leading Gardening Company invites you to create a new range of battery handheld tools for gardening, made of brushcutter, hedge trimmer and blower, with a modern and innovative design.

**Official contest page:** <http://bit.ly/BatteryLawnTools>

## Company Description

Leading Gardening Company is a leader enterprise in Europe active in the production of machines and tools for the gardening industry, with a range of products for professional and consumer segments.

## What we are looking for

The sponsor relies on the Community of Desall.com for the design of new products dedicated to gardening, through the organization of two contests open to all creatives, that will take place simultaneously in order to facilitate the creation of a range of products sharing the same *family feeling*. In particular, **Battery Lawn Tools** is looking for a new range of products dedicated to a **consumer** target, made of **three battery handheld tools and of the battery** (employed by all the products of both contests). They should all be coherent in terms of design, with **an innovative and minimal style** and a particular attention to **ergonomics** and **usability**.

## Guidelines

For the correct realisation of your proposals, keep into consideration the following guidelines:

**Product typology:** the family of **handheld battery tools** you are invited to design shall have the same *family feeling*. In particular, you are invited to focus on the following products:

- 1) Brushcutter
- 2) Hedge trimmer
- 3) Blower
- 4) Battery

## 1) BRUSHCUTTER

The brushcutter you are invited to design is an engine powered tool for the maintenance of gardens and green areas, for cutting grass, shrubs, bushes and similar.

Hereafter you can find the elements included in the brushcutter and the various characteristics. In the *Market-insight\_Battery-tools* presentation attached in the *Material files* you will find several examples of products already available on the market and other useful info for your design.

### Elements:

1. Upper body with battery compartment
2. Shaft
3. Handles
4. Commands
5. Lower body (engine)
6. Cutting head
7. Cutting guard

**1. Upper body with battery compartment:** you are invited to **design the body** located at the upper end of the brushcutter where the **battery** (see **Battery** paragraph) and **the rear handle grip** are hosted (see **Handles** paragraph). The **battery compartment** will have to include an **insertion** and **release mechanism** for the battery, while ensuring that the **battery remains tightly fixed when the tool is in use**, providing a **lock/unlock system for the battery**. On this body you are also supposed to **apply the logo** as better specified in the relevant paragraph. This element will also serve as a **counterweight** to ensure an optimal **balance** for the brushcutter, with its pivot in the front handle.

**2. Shaft:** you are NOT supposed to design this element, which is made of aluminium, but you are invited to include it in the presentation of your project. The shaft will be 110/120cm long. We remind you that the shaft will host the front handle.

### 3. Handles:

- **Rear handle:** it is integrated in the **upper body**, with a **soft-grip** finish and partial co-injection of rubber (see slide 48 of the *Market-insight\_Battery-tools* presentation attached in the *Material files*); it will host the **power trigger** of the brushcutter.
- **Front handle:** it is **located on the shaft** and will have to be **adjustable along the height of the shaft** to better meet the various requirements of the final consumers. It will also have to be equipped with a **front guard for the legs** (see the *Material files* for some examples of products already available on the market).

The handle will have a **soft-grip** finish (partial co-injection of rubber, see slide 49) to ease the grip and make the use more comfortable.

**4. Commands:** the brushcutter will be equipped with an intuitive and practical **command interface**, with **two functions: on/off** and **boost** (or secondary function). A **minimal** and **elegant** style will be preferred, embedding a **LED/indicator light** that turns on when a function is activated in correspondence of the relevant button. For some examples and to learn more about the technology to employ in the buttons see slide 54 of the *Market-insight\_Battery-tools* presentation attached in the *Material files*.

**5. Lower body (engine):** you are invited to **design the case of the whole body**, keeping into consideration the characteristics and dimensions of the engine provided in the 3D file attached. For the correct cooling of the engine, you are also supposed to include **ventilation grids**. The body will be located in the lower end of the shaft and will be directly connected to the cutting head where the blade or cord are fixed. You are NOT supposed to design the engine.

**6. Cutting head:** the cutting head is the element where the blade or the cord are fixed. You are NOT required to design the cutting head, but you are nevertheless invited to include it in your project for an overall better presentation of your submission.

**7. Cutting guard:** in the lower end of the shaft, **above the cutting head**, include a **protection device** against stones or debris that may accidentally be hit by the cutting head and projected towards the operator during the normal activity. **The maximum diameter** of this element is **~30cm**.

**Materials:** the plastic parts of the brushcutter may be realized in **ABS, PA6** or **PP**. The shaft will be made in **aluminium**.

**Size:** the brushcutter shall have the following maximum dimensions, 175x30x25cm (LxWxH), handles excluded, that you are free to design as you wish. The shaft will be 110/120cm long.

**Weight:** the brushcutter will have a **weight equal to or lower than 4,5 Kg**.

## 2) HEDGE TRIMMER

The hedge trimmer you are invited to design is an engine powered tool for the maintenance of hedges and bushes, equipped with a saw-toothed blade that enables to easily cut twigs and branches through an automated movement.

Hereafter you can find the elements included in the hedge trimmer and the various characteristics.

In the *Market-insight\_Battery-tools* presentation attached in the *Material files* you can find several examples of products already on the market along with other useful information for your design.

## Elements:

### 1. Engine body and battery compartment

### 2. Handles

### 3. Commands

### 4. Hand guard

### 5. Blade

**1. Engine body and battery compartment:** you are invited to **design the body** containing the engine and the battery (see **Battery** paragraph), that will constitute the main body of the hedge trimmer. The **battery compartment** will have to include an **insertion** and **release mechanism** for the battery, while ensuring that the **battery remains tightly fixed when the tool is in use**, providing a **lock/unlock system for the battery**. For the correct cooling of the engine, you are also supposed to include **ventilation grids**. Please see the 3D file attached in the *Material files* for the engine dimensions.

## 2. Handles:

- **Rear handle:** in addition to hosting the **power trigger** it will have to enable a **180°** rotation ( $\pm 90^\circ$ ) around the axis made of engine body and battery compartment, in order to ensure for the user a comfortable operation on the various sides of the hedge (see slide 50 of the *Market-insight\_Battery-tools* presentation attached in the *Material files*). The handle will have a **soft-grip** finish (partial co-injection of rubber, see slide 48 of the *Market-insight\_Battery-tools* presentation).
- **Front handle:** in addition to providing an optimal handling and comfortable use of the hedge trimmer, the **front handle** will also embed a further safety device, the **safety switch** that, only when pressed together with the power trigger, will enable the operation of the hedge trimmer. The preferred solution for the **safety switch** is **frontal** and will have to extend all along the handle, as specified in the slide 49 of the *Market-insight\_Battery-tools* presentation attached in the *Material files*. The handle will have a **soft-grip** finish with partial co-injection of rubber, to ease the grip and make the use more comfortable.

**3. Commands:** the hedge trimmer will be equipped with an intuitive and practical **command interface**, with **two functions: on/off** and **boost** (or secondary function). A **minimal** and **elegant** style will be preferred, embedding a **LED/indicator light** that turns on when a function is activated in correspondence of the relevant button. For some examples and to learn more about the technology to employ in the buttons see slide 54 of the *Market-insight\_Battery-tools* presentation attached in the *Material files*.

**4. Hand guard:** to ensure the highest safety for the user, you are required to design a **protection device** that may prevent any accidental contact with the blade. This protection device will have to be **placed between the blade and the front handle**. You can find several examples of this protection device in the *Material files* attached, in particular at slide 49 where the front handle is also illustrated.

**5. Blade:** the hedge trimmer will be equipped with a **~60cm** long tooth saw blade. You are NOT required to design this element, but you can find the relevant 3D file inside the *Material files*, to include for a better presentation of your project.

**Materials:** the plastic parts of the hedge trimmer may be realized in **ABS, PA6** or **PP**.

**Size:** the hedge trimmer shall have the following maximum dimensions (blade included): **~100x21x20cm** (LxWxH).

**Weight:** the hedge trimmer will have a **weight equal to or lower than 3 Kg**.

### 3) BLOWER

The blower you are invited to design is an engine powered tool for gardening, to remove debris and leaves through a channelled flux of air.

Hereafter you can find the elements included in the blower and the various characteristics. In the *Market-insight\_Battery-tools* presentation attached in the *Material files* you can find several examples of products already on the market along with other useful information for your design.

#### Elements:

##### 1. Engine body and battery compartment

##### 2. Handle

##### 3. Commands

##### 4. Tube

**1. Engine body and battery compartment:** you are invited to **design the body** containing the engine and the battery (see **Battery** paragraph), that will constitute the main body of the blower. The **battery compartment** will have to include an **insertion** and **release mechanism** for the battery, while ensuring that the **battery remains tightly fixed when the tool is in use**, providing a **lock/unlock system for the battery**. For the correct operation of the tool it is necessary that the **engine and the air tube stay on the same axis**, as you can infer from the several blower

examples provided in the *Market-insight\_Power-tools* presentation attached in the *Material files*. For the engine size please check out the 3D file attached in the *Material files*. A fundamental element of the blower is the **intake air grid** for the air that will be channeled through the tube. For an optimal operation, the grid shall be placed **on the back** or **on the sides of the tool**.

**2. Handle:** the blower will be equipped with one handle only, with a **soft-grip** finishing with partial co-injection of rubber, see slide 48 of the *Market-insight\_Battery-tools* presentation attached in the *Material files*. The handle will also host the blower **power trigger**.

**3. Commands:** the blower will be equipped with an intuitive and practical **command interface**, with **two functions: on/off** and **boost** (or secondary function). A **minimal** and **elegant** style will be preferred, embedding a **LED/indicator light** that turns on when a function is activated in correspondence of the relevant button. For some examples and to learn more about the technology to employ in the buttons see slide 54 of the *Market-insight\_Battery-tools* presentation attached in the *Material files*.

**4. Tube:** the blower will be equipped with a **65-70cm long** tube for the outlet air. The **diameter** will be **9,5cm at the junction with the engine body** and **7cm at the outer end of the tube**.

**Materials:** the plastic parts of the blower may be realized in **ABS, PA6** or **PP**.

**Size:** the hedge trimmer shall have the following maximum dimensions (tube included): **~100x20x25cm** (LxWxH).

**Weight:** the blower will have a **weight equal to or lower than 2,5 Kg**.

#### 4) BATTERY

You are invited to develop the **design of the battery** that constitutes a **fundamental element which is employed in all the products**, including the *powerhead* subject of the *Battery Lawn Powerhead* contest. In case you are participating in both contests, you are invited to use the very same battery.

It is a **rechargeable Li-Ion battery** that, once inserted, shall be integrated in the design of the whole product. Consider a minimum bulk volume of **93x130x85mm** (LxWxH), trying to keep the size of the battery as small as possible.

The battery **shall be equipped with a handle** for a more convenient transportation and an easy removal from the compartment, keeping into consideration the insertion/removal and the lock/unlock mechanisms already designed in the battery compartment of each product. The **battery design** shall also be **organic** and integrated with the tool, preferably studying solutions where the battery is totally inserted inside the volume of the tool itself or, if you choose a different approach, it shall nevertheless ensure an aesthetic continuity with the overall design of the tool. For some examples, see slide 47 of the *Marketing-insight\_Battery-tools* presentation attached in the *Material files*.

The battery shall also be equipped with an **indicator light** that enables the user to understand the **battery status**, when in use, and the charge progression when charging. In order to be charged, the battery shall be removed from the tool and inserted in the charger (which is not subject of the contest). Ultimately the **battery** will have to be **inserted from above or from the back side of the tool**, preferably thinking of an agile system that enables the company to reduce the battery size, over time, without having to redesign the whole range of products. You can find the 3D file of the battery volume attached in the *Material files*.

### COMMON FEATURES FOR ALL PRODUCTS

The products you are invited to design are part of a range of products dedicated to domestic gardens; accordingly they have to share the stylistic and formal aspects that one may trace back to a shared code, easily distinguishable by the final consumer. Here are some common aspects you are invited to follow for all the products.

**Ergonomics:** fundamental aspects which are common to all products are **ergonomics** and the **attention for the user experience**, employing **soft-grip** finishes in the various handles and taking good care of all the other aspects related to interaction and handling (command interface, etc.). Another important aspect is the **balance of the tool**, that shall ensure a comfortable usage. Other meaningful aspects are **safety** and **lightness**.

**Style:** the style of the products you design shall be **sober, elegant** and **modern**, it shall convey a sense of **solidity** and **reliability**, while preserving a sense of **lightness in the shapes**. The lines shall be **fluid and clean**, with **an organic design, simple** and **minimal shapes**. The edges shall be **rounded** and **clean**. In order to increase the *family feeling* inside the range of products (including the *powerhead*, subject of the *Battery Lawn Powerhead* contest) you are invited to think of possible **stylistic elements shared by all the products** that may become a distinguishing feature for the brand (e.g. grids, etc.). In the *Marketing-insight\_Battery-tools* presentation attached in the *Material files* you will find several examples of products currently available on the market, with indications and comments that will guide you through the design. In particular, pay attention to a few stylistic choices that the sponsor prefers to avoid, such as suggesting a futuristic design or too complex shapes (see slides 39-44).

**Colour:** the products you design will have two colours of your choice, with two different proportions and finishes. In particular, a **dark colour with matte finish**, that will cover **60% of the tool** and a **light colour with glossy finish**, that will cover the remaining **40% of the tool**. As far as the proportions are concerned, keep into consideration the complete tool with the battery installed.

**Logo:** you are required to **include the logo** on every product, that for the purposes of the contest you will substitute with the wording: **“logo”**. In particular, you are invited to include the **logo on the left side** and **on the right side** of every tool, considering the orientation while it is being used. **On the right side**, in addition to the logo **also include the model code of the tool** that for the contest purposes you will substitute with the wording: **“XYZ123”**. The logo will be applied either through **pad printing** or **embossed on the mould**. For some examples, please refer to slide 53 of the *Market-insight\_Battery-tools* presentation attached in the *Material files*.

**Where to use and target:** the range of products you are invited to design shall be addressed to a **consumer, non-professional** target, for the maintenance of the **home garden**, made of lawn, hedge and bushes.

**Other notes:** you are also invited to employ the **least possible number of components** (and thus of moulds), in order to **keep the production costs at the lowest**.

**Project presentation:** in order to better present your projects, you are invited to submit the **whole family of products with a single submission** (upload), using the five slots available and the archive, showing at least one view of the **whole family**, the **single tools** and the **battery**. You are finally invited to attach the 3D files used for the project in .igs or .step formats, inside the .ZIP archive to attach from the upload page.

**Evaluation criteria:** in the evaluation of your submissions the sponsor will take into account the following criteria, each assigned a value between 1 and 5 according to its importance:

- **Stylistic coherence between the various products** (5/5)
- **Functionality/usability** (5/5)
- **Compactness** (4/5)
- **Aesthetic quality and project presentation** (4/5)
- **Degree of innovation** (3/5)

**Language:** since we are an international Community, all texts provided with your uploads (abstract, description, tags, etc.) should be written in English.

### Timeline

Upload phase: 1<sup>st</sup> April – 31<sup>st</sup> May 2017 (1.59 PM UTC)

Client Vote: from 31<sup>st</sup> May 2017

Winner announcement: approximately by mid-July 2017

### Eligibility and submission

Participation is free of charge and open to designers and creative talents of any nationality aged 18 years or older. Participants can present one or more projects, but only the projects published on the [www.desall.com](http://www.desall.com) web site, via the upload page related to “Battery Lawn Tools” will be accepted.

## **Award**

**1st: €6,000**

The selection of the winner by the Sponsor will be the result of an unquestionable evaluation and it will take into account originality, feasibility and consistency with the brief presented.

## **Option right**

For the duration of the option right, the Sponsor offers an extra chance to all participants setting a price of Euro 3,600 (three-thousand-six-hundred) for the purchase of the license for the economical exploitation of the projects not-acknowledged as the winning proposals.

For more info, please read the [Contest Agreement](#).