

## **Modern mulching mowers - empty marketing promise or really good machines?**

In recent years, a large number of so-called "new" mulch lawnmowers have come onto the market. You recognise them immediately by their missing collection bags and the mowing hoods' round, closed shape.

As a revolutionary new development, these machines are intensively advertised by every manufacturer. There is talk of "intensive mulching", "micro-shredding" and even "pulverizing" the lawn.

Are these mowers really as new and as good as their marketing promise?

### **First, the facts and figures:**

- According to Wikipedia, mulching refers to mowing with simultaneous shredding of the mowed material and covering the soil with fresh organic materials
- Mulching is not a new invention, but a mowing method that has long been used in agriculture and gardening. Various types of mowing systems have been used for a long time
- For decades now, lawn mowers have had so-called "mulching inserts" or "mulching kits" that are inserted into the mowing hood and replace the collection bag

So mulch mowers are not as new as advertised. But this is true: the new generation of mulch mowers has a much cleaner cutting pattern than older models. They are also considerably better than combination mowers with a mulching insert.

### **The technical progress is the result of a novel combination of the following components:**

- Mulch mowers have a completely round mowing hood (also called mulching bell) without edges, corners or ejection channels
- In the circular shape of the mulching bell, a rotating blade (approx. 2,800 to 3,100 rpm) can create a circular air stream
- Long cut grass is swirled in the air stream for some time
- While the grass cuttings are being swirled, a special mulching blade with several cutting edges located at different heights of the blade can shred the grass blades further and finer
- When the grass particles have become very small and offer the air stream little contact surface, they fall back onto the surface of the lawn
- The rear edge of the mulching bell, or a specially mounted crosspiece at the rear of the mower, then "brushes" the fine mulch particles into the remaining lawn. The clean cut is finished, without a collection bag

Mulching mowers are therefore a clever combination of mower deck, airflow and blade shape.

**Good mulching mowers should have the following elements for an optimal cutting pattern:**

- Deep, circular mulching bell: A constant air flow can develop, and a lot of cuttings can be collected
- Strong air flow in the mulching bell: through extra air wings or a high, angled, bevelled blade shape
- Blades with several cutting edges: up to three cutting edges are common
- Variegated cutting edges: Good blades distribute the cutting edges at a height of 30 to 40mm and thus cut in several levels in the mulch bell
- The mulched cuttings are raked into the lawn: a crossbar or similar element distribute the remaining blades of grass, causing particles to fall to the bottom of the lawn

Anyone who has purchased a good mulching mower will be truly amazed at first use. Simply "mow through" lawns without stopping. No annoying process of emptying of the cuttings onto the compost or trailer. 30% savings on fertilizers and, most importantly: a really clean and even cut as it used to be with a collection lawn mower.

Only one question remains: What are you going to do with the 25% more time you have when compared to the mowing with a catch bag? Probably best to do something useful.



**YouTube channel:**

<https://www.youtube.com/channel/UCLqXsENxtcHxyEQ4zUO147g>

**About AS-Motor Germany GmbH & Co KG:**

Headquartered in Bühlertann, Germany, AS-Motor Germany GmbH & Co. KG has developed and manufactured special motorised devices for garden and landscape care since 1959. AS-Motor devices are engineered for extreme conditions such as high growth and inclines exceeding 35 degrees. The family company has more than 130 employees and manufactures the majority of its components itself. Additional information is provided at [www.as-motor.com](http://www.as-motor.com).

**Photographic material:**

(Screen resolution only. Request print resolution at [ursula.brenner@as-motor.de](mailto:ursula.brenner@as-motor.de))



**Figure 1:** Mulch mowers can be recognized by the lack of a collection bag and the mowing hood's round, closed shape.



**Picture 2:** The mulching bell of mulching mowers is completely round, without any interference from edges, corners or ejection channels.



**Figure 3:** In the mulching bell, the rotating blade generates an air stream that swirls cut grass. The grass is finely shredded by a special mulching blade and returned to the surface of the lawn.



**Figure 4:** The mulched, fine grass particles are raked into remaining lawn and fall to the bottom of the lawn.

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