

AS
MOTOR

AS-MOTOR /
ELECTRIC

POWER FOR THE PROFESSIONAL

EVOLUTION



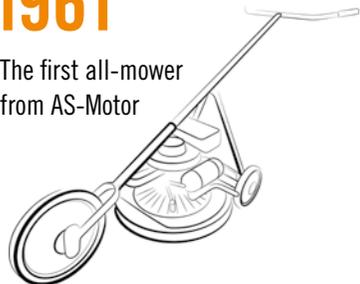
A SIMPLE IDEA AND ENTREPRENEURIAL AMBITION were the key elements for Alfred Schefenacker when he founded the AS-Motor company in 1959. It was he who rethought the classic „mowing“: it should handle denser, higher grass and steeper terrain easily. Making heavy work easier and more bearable for everyone. A good 60 years later, the „all-mower“ is synonymous with high grass mowers. And the machines from AS-Motor stand for quality „Made in Germany“ worldwide.

THE TECHNICAL PROGRESS IN ALL-MOWERS IS UNMISTAKABLE. Although still designed as simply as possible, current models are crammed with know-how and sophisticated details in drive, blade system, handling and safety. The innovation engine of AS-Motor is to rethink the proven and the existing.

INNOVATION MADE FOR PROFESSIONAL USERS. Technological progress in battery technology now makes it possible to transfer the performance and running time required by professional users to real professional battery mowers.

1961

The first all-mower from AS-Motor



1969

AS-Motor is the market leader for battery lawnmowers



1995

The first professional all-mower from AS-Motor



2016

The newly designed AS 63 professional all-mower



2021

AS 63 EAllmäher
the first professional Allmäher with battery technology



ENGINEERING

NEW THINGS SOMETIMES OCCUR BY CHANCE. For example, the meeting of two companies with the same or similar visions. One is looking for high-performance batteries for professional mowers and the other is looking for demanding professional applications for its latest battery technology. The secret to moving forward lies in taking the first step. The common path to the goal then needs heart, passion, commitment and dedication. The result is something to be proud of: **A new performance class of professional battery mowers.**

**AS
MOTOR**

+

EGO
POWER BEYOND BELIEF

=

**AS-MOTOR
ELECTRIC**

- Pioneer in the field of professional and high grass mowers
- Family business
- Since 1959
- Bühlertann, Germany
- 135 employees
- **Own R&D department**
- 14,000 professional mowers per year
- Exports to 36 countries

- Pioneer in battery technology and power tools
- Family business
- Since 1993
- Nanjing, China
- 7,000 employees
- **Own R&D department**
- 10 million product units per year
- Exports to 65 countries

Decades of individual experience and competence pursue a common goal:
GENUINE, PROFESSIONAL BATTERY MOWERS



ECOSYSTEM

„SO QUESTION THOSE WHO COMMIT TO FOREVER!“ The decision for a battery system needs to be well considered. The decision made will accompany the user for years. A central and decisive point is the choice of the battery system. Decision criteria include the power of the motor (watts) and the energy content of the battery (Wh).

For professional users, however, it is above all the usable power and the maximum capacity of the battery system under maximum load, i.e. a combination of volts, amps, watt-hours and cooling system. Continuous shutdown or overheating of the system are not acceptable and not very practical for the professional user. A wide choice from an existing range of different application equipment also makes it easier to switch to one system. Combined with warranties and available service, nothing stands in the way of a sensible, professional decision for the future.

- ✓ Sufficient power and running time for professional applications
- ✓ Existing and flexible choice of application equipment
- ✓ One battery system for all tools
- ✓ Future-proof battery system
- ✓ Competitive and constant battery costs (€/Wh)
- ✓ Service availability
- ✓ 2 years professional warranty on batteries
- ✓ Durable quality for up to 1.200 battery charges at almost full battery capacity

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EQUIPMENT

THE TIME IS RIPE FOR PROFESSIONAL BATTERY MACHINES. Technological progress in battery technology opens up new possibilities. Lithium-ion batteries can now match the performance of conventional combustion engines and simultaneously have a positive influence on decisive criteria: **Less noise, less vibration and no exhaust fumes.**

Increasingly, life cycle costs are replacing traditional acquisition costs in public procurement guidelines. We are determined to make our contribution. But you can rely on professional performance, all-weather reliability and long service life. Meet the expectations of your customers and clients also in the near future. Do not save on your competitiveness but rather on money for running costs and service. **Here are the new ones: 4 product families, 9 models, one system.**



AS 420 EProClip



AS 470 EProClip A



AS 510 EProClip A



MULCHING LAWN MOWERS

AS 531 EProCut B



PROFESSIONAL LAWN MOWER

AS 21 EAllmäher



AS 62 EAllmäher



HIGH GRASS MOWERS

AS 63 EAllmäher



AS 30 EWeedHex



WEED REMOVERS

AS 50 EWeedHex



AS *E*ALLMÄHER

A NEW ERA IN THE SUCCESSFUL ALLMÄHER HISTORY IS NOW DAWNING.

As a high grass mower pioneer since 1959, AS-Motor presents the first Li-Ion battery-powered Allmäher. The necessary power and running time is now available. The technical hurdle to overcome for all high grass mowers is the power and energy requirement when mowing dense grass. The electric motor unit must be able to deliver maximum power continuously and absorb any „power peaks“ that occur without switching off immediately. The best example of this is the classic molehill on extensively maintained areas.

The maintenance and preservation of ecologically valuable marginal strips is more necessary today than ever before and a practical prerequisite for species protection. For years, AS-Motor has consistently and persistently pursued the possibilities of alternative, electric drives for its Allmähers. A development partnership with one of the market leaders in battery technology has now made the technical breakthrough possible. Whenever you now ask yourself: Is there a battery-powered alternative? **The answer is yes.**
Now also for tall grass!



AS 21 *E*Allmäher

Cutting width	51 cm
Work rate max.	appx. 1.500 m ² /h
Wheel drive	Single speed
Speed	appx. 3,0 km/h
Cutting height adjustment	55 – 80 mm
Weight w/o batteries	49 kg
Dimensions in cm	L 200, B 74, H 99
Item number	G06100104

AS 62 *E*Allmäher

Cutting width	61 cm
Work rate max.	appx. 2.300 m ² /h
Wheel drive	Variomatic
Speed	appx. 1,8 – 3,8 km/h
Cutting height adjustment	50 – 100 mm
Weight w/o batteries	69 kg
Dimensions in cm	L 191, B 70, H 99
Item number	G60000203

AS 63 *E*Allmäher

Cutting width	61 cm
Work rate max.	appx. 2.300 m ² /h
Wheel drive	Variomatic
Speed	appx. 1,8 – 3,8 km/h
Cutting height adjustment	50 – 100 mm
Weight w/o batteries	74 kg
Dimensions in cm	L 191, B 70, H 99
Item number	G60000106

EXTREME

THE IMPROVEMENT OF „2-STROKE“ IS „NO STROKE“. The AS-Motor Allmähers with 2-stroke engines are legendary in landscape maintenance. Their suitability for slopes, power-to-weight ratio and manoeuvrability in difficult terrain remain unrivalled to this day. Only the latest battery technology is at eye level in this extreme application. Fully slope-suitable without any theoretical slope limits at even higher torque of the brushless AS-Motor Electric motor with simultaneously reduced weight.

When it comes to well-being for users and the environment, the battery-powered Allmäher is advancing into hitherto unknown dimensions. Annoying noise for users and the environment, tiring vibrations, harmful exhaust fumes and the hazardous handling of fuels are forever a thing of the past.

However, the somewhat abstract-sounding goal and the state of well-being can also be measured economically. Productivity is the unit of measurement for it. When activities feel less like work, they are easier and more enjoyable. Practical occupational safety starts here and pays off in the long run. The time has come to rethink our habitual actions and make it more sustainable. The necessary machines are now available.

AS-Motor is making its contribution and will continue to do so. That's a promise.

IN FOCUS: AS 63 E-ALLMÄHER

Probably the most extreme battery-powered mower in the world. Made for high grass up to 80 cm. Maximum possible slope capability. Differential lock. Automatic parking and engine brake. Reduction gear with infinitely variable speed. Optimal weight and balance. Powered by the strongest battery powerhead and equipped with the most powerful portable batteries. The limits of the machine? Extreme!

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ENERGY



TO DO A PROFESSIONAL JOB, YOU NEED ENERGY. PREFERABLY A LOT OF IT. The goal of the day is set. The job at hand has to be done. The demands professionals place on battery-powered devices in commercial use are the same as those placed on existing machinery with combustion engines. The first decision criteria mentioned by professional users when making an investment are running time, power and work result. The next most important criteria are cost-effectiveness and payback period.

The factors here are purchase price, operating and service costs, flexible usability and possible service life. In any case, the performance characteristics of battery-powered tools where they outperform petrol-powered ones are already clear: better for health, better for the environment, lower operating costs and lower service and maintenance costs. That is a fact! An increasing tendency towards a higher emphasis on the factors health, environment and sustainability is currently evident.



* Example AS 510 E-ProClip A

Ideal power for hand-guided professional devices out of...	56 V voltage
Largest battery capacity of a hand-held battery on the market	56V x 10Ah = 560 Wh
One of the largest backpack batteries on the market	56V x 28 Ah = 1,568 Wh
Max. battery energy on a walk-behind mower	2 x 560Wh + 1,568Wh = 2,688 Wh
Most powerful electric engine available for lawn mowers	3,200 W rated power
Professional warranty for batteries	Hand-held battery: 2 years Backpack battery: 3 years
Short charging time up to 100 % with quick charger	Hand-held battery 10 Ah: 70 min for 560 Wh Backpack battery 28 Ah: 210 min for 1,568 Wh
Competitive and constant battery price per Wh	Hand-held battery: 560 Wh: 0,89 €/Wh Backpack battery: 1,568 Wh: 0,89€/Wh
Full compatibility	Any hand-held battery on any device usable

AS EPROCUT

WHERE ELSE, IF NOT ON A LAWN? Flowering gardens, well-tended parks and green lawns have delighted people for centuries. This is the place where they feel good, rest, relax or do sport for physical balance. Unless a rattling lawnmower disturbs the restful tranquillity. In no other applications are the advantages of battery technology so obviously noticeable and audible as when blowing leaves and mowing lawns in urban zones.

NOISE AND HAND-ARM VIBRATIONS CAN BE STRESSFUL. The Occupational Health and Safety Ordinance on Noise and Vibration has set the trigger value for daily vibration exposure at 2.5 m/s^2 . The AS 531 E-ProCut professional lawnmower is below this value at less than 1.0 m/s^2 .

THE PERCEIVED NOISE LEVEL for the user is also reduced by approx. 8 dB. This corresponds to more than 50 % less perceived noise. This is a real benefit and progress for the health of the user and his environment, without any loss in power and performance. The 56 V electric motor still has enormous power reserves, even for grass heights up to 30 cm. Service providers and contractors are already using battery technology as a powerful argument when acquiring and awarding new contracts. **Be prepared for the future.**



AS
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AS 531 E ProCut B

Cutting width	53 cm
Work rate max.	appx. 2.100 m ² /h
Wheel drive	Variomatic
Speed	appx. 3,0 – 4,5 km/h
Cutting height adjustment	30 – 80 mm
Weight w/o batteries	54 kg
Dimensions in cm	L 164, B 59, H 99
Item number	653100116



**Hand-arm vibration <math>< 1.0 \text{ m/s}^2</math>, 50 % less noise.
Powerful, like the professional petrol engine.**

EPOWER

THE MOST POWERFUL ELECTRIC MOTOR COMES JUST IN TIME. If you were already satisfied with the power of a battery mower, you will now be amazed. The AS-Motor Electric drive sets the new best mark in its class.

WHERE DOES THE POWER COME FROM? The energy is supplied by two 56 volt Li-Ion batteries. Either the most powerful hand batteries with 10 Ah and 560 Wh each or in addition with one of the most powerful back batteries with 28 Ah and 1,568 Wh.

WHERE DOES THE ENERGY GO? The new AS-Motor Electric drive delivers a rated power of 3,200 watts. That is a new record in its class and considerably more than the 1,300 - 1,600 watts of other existing battery systems.

AND WHEN THE GOING GETS TOUGH? When mowing, 36/43 volt systems quickly reach their limits. Regular shutdown due to overload, especially in Eco mode, is the result. The 56 V technology and the power reserves of the AS-Motor Electric motor can react faster here. Torque and speed do not drop abruptly. They just keep going.

KEEP COOL! Mowing causes a high continuous load for the entire battery system. High currents lead to motor warming. The 56 volt system helps to keep the amperage and warming in check. In addition, the AS-Motor Electric drive has an active cooling system with fan. The batteries with the patented ARC shape and KeepCool™ technology with phase change material are located outside the motor and can steadily dissipate waste heat. Now the bar is set high.

More power. More performance. MORE PROFESSIONAL.



POWER like a 200 cc petrol engine, with at the same time higher torque.

AUTONOMY for a whole working day with up to 2,688 Wh energy reserve.

PEAK POWER TECHNOLOGY balances the power of up to three batteries at the same time.

DELIVERS MAXIMUM POWER from parallel batteries when needed.

COMPATIBLE with all EGO hand-held batteries.

CONNECTIVITY with EGO backpack batteries on selected models.

AS EPROCLIP

FINALLY A PROFESSIONAL MULCHING LAWNMOWER WITH PROFESSIONAL BATTERY POWER. Mowing with a collecting bag is technically simple compared to clean mulch mowing. The advantages of being able to work without interruption, not having to empty a collecting bag and not having to dispose of cuttings save up to 25 % time. On the other hand, the technical requirements for driving a mulch mower are higher than those for a collecting bag mower. A clean mulching result requires higher blade power to finely shred the lawn cuttings rather than simply cutting them off and throwing them into a bag. This is noticeable to the user when cordless lawnmowers with mulching inserts or simple cordless mulchers „give up“ on denser lawns, switch off or mow uncleanly.

NOTHING COMES FROM NOTHING - THAT IS THE REALITY. Now the new AS-Motor Electric drive comes into play: power in abundance when it is needed and a previously unattained running time for a true professional mulcher. Take advantage of the AS-Motor mulching lawn mowers every day. **Gain time for other activities with the power and endurance needed for professionals.**



AS 420 EProClip

Cutting width	42 cm
Work rate max.	appx. 1.500 m ² /h
Wheel drive	-
Cutting height adjustment	40 – 80 mm
Weight w/o batteries	30 kg
Dimensions in cm	L 127, B 46, H 100
Item number	G47000206



AS 470 EProClip

Cutting width	47 cm
Work rate max.	appx. 1.400 m ² /h
Wheel drive	Single speed
Speed	3,0 km/h
Cutting height adjustment	40 – 80 mm
Weight w/o batteries	35 kg
Dimensions in cm	L 131, B 51, H 100
Item number	G47000105



AS 510 EProClip

Cutting width	51 cm
Work rate max.	appx. 2.000 m ² /h
Wheel drive	Variomatic
Speed	2,0 – 4,0 km/h
Cutting height adjustment	40 – 90 mm
Weight w/o batteries	43 kg
Dimensions in cm	L 139, B 55, H 100
Item number	G51000113

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ENVIRONMENT

NOTHING IS AS CONSTANT AS CHANGE. In landscaping and horticulture, petrol has been the preferred energy source for almost 100 years. The main reason for this is that there have been no real alternatives to it. At the moment, we are witnessing a change in trend. A real change towards a more respectful use of the available resources. We need to rethink our actions for a more sustainable future and to preserve the regenerative capacity of ecosystems, living beings and our environment.

TECHNOLOGICAL PROGRESS OFFERS US NEW TOOLS TO DO SO. Battery-powered alternatives now compete with petrol-powered tools in almost every field of application. In many cases, the performance of battery-powered tools is on par. The attitude and mindset of landscaping customers is becoming more demanding when it comes to sustainability and legislation is determining future developments with stricter regulations.

THE QUESTION „IF“ HAS ALREADY BEEN ANSWERED WITH „YES“. Now it is a question of „how“ and with which equipment. It is now up to you to use the new, technical possibilities for yourself. Be competitive for future orders. Be competitive with other applicants. Serve new business areas that did not exist a few years ago. Sell your holistic care concept. We would like to accompany you on this path. **With truly professional battery-powered devices.**



Unburnt petrol*:	After 1,000 battery charges		
Hand held 560 Wh	780 Liters	Health 	100 % dB vs 50 % dB
Backpack 1.568 Wh	2,180 Liters	Vibrations 	100 % m/s ² vs 30 % m/s ²
		Well-being 	100 % CO NOx HC C ₆ H ₆ vs 0 % CO NOx HC C ₆ H ₆
		Environment 	100 % CO ₂ vs 0 % CO ₂

* Example: AS 510 ProClip 4T A vs. AS 510 E-ProClip A

AS EWEEDHEX

MECHANICALLY AGAINST WEEDS – BUT PLEASE BE CONSISTENT.

Herbicides were convenient but never good to us. Their components always find their way back to the user. It has not changed the original starting point – weeds still grow where you don't want them to. Mechanical weed removers confront them without chemicals. It would be consistent if the remaining negative characteristics of such machines could now also be reduced completely or to a minimum.

WEED REMOVAL WITHOUT CHEMICALS, WITHOUT EXHAUST FUMES AND WITH LESS NOISE AND VIBRATION.

Battery-powered weed brushes are exemplary in their application. In addition to the chemical-free and quiet operation, the electric motor can use one of its special technical advantages – its torque.

Thanks to its ability to adjust power, it maintains the desired speed more consistently than petrol engines. The effective brushing power of such machines is amazing and exceeds that of petrol engines.

You will be astonished at how pleasant it is to work in silence without having to sacrifice power. **A real blessing for the user and his environment.**



AS 30 EWeedHex

Cutting width	35 or 42 cm
Wheel drive	–
Weight w/o batteries	38 kg with steel plate brush
Dimensions in cm	L 157, B 61, H 108 – 120
Item number	607300112



AS 50 EWeedHex

Working width	50 cm
Work rate max.	appx. 1.000 m ² /h
Wheel drive	Variomatic
Speed	2,0 – 4,0 km/h
Weight w/o batteries	appx. 69 kg
Dimensions in cm	L 192, B 61, H 99
Item number	607300113



ECONOMY

MY NEIGHBOUR SAYS: „RECHARGEABLE DEVICES ARE MORE EXPENSIVE THAN PETROL DEVICES BECAUSE BATTERIES ARE EXPENSIVE!“

Without background knowledge, this prejudice is often used as a general argument. Yes. This may be the case at the time of purchase, but during the subsequent period it looks quite different again due to the considerably lower energy costs (electricity versus petrol) and the lower costs for maintenance and servicing.

The comparative cost calculation for the AS 510 mulching lawn-mower shows that the battery-powered model leads to significant cost savings. In the example opposite, the batteries have not even reached 40 % of their maximum charge cycles and are still fully usable.

RECOGNISING POSSIBILITIES BEFORE THEY BECOME OBVIOUS. Now the flexibility of the application possibilities comes into play. The batteries purchased can be used on 20 more devices. Each additional purchase of equipment expands their application possibilities. An additional professional hedge trimmer, for example, costs only 271 € without batteries. A comparable, separate petrol hedge trimmer would cost 339 €. The more you can use your batteries, the greater the saving in energy costs compared to petrol equipment.

Don't be afraid to give up good things for better things.

Think about it and take the first step.

AS-MOTOR WILL ACCOMPANY YOU AT EVERY STEP.

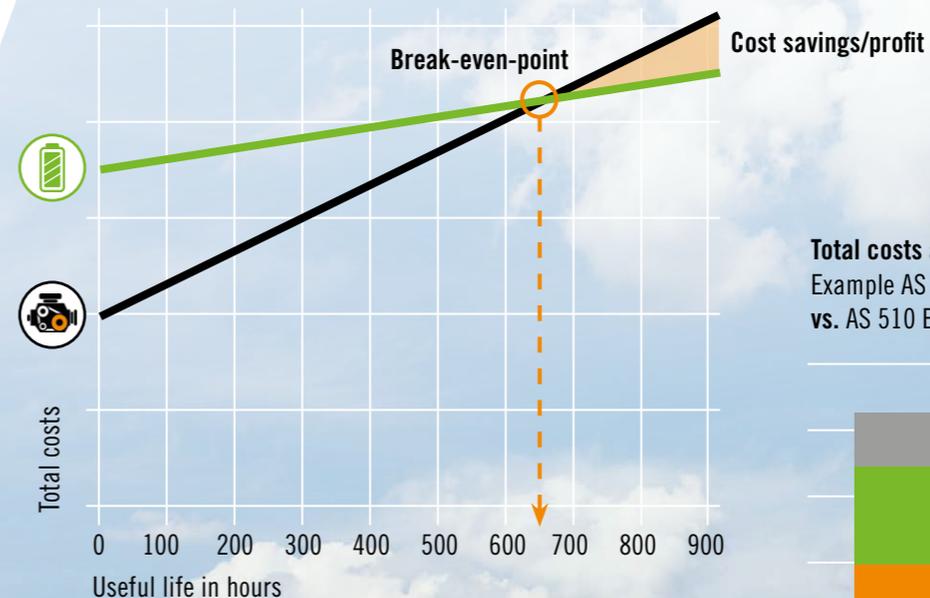
Buying green!

Green Public Procurement (GPP)

- ... helps protect the climate and the environment
- ... pays off
- ... is better for your health
- ... encourages imitation
- ... is a driver for eco-innovations
- ... offers competitive advantages
- ... is eligible for funding in the future

More information on Green Public Procurement:

https://ec.europa.eu/environment/gpp/index_en.htm



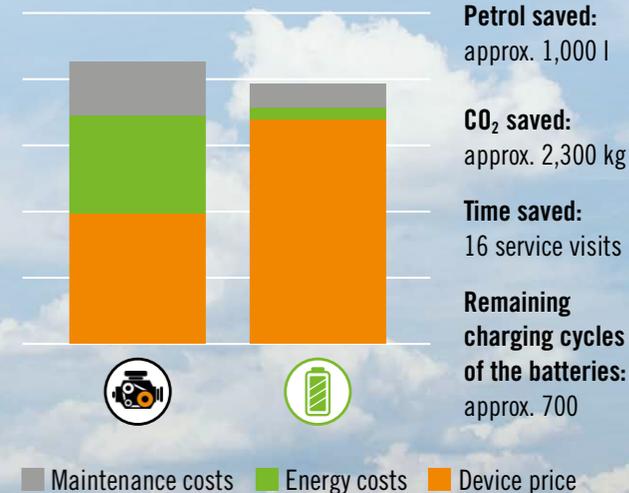
Cost comparison

Example AS 510 ProClip 4T A vs.

AS 510 E-ProClip A with two 10 Ah 56 V batteries

Total costs after 840 operating hours

Example AS 510 ProClip 4T A
vs. AS 510 E-ProClip A





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Errors and omissions excepted. No claims can be derived from information or illustrations.

AS-Motor Electric models are available from spring 2022.