Our Product Range for

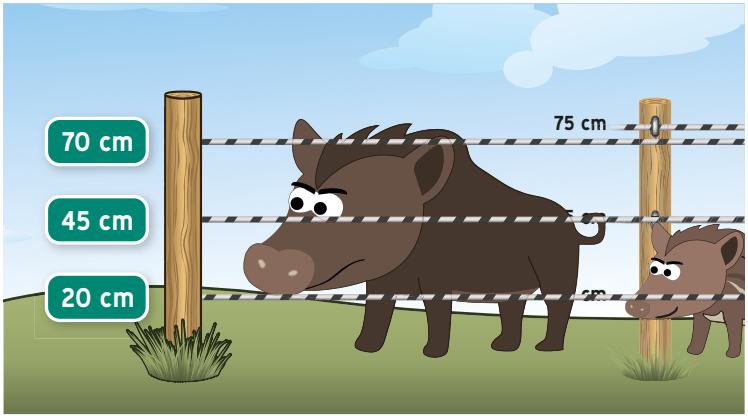
Wild Boars

Despite popular belief the number of wild boars has been steadily rising over the past years. This guide will prepare you should you encounter them on your property in the near future. The right accessories are required to ensure your electric fence is a reliable deterrent to wild boars. We have prepared a few tips and guides for you that will make building your defence against wild boars a bit easier.

Fence height

Permanent fence posts make up the framework for your fence system. Put solid wooden or metal posts at corners, access points and also moving points with particularly high tensile forces. Place the insulators **(Art. 44812)** on these for the wires at two or three heights. You should plan for the upper rows to be set at heights of about **45 cm** and **70 cm** and the lower row at **20 cm** so that large wild boars, but also smaller young boars, cannot slip through the fence.

To **improve visibility** of the electric fence, as well as the wire, use an **additional stretch of 10 mm tape**.



Fence posts

Place posts, ideally lightweight **plastic, fibreglass or metal posts**, between the permanent fence posts to keep the wire insulated from the ground. Make sure the eyelets on these line posts are located at the right heights **(Art. 44451, 44499** and **44111)**. To ensure the wire remains tensioned over long distances or you need to be able to reduce the tension, install additional metal Z-posts at around every 70–100 m, **(Art. 42220)**.

Note: always ensure you have enough space around the posts to enable future maintenance. As well as using a scythe for removing vegetation, herbicides or burners are sometimes used. In this case, make sure that the necessary distance is kept with adjacent fields so as not to damage crops and similar.

Conducting materials

Wild boars have **very poor vision**. It is therefore necessary to make sure the conducting material is highly visible. Studies have shown that **contrasting black / white** is easiest for them to see. Very long fences are usually used for defence against wild boars. Conductors with **high conductivity** are therefore needed to ensure the electricity can travel the full length of these fences.

Galvanised steel wire is a good choice for permanent fences. This has excellent conductivity even over long distances and is particularly robust **(Art. 44558)**. If you are planning on putting up a mobile fence, you have a choice between steel stranded wire **(Art. 44539)** and polywire **(Art. 42405)**. These can be rolled and unrolled more easily than plain steel wire and are therefore **much more versatile**.

Our Product Range for

Wild Boars

The steel stranded wire is highly tear-resistant with good conductivity at a low price. The downside is its relatively high weight when putting up and taking down the fence, difficultly to handle and susceptibility to rust. Polywire is significantly more lightweight, but less tough as a result.

We recommend using wire **polywire** with at least **6**, preferably **9**, **stainless steel wires** and with at least **1** additional **copper wire (Art. 44645)**. The **resistance should not exceed 0.3 ohms/m**. Additional UV-resistance increases the lifespan of the wire. Excellent visibility and very good conductivity is offered by the new black / white polywire with TLD technology **(Art. 42405)**.

Rolling out and tensioning the wire is made easier using a reel. **Reels** can generally hold between **500** and **2,000 m of wire**. They **can be mounted** to permanent fence posts if necessary. If you discover breaks in the fence or your wire is too short and needs extending, do not tie knots! Knots create very high electrical resistance and impede the flow of electricity along your fence. Instead, use **polywire connectors**. These create a conductive connection between the ends of the polywire and are therefore the perfect choice for guaranteeing the required voltage along the fence (Art. 44684 and **44619)**.

Tip: so that the boars notice the fence, allow for a 10 mm wide tape as a visual marker on the lower and / or middle row **(Art. 44554)**!

Energisers

Wild boars are very strong and resilient animals and are not used to electric fences. The fence therefore needs to be very powerful and very clear to see. It is **important** that when the animals touch the fence for **the first time** it **remains so strongly in their memory** they won't go near it a second time! A more powerful energiser should be chosen than would normally be used for horse or cattle fences.

A **fence voltage of 2,000 V is not sufficient for wild boars**. The fence voltage should be **at least 4,000 V**. The discharge energy should **not** be less than 2 joules and an energiser with **3–5 joules** discharge energy is **preferred (Art. 44853.P.UK** and **44687.P.UK)**. Wild boars will mostly investigate the fence and get a shock to their sensitive snouts. As such, **shock energy above 5 joules is not necessary** for successfully scaring away the animal. If you have a very long fence, however, or a fence with a lot of vegetation, then it makes sense to get an energiser with reserve capacity. These energisers have pulse energy of up to 14 joules and provide the highest functional security. **(Art. 44875.UK)**.

To get the required performance, use either a **12 V battery energiser** or, ideally, a **mains energiser**. **12 V battery units** are suitable for medium to long **fences up to 10 km**. To be a high-performance defence against wild boars, the 12 V energiser needs at least a 100 Ah battery (Art.34462). Keeping a spare battery has proven to be very useful in practice. There is also the additional option of connecting up a **solar panel**. This will save you a lot of work, time and money and also protect the environment.

A **mains energiser is recommended** for defence against wild boars wherever possible. It will provide a higher performance at a reasonable price as well as allowing you to keep long stretches of fence at the right voltage **(Art. 41830.UK, 44865.UK, 44875.UK)**. You should in any case ensure that you choose an energiser with enough power for your fence, taking into account any vegetation that will appear.

Our Product Range for

Wild Boars

Grounding

No electric fence will work without proper grounding. Electricity can only flow when the circuit has been completed through the animal and the ground. To guarantee a good return current to the energiser, you should ideally use galvanised steel grounding stakes with T or L profiles. These have a large surface area and good conductivity.

Insert the grounding stakes about 1–2 m into the ground **(Art. 44219)**. Each grounding stake should be placed about **3 m apart** and connected together using a high-voltage cable **(Art. 32601)**. Round grounding stakes with a length of 0.75 m are often used for mobile fences **(Art. 44375)**. Placing several stakes (3–7) will ensure sufficient conductivity. If other grounding systems are placed near to your fence system, such as those for houses, you should keep your grounding posts to a distance of at least 10 m from these.

Field gates

When protecting fields it is necessary to have access gates for farming machinery. For this reason you should allow for as many gates as necessary when planning your fence. However, **gates** always **present a weak point** for the flow of current around the system and should not be installed unless absolutely necessary.

For building gates use gate handles and **gate handle hooks** with tension springs **(Art. 44938, 44421, 44426)**. We also recommend installing an insulated high voltage cable below ground to bridge across the gate **(Art. 32601)**. It is not uncommon for someone to forget to the close the gate after going through. The wires are then left lying on the ground which creates a short circuit and significantly reducing the fence voltage.

In this case, the use of a flexible gate system is beneficial **(Art. 44938)**. With these systems, the electric rope or tape rolls up into a drum when the gate is opened.

Practical approach to assembly:

- drive in the permanent post and attach the insulators
- place line posts every 5–7 m (made from plastic, metal or fibreglass)
- unroll wire (and tape) and hang from the insulators
- tension the fence where necessary
- use gate handles with tension springs on gates
- set up the energiser and place grounding posts
- connect and link all electrical connections (fence connection wire to connect energiser with the fence; lead out cable to connect the energiser ground connection to the grounding stake; connect the 2–3 rows of fence wire to each other using fence connection cable **(Art. 43220)**.

Tip:
for an **additional deterrent effect**, it can be useful to **attach repellents** to a few fence components, such as the permanent fence posts, for example. The boar will associate the repellent with an unpleasant electric shock and avoid such areas in the future. A **blinking warning light** can have a similar deterrent effect **(Art. 32380)**. The light warns the boar about the presence of the electric fence and prevents it from missing the fence and running into it. If curiosity gets the better of the animal and it decides to go near then fence, then it will get an electric shock that will scare it off. The boar will then avoid areas with warning lights in order to avoid any further shocks!

Tips & tricks

Using fence connection cables:

Better conductivity, and therefore better supply of voltage to a long fence, can be achieved by cross-linking the upper and lower rows of wire at 200–300 m intervals. If your fence is circular, connect the beginning and end of it together. It is often just one side of a plot of land that is fenced off, in which case the beginning and end of the fence do not need to be connected.

Our Product Range for

Wild Boars

Avoid connections between copper wires and galvanised components:

Connections with **copper wires should** not be put in direct contact with galvanised **components** (grounding stake, energiser, wire, etc). This can result in the build-up of galvanic elements and corrode the zinc coating. To avoid this problem on mobile fences you can use tin-plated cables **(Art. 33615)** or, on permanent fences, special connection cables (cable with a galvanised steel core) **(Art. 32601)**.

Checking for leakages:

Vegetation on the fence, **faulty insulators** or **damp wooden posts** making direct contact with the wires and many other things may complete the fence circuit with the ground. The electricity then flows through the fence up to that point and leaks into the ground. This results in insufficient voltage on the fence to scare off wild boars that touch it. You should therefore regularly check that your fence is in full working order.

Finding faults on the fence is made much easier by using practical fence testers **(Art. 44700)**. Modern digital fence testers display the exact current and voltage on the fence. There are now even fence testers for steel wires that display arrows to direct you towards the location of a fault **(Art. 44864)**. It is generally helpful to find several points along the fence and test these same points regularly. These values can then be easily compared with each other to simplify any necessary fault location.

A particularly convenient way to monitor the fence is to use a fence alarm system with an SMS feature. You are informed via an SMS message as soon as the fence voltage drops below a certain value. You'll no longer have to deal with unknown problems with your fence system and save having to constantly turn it on and off.

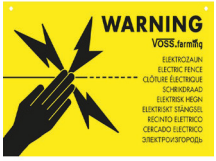
Very long fences (longer than 6 miles):

It is a good idea to divide the area to be fenced into several fence sections. Each fence section is powered by its own energiser. This has the advantage that the whole fence system will not go down if there is a fault. This will also make any faults easier to locate and resolve. When building multiple independent electric fence systems, a minimum distance of 2.5 m should be kept between them. Any gaps must then be filled with mechanical barriers such as wooden hoardings or another non-conducting material.

Quality pays:

The assumed high costs of an electric fence system for defence against wild animals are nothing compared to the frequently much higher costs and annoyance that can result from the damage caused by them. The following applies when making your choice: The higher the quality of the fence components, the more reliable the deterrent effect!

Signage:



It is a legal requirement that any electric fence systems placed near to public roads and pathways are clearly indicated by warning signs accordingly. Attach clearly visible warning signs at a recommended interval of 10m to 50m, but not exceeding 90m and at entrances to paths and locations where an electric fence may not be expected carrying the phrase „Warning Electric Fence" **(Art. 44842)**.

Should you have any questions please contact us. See you in the next issue.