

The new

QUALITY

in welding

MicorStick & MobilePower:
Electrode welding powered by battery technology

✓ Easier

✓ Faster

✓ More mobile

WORLD INNOVATION:
Battery-powered welding



LORCH

NO NEED TO UPGRADE

TO A NEW WELDING UNIT

Oh, Yes! Yes, there is ...

Maximum performance and welding with perfection.
Yet, lighter than most welding units whilst offering
a level of robustness that is second to none.
The time has arrived for the new MicorStick.
We bet that you will never want to be without it again!
Discover this exceptional talent!



ADE

G MACHINE?

✓ The new Quality
Easier. Faster. More mobile.

... as it lets you work much
✓ easier !



✓ Easier

✓ Faster

✓ More mobile

The MicorStick

Lighter still. Even better. The best there is for electrode welding. Full MICOR performance even on 230 V main supply.

Electrode welding with ease and perfection

MicorStick raises the bar when it comes to styling and good looks. Its modern housing design sets a new standard in the area of electrode welding: The MicorStick 160 is the first fully resonant inverter welding machine that operates on 230 V mains power featuring Lorch's innovative and patented **MICOR technology**.

Even when you operate with long cables of up to 200 m or when using a generator, this technology allows the MicorStick to guarantee superior welding characteristics and to provide **an exceptionally stable and forceful arc**.

Weighing in at **merely 4.9 kg**, this unit is one of the lightest available. Exceptionally robust at the same time, it is perfect both for the demanding everyday use at the workshop and for your hardest jobs on site when flexibility and durability are essential. We do not know any other system that is tougher than ours. Nor can we hardly think of one that offers the same **unique performance range** as our MicorStick.

Everything included: For reliable ignition and perfect welding characteristics.

- The automatic **Hotstart** provides absolutely perfect ignition characteristics.
 - The **Anti-Stick-System** prevents the electrode from sticking.
 - The **Arc-Force regulation** supports the welding process with increased arc stability and optimised metal transfer.
- What is more, the MicorStick offers the special function **StableArc** which, in the higher current range stabilizes the arc through systematic frequency pulsing when running on mains power. This provides for **increased directional stability**, reduces arc blow and gives increased dynamics. You will feel and hear the difference straight away.

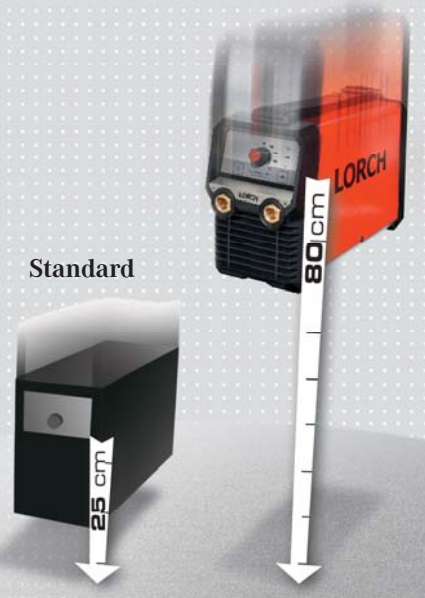
The MicorStick provides 100% conformity with the latest connection standard and can be operated without restrictions on all public mains networks. After all, we simply want you to achieve welding perfection wherever and whenever you need it.

RECORD!

**Withstands falls
from up to 80 cm!**

MicorStick

Standard



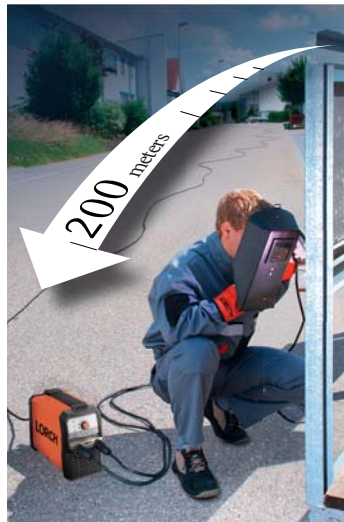
**Exceptionally light.
Extremely robust.**

The independent statistics state: **Every machine is dropped at least 4 times during its life time.** The standard requires: a welding machine must be able to withstand a fall of only 25 cm.

Yes, honestly! Only that. If a machine falls out of your hand or from the workbench, it's often much higher than 25 cm and usually leaves the machine broken. That is simply a fact unless, of course, it is red and comes from Lorch, for we were the first manufacturer to fit our machines – including the new MicorStick series – with **special crash protection**. The results are impressive, setting the quality standards for real mobile welding quality: with a **guaranteed fall protection from a height of up to 80 cm**.

MICOR makes it possible.

Whilst other welding machines have to throw in the towel when being used with a 30 m extension cable, the MicorStick extends your working radius up to 200 m. It still manages to ignite perfectly and reliably – without compromising welding quality.



Increased power thanks to MICOR: The turbo effect

The patented MICOR technology acts like a turbocharger on a car engine: Maximum power is invoked from the smallest of spaces. When the current is reduced due to external disruptions, MicorStick will activate **significantly higher voltage reserves** and reliably offset any fluctuations in the mains voltage. Due to the huge input current tolerance of -40% to $+15\%$ the MicorStick allows you to weld with perfect reliability, even when operating on unstable and weak power supplies. The result is perfect electrode welding **suitable for even the most demanding welding tasks including CEL electrodes**. Ideal for those pipeline construction workers who often only have 230 V mains power at their disposal during installation on site.

INGENIOUS!

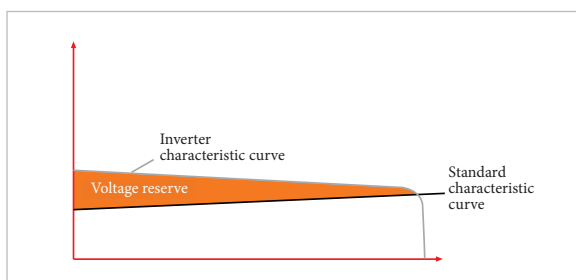
Operation as it is supposed to be!

3 steps to achieve weld perfection

1. Switch on
2. Select process/ electrode type
3. Adjust welding current

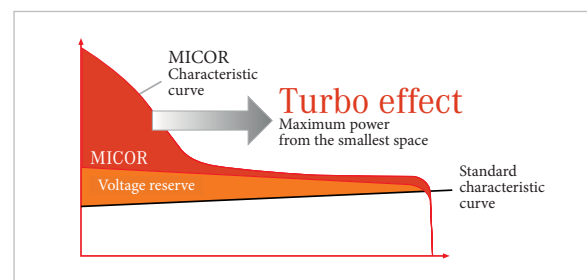


Conventional inverter technology:



Voltage and power reserves are small for conventional inverters. The welding process can become quickly unstable.

MICOR Inverter Technology:



Particularly for the critical, lower current ranges, MICOR inverters build up a high voltage and ensure maximum stability.

Energy efficiency plus power savings mode.

While perfect welding characteristics are key, a gentle handling of the existing resources is just as important. This is why we made sure that the MicorStick will not only achieve perfect welding results but also utilise valuable **energy in the most effective way**. MicorStick will optimise its power consumption whenever possible. The MicorStick is capable of detecting when it is not in use, during such times the MicorStick activates the power savings mode automatically, switching the power unit off and the operational panel to minimum load. A brief press on the start button is all it takes to restore the machine to ready-to-operate condition.



The MicorStick at a glance:

- ✓ Extremely robust with a **minimum weight of 4.9 kg**
- ✓ Guaranteed **protection against falls** of up to 80 cm in height
- ✓ Maximum performance and **perfect welding characteristics** thanks to innovative and patented MICOR
- ✓ Especially suitable for basic, rutile and special **electrodes up to 4 mm**
- ✓ Perfectly reliable **vertical down-welding** of cellulose electrodes (CEL)
- ✓ With **Hotstart, Anti-Stick** and **Arc-Force regulation technology**
- ✓ Stabilisation program: When running on mains power, **StableArc** enhances the directional stability and dynamic of the arc during operation in higher current ranges thus minimising the effects of arc blow.
- ✓ **TIG welding function** with ContacTIG
- ✓ **InsideCoating**: optimum dust protection for a **long service life**
- ✓ “**3 steps to weld**” operating concept
- ✓ Outstanding characteristics when operating on **generator power**
- ✓ **Full power** even in the case of voltage fluctuations and when using long cables (up to 200 m)
- ✓ Also available as an “**Accu-ready**” version that allows for welding operations “off grid” and can be operated in combination with Lorch’s high-performance battery pack MobilePower 1
- ✓ **High efficiency and low energy consumption** due to state-of-the-art MICOR power electronics and automatic power savings mode
- ✓ **Overvoltage protection**: No damage to the unit as result of an inadvertent connection to 400 V mains voltage
- ✓ Manufactured and tested according to **EN 60974-1**, with CE mark and S-symbol and IP 23



Quality
Made in Germany.



HAVE YOU EVER TR WITHOUT A POWER

Now is the time! No power

Arrive, plug in, and start welding? The reality looks quite different: Arrive, and start looking for a power outlet first. This takes time. And stretches your patience. Worse still, sometimes you cannot even find a power connection nearby. The solution: Welding on battery power. Is that even possible? Why not? It actually works great. This is because MicorStick can operate both on mains power and battery power. Provided the battery is called Lorch MobilePower.



IED WELDING

R SOCKET?

connection – no problem.

✓ The new Quality
Easier. Faster. More mobile.

... for now you will be ready to
start welding much **✓ faster** !



✓ Easier

✓ Faster

✓ More mobile

Battery pack **MobilePower**

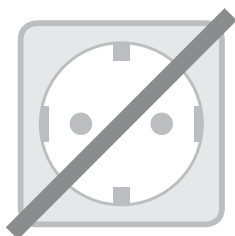
World Innovation – battery-powered welding.
Power wherever you go. Exactly where you need it.

No more searching for a mains supply: Mobile welding in a new dimension.

Unlimited mobility – that is the new standard. Welding without need for mains power or generator. Weld wherever you need to – even in the most remote locations. Weld at even higher levels of productivity. **You are bringing our power with you.** May we introduce: the MicorStick Accu-ready version along with the separate MobilePower 1 battery pack – Accu-powered welding technology made by Lorch.

Dream team for increased productivity. MicorStick plus MobilePower.

This is the brief formula for short paths. The need to hunt for a mains power connection – eliminated. The need to drag long extension cables – eliminated. The need to walk back to the fuse box whenever the fuse trips – eliminated.



MicorStick and the MobilePower allow you to cut all ties and work **independently of the available mains power**. Simply connect the MobilePower 1 battery pack to the MicorStick 160 Accu-ready. No more tiresome preparation, simply start welding without any delays. Work wherever you want and need to work.

Perfect for servicing large factory premises, especially in the outdoor areas. Especially ideal for construction sites and applications in rural areas. Your best choice for quick repairs of conveyor systems, construction equipment and agricultural machinery. **First-class welding performance exactly where you need it.**

... LET'S GO!

Off the grid,
yet still powerful.
Simply connect
the MobilePower 1
battery pack
and start welding.



ACCUp
READY

ACCUp
TECH

**MicorStick 160 +
MobilePower 1**

BATTERY POWER

**Weld up to
28 electrodes on a single
battery charge!**

Battery technology that fits practice: MobilePower 1

Battery-powered welding is a real technological challenge. The amount of power required for welding is much greater than the energy needs of electric tools. This is why MobilePower 1 comprises superior high-performance batteries that feature lithium-ion technology and offer a capacity equal to 40 batteries used with ordinary cordless power drills. While other solutions fill up a large box, Lorch's technology is small and compact. And deliver full performance whenever it is needed.

One battery charge lets you weld up to 28 electrodes with a 2.5 mm diameter or up to 12 electrodes with a 3.2 mm diameter. This is more than you will need for most welding applications on the go.

Everything at a glance. Thanks to the charge level indicator.

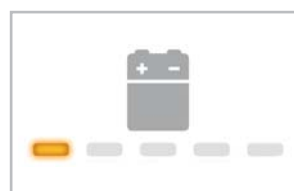
Intelligent battery management means that you can rely on your MobilePower 1 every time you need to. You will never lose track of your power reserves thanks to the large and easy-to-read charge level indicator.

Varying with the type and the length of the electrode, one charge indicator bar means 3–4 electrodes with a diameter of 2.5 mm or approximately 2 electrodes with a 3.2 mm diameter. This tells the welder how many welds he can still complete before he needs to return to mains power and charge the battery.



Everything within range.

Means to:
maximum battery life
and, thus, the longest
possible working time.



The last indicator
switches to yellow:

The remaining capacity
is enough for 1–2 more
electrodes.

Maximum electrode capacity per battery charge:

Electrode diameter	Welding current	Electrode type RC11		Electrode type RR12	
		Length 250 mm	Length 350 mm	Length 250 mm	Length 350 mm
ø 2.5 mm	60 A	28	21	23	17
	90 A	23	17	21	15
	110 A	21	15	20	14
ø 3.2 mm	90 A	–	12	–	10
	120 A	–	10	–	9
	150 A	–	9	–	8

All specifications represent maximum values gathered from real weld testings. The actual range that can be achieved in a specific application varies with the manufacturer's brand of the electrode, the way the welder works and the environmental conditions.

Full power. Time and time again. Maximum performance thanks to interchangeable batteries.

Plenty and ample. This is what you may think when glancing at the performance data of the MobilePower 1: Enjoy 600 Wh of extra power and weld **up to 28 electrodes** (2.5 mm). But, that is not all. The most ingenious part about Lorch's battery-supplied welding technology: the power reserve is **easily increased by using additional battery packs**. Any welder requiring more than one battery charge during a particular application can carry this extra power with him. Simply pack a second MobilePower 1 battery pack and double your welding time. A third one triples your work time. A fourth one quadruples it. And so on ... Unplug the empty one, plug in a new one, and keep welding. Since changing the battery is a breeze, you will remain highly productive.

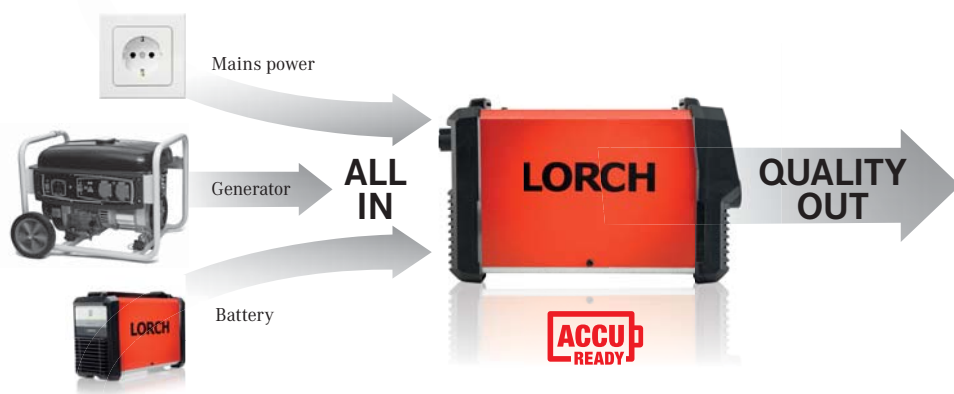
Plug out. Plug in.

WELD LONGER!



Optimum flexibility: One input for all options.

Smart power management turns the "Accu-ready" version of the MicorStick into a real **take-all-in when it comes to current**. But, not all types of current are equal. The direct current generated by the MobilePower 1 requires that the system control will act differently than it would for the alternating current of a 230 V mains supply. The MicorStick uses the intelligent plug-in connection to detect automatically whether a MobilePower battery pack is connected or if it is being operated on mains or generator power. It will then optimise the internal power management in order to produce an arc that is as stable and powerful as you would expect, regardless of the type of power supply used.



"All-In" for the MicorStick 160 Accu-ready means maximum flexibility: Welding while connected to 230 V mains supply, thanks to MICOR technology even on cables with a length of up to 200 m. Outstanding also when powered by a generator. And, if no mains power is available on site, simply connect the MobilePower 1 battery back and start welding.

YOU REALLY LIKE MANY METERS OF

Suit yourself! A few kilos less

Save your energy for the real challenges you are facing. Because you are now in a position where you do not have to look for power – you are already carrying it with you. Whether you are working way up high or deep down low. You are free – of the power grid, of generators and the annoyance of carrying around heavy cables. Simply start working!



CARRYING

HEAVY CABLE?

would not only be lighter ...

✓ The new Quality
Easier. Faster. More mobile.

... but also makes welding
✓ more mobile than ever!

✓ Easier

✓ Faster

✓ More mobile

Unlimited
possibilities
– as far as
the eye can see!

Weld wherever and whenever you want.
100 % mobile – in any situation.
That is the new definition of freedom.



No matter where you are welding – without power you cannot perform! Great when you have an electrical socket available. Better still, when you can bring your own power with you. Far out there, way up high, and deep down low!



Generation freedom –
for countless applications.

Whether used in forestry, mining, maintenance, sewage, at high seas or for road, bridge or tunnel construction – the combination of MicorStick plus MobilePower offers almost limitless application options. First-class welding performance where you need it. Off the grid, yet still powerful. High-performance battery technology makes it possible. Up to 28 electrodes (ø 2.5 mm) on a single battery charge. MicorStick 160 Accu-ready and MobilePower 1 from Lorch – the dream team for your welding applications on the go.

MicorStick & MobilePower – your drive

MicorStick 160

MicorStick 160
Accu-ready

MicorStick 160



Battery operation	–	●
Mains operation	●	●
Generator operation	●	●
Welding range		
Electrode	10 – 150 A	
TIG with ContacTIG	15 – 160 A	
Weldable electrodes		
Electrode Ø in mm	1.0 – 4.0	
CEL Ø in mm	1.5 – 4.0	
TIG Ø in mm	1.0 – 2.4	
Standard duty cycle measured according to German quality standard DIN EN 60974-1 at 40 °C ambient temperature		
Current at 100% duty cycle (40 °C)	110 A	
Current at 60% duty cycle (40 °C)	120 A	
Duty cycle I max. (40 °C)	30%	
Machine		
Mains voltage	1 ~ 230 V	
Permitted mains tolerance	+ 15% / – 40 %	
Mains fuse, delayed action	16 A	
Dimensions in mm (L x W x H)	340 x 131 x 215	
Weight	4.9 kg	



Perfect on the move.



am team for increased productivity.



Battery pack MobilePower 1

for use with MicorStick 160
Accu-ready



Power	604.8 Wh
Minimum service life	1,000 charging cycles
Dimensions in mm (L x W x H)	323 x 131 x 215
Weight	7 kg

MobilePower charger

Input voltage	115 V / 230 V
Input power	2.6 A / 1.4 A
Output voltage	58 V
Output power	4.5 A
Charge time	150 min

IP23
S

INNOVATION.

Made by Lorch.



You can, of course, also easily carry the MicorStick and the MobilePower individually. Both come standard with a convenient carrying strap. Another option is to choose one of Lorch's smart transport and carrying solutions. Thought through – for **unlimited mobility**.



Easy Go 2

Carrying option for
MicorStick and
MobilePower.

Easy Go 3



Weld Backpack

Comfortable backpack
solution including
waist and chest strap
for MicorStick and
MobilePower.



MicorStick & MobilePower: Electrode welding powered by battery technology



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