The MicorTIG & MicorStick series

# THE NEW STANDARD IN PORTABLE WELDING MAINS. GENERATOR. BATTERY.

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# **Overview**

Lorch, world-leading, new, all in one resonance technology that enables the next generation of portable machines to operate from mains supply, small generators and batteries all delivering a perfect Stick and TIG welding performance.

# The MicorTIG series at a glance

- **Portable TIG welding inverter.** Mobile and compact 200 DC TIG welding machine with MicorBoost technology, non-contact high-frequency ignition and electrode welding function.
- Total flexibility. Completely independent thanks to All-in technology for mains supply, generator and battery.

- **Powerful**. The built-in Power Factor Correction Module (PFC) provides for an optimum mains load as well as full capacity during 230 V mains operation.
  - **Graphical display with job memory**. The MicorTIG 200 ControlPro offers a clearly structured user interface that makes controlling the machine fully intuitive.
  - **Pulse and fast pulse**. The integrated pulse function with up to 5 kHz is exceptionally well-suited for welding thin sheets.
  - Safety. Bearing the IP23 and S-symbol, the series is ideal for outside field applications.
  - **Robust and protected against falls from a height of up to 80 cm**. Thanks to its specially designed crash protection the MicorTIG 200 DC is sure to survive a fall from heights of up to 80cm completely unscathed. Should you accidentally drop your welding machine or allow it to fall off the workbench, you can simply power through and keep working.
  - **Remote control at the torch**. No more need to switch back and forth between workpiece and machine. The optional Powermaster torch puts all key welding parameters right at your fingertips, i.e. on the handle.
  - **Energy efficient**. The MicorTIG utilises cutting-edge industrial electronics and on-demand technology to achieve a superior level of efficiency and exceptionally low power consumption.

ding machine tact high-frequency on.





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# Versions

MicorTIG 200 DC Accu-ready	MobilePower
Welding range A 5 – 200	Battery pack with
Mains connection 1~230 V	lithium-ion technology can be connected to
Operating concepts	MicorTIG 200 DC
BasicPlus	
ControlPro	
Equipment	
Accu-ready: All-in technology for mains supply, generator and battery $lacksquare$	ACC 21
PFC module for optimum mains load	LORCH
High-frequency ignition (HF), gas management	
Configuration options Standard equipment	

# **Operating concepts**



#### **BasicPlus**

- HF ignition
- Pulse function with up to 5 kHz
- Exact-ampere digital display
- Infinitely variable current setting
- Menu for setting the auxiliary parameters
- Electrode pre-selection for Standard and CEL
- Switch 2-stroke/4-stroke •
- Remote control connection •
- Possibility for connection of the Lorch • Powermaster remote control torch



#### **ControlPro**

- Menu navigation via detailed welding sequence control
- HF ignition
- Pulse function with up to 5 kHz •
- Job memory for 10 welding tasks •
- Exact-ampere digital display •
- Infinitely variable current setting •
- Electrode pre-selection for Standard and CEL •
- Switch 2-stroke/4-stroke •
- Remote control connection ٠
- Possibility for connection of the Lorch • Powermaster remote control torch

#### **Technical data**

		MicorTIG 200 DC Accu-ready			
Welding process		TIG	Electrode		
Electrode Ø	mm	1.0 - 4.0	1.5 to 4.0 Steel, stainless steel		
Weldable material		Steel, stainless steel, copper			
Welding range	А	3 - 200	10 - 180		
Duty cycle I max. (40°C)	%	25			
Current at 60% duty cycle (40 $^{\circ}$ C)	А	15	0		
Mains voltage	V	1~230			
Dimensions (L $\times$ W $\times$ H)	mm	360 x 130 x 215			
Weight	kg	6.8			

### The MicorStick series at a glance

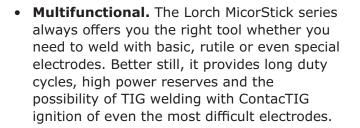
#### • Electrode welding inverter.

CEL-capable, fully resonant welding inverter with MicorBoost technology, electrode pre-selection and TIG function. Suitable for connection to cables with a length of up to 200m and for generator operation.

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• **Compact**. The low weight and compact dimensions of the Lorch MicorStick series make it easy to work with just the way you want especially in the most confined spaces.



- **Hotstart**. Thanks to the adaptive automatic Hotstart feature you can always count on perfect ignition.
- **Anti-Stick System**. The Anti-Stick system prevents the electrode from sticking, especially useful for positional welding.
- Arc-Force control. Supports the welding process with increased arc stability and optimised metal transfer.
- Dependable. Even when powered by a generator and hooked up to primary cables with a maximum length of 200m, the Lorch MicorStick strikes up reliably and remains incredibly stable.
- Robust and protected against falls from a height of up to 80cm. Thanks to its specially designed crash protection the Lorch MicorStick is sure to survive a fall from heights of up to 80cm completely unscathed.

Should you accidently drop your welding machine or allow it to fall off the workbench, you can simply power through and keep working.

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MICORBOOST

- Energy-efficient. The Lorch MicorStick series truly shines when it comes to high efficiency and low energy consumption thanks to its integrated state-of-the-art industrial electronics and fan-on demand technology.
- Cutting-edge inverter technology. This resonance technology with digital control allows the inverter to combine perfect welding results with superior ease of use.
- Mobile. Boasting a remarkably low weight and compact external dimensions, our Lorch MicorStick is one of the most portable welding machines money can buy.
- **Safety.** IP23 and S-symbol together with VRD makes the series ideal for applications in the field.

# Versions

		MicorStick 160	MicorStick 180	MicorStick 160/125 VRD	MobilePower
Welding range	А	160	180	160/125	Battery pack with
Weldable electrodes up to $\emptyset$	mm	4	4	4	lithium-ion technology
Mains connection 1~230 V		•	•	-	can be connected to all MicorStick systems.
Operating concepts					
BasicPlus		•	-	-	
ControlPro		•	•	•	
ControlPro RC		-	•	-	
Equipment					
Accu-ready: All-in technology for for mains supply, generator and battery		•*	•	•	Contraction of the second seco
Version with remote control co	nnection	-	•	-	
PFC module for optimum main	s lead	-	•	-	
Pulse function		-	•	-	
in combination with ControlPro		• C	onfiguration option	s • Standard equipment	

# **Operating concepts**



#### **BasicPlus**

- "3 steps to weld" operating concept
- Simplest one-button operation
- Infinitely variable current setting
- Electrode pre-selection for Standard and CEL for optimum welding parameters
- TIG-DC welding function (with ContacTIG)



#### ControlPro

- "3 steps to weld" operating concept
- 7-segment display, exact to the amp
- Simplest one-button operation
- Infinitely variable current setting
- Electrode pre-selection for Standard (basic and rutile) and CEL for optimum welding parameters
- TIG-DC welding function (with ContacTIG)
- Submenu for custom adjustments of the system settings

Technical	data
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		MicorStick 1	60 Accu-ready	MicorStick 1	80 Accu-ready	MicorStick 16	0/125 VRD
Welding process		Electrode	TIG with ContacTIG	Electrode	TIG with ContacTIG	Electrode	TIG with ContacTIG
Electrode Ø	mm	1.5 - 4.0	1.0 - 2.4	1.5 - 4.0	1.0 - 2.4	1.5 - 4.0	1.0 - 2.4
Weldable material		Steel Stainless steel	Steel Stainless steel Copper	Steel Stainless steel	Steel Stainless steel Copper	Steel Stainless steel	Steel Stainless steel Copper
Welding range	А	10 - 150	10 - 160	10 - 180	3 - 200	10-125/150	10-125/160
Duty cycle I max. (40°C)	%	:	30	2	25	30	D
Current at 60% duty cycle (40 $^{\circ}$ C)	А	1	20	1	50	12	0
Mains voltage	V	2	30	2	30	23	0
Dimensions (L $x W x H$ )	mm	360 x 1	30 x 215	360 x 1	30 x 215	360 x 13	0 x 215
Weight	kg	4	1.9	5	5.8	4.	9

# Highlights

# Unique flexibility for MicorTIG & MicorStick thanks to All-in technology

- This means for you: additional battery-supplied welding in combination with Lorch's high-capacity battery pack MobilePower.
- First-rate welding performance where you need it.

# Mains power Generator ALL IN LORCH QUALITY OUT Battery

# **MicorTIG additional features:**

#### Stainless steel welding with DC

TIG-DC welding TIG-DC pulse welding



### Stainless steel welding with DC



The TIG Ignition is triggered contactless with high-voltage pulses and with the press of a button to ensure that the tungsten electrode does not come into contact with the workpiece. Putting an end to welds with tungsten inclusions, this technology reduces the strain on the electrode.



When working in HF-sensitive environments or on tools, the operator has the additional option of switching to ContacTIG (contact ignition).

ContacTIG

# MicorStick additional features:

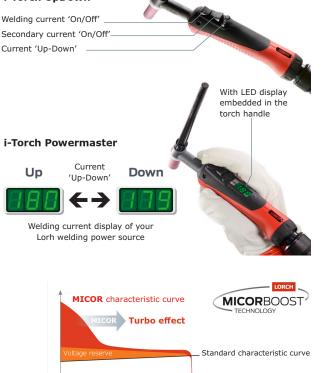
#### MicorBoost technology

· First-rate welding performance where you need it.

#### Advanced, smart technology with superior safety, 10-amp VRD, MINE-Spec capable

- With the advanced 160/125 VRD system simply plug into mains or generator power and the system limits the outpt to 124A maximum to meet the requirements for a 10-amp 240V input. Then connect the same system to Lorch Mobile 1 battery pack and the machine will deliver full 160amp (TIG), 150amp (STICK) output.
- The Lorch 160/125 VRD is designed to meet the needs of the South Pacific mining and OH&S safety requirements and can be upgraded to meet the full Australian Mining Specification requirements.
- IP23 S rating, designed for outside field use and wet areas.
- Extra tough and robust housing design.
- Up to 200 metres of primary cable, still delivers perfect welding performance.
- Highly portable with a weight of just 4.9kg.

Can also be used with remote control torch



# MicorTIG & MicorSTICK SERIES

# MicorStick Accu-ready and battery pack mobile power

### MicorStick 125/160/180 Accu-ready and battery pack MobilePower The dream team for welding applications on the go.

# Mains-independent, exceptionally versatile, and powerful.

MicorStick plus MobilePower. This is the formula for short distances. The need to look around for a mains connection – eliminated. The need to carry along extension cables – eliminated. Simply connect the Mobile-Power battery pack to the MicorStick Accu-ready. No more cumbersome preparations, just start welding right away. Exactly where you need to and where you want to. An excellent choice for installation work on construction sites and in the area of forestry. Ideal for quick repairs on conveyor systems, construction equipment and agricultural machinery. First-class welding performance exactly where you need it.

#### Full flexibility thanks to changeable batteries.

Battery 1 =	Battery 2 =	Battery 3 =	Battery 4 =			
Up to 28 electrodes	Up to 56 electrodes	Up to 74 electrodes	Up to 102 electrodes			

# Technical data

			MobilePower
	Power	Wh	604.8
	Charging cycles	mm	approx. 1,000
	Dimensions (L x W x H)	mm	323 x 131 x 215
	Weight	kg	7
	Charge time	min	150

# Maximum electrode capacity in units per battery charge

				Electrode type R	211	Electrode type RR12		
Electrode Ø		Welding current		Length 250mm	Length 350mm	Length 250 mm	Length 350mm	
2.5	mm	60	А	28	21	23	17	
2.5	2.5 mm 90 A	23	17	21	15			
2.5	mm	110	А	21	15	20	14	
3.2	mm	90	А	-	12	-	10	
3.2	mm	120	А	-	10	-	9	
3.2	mm	150	А	-	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 local environment.







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