The V series

FOR EVERYONE WITH BIG THINGS IN MIND.

UNPARALLELED TIG TECHNOLOGY
Packaged in a groundbreaking industrial design

SUPERIOR TIG PRODUCTIVITY
Thanks to remote control, cold wire feeding, and perfect automation

INCREDIBLY EASY TO USE
With plain text display and ergonomically designed control panel

The V series at a glance

- **Powerful TIG.** Unrivalled TIG technology squeezed into a robust industrial housing and combined with tried-and-tested inverter technology guarantees unsurpassed real-world performance and maximum productivity.
- **Plain text display with language selection and Tiptronic.** Thanks to the clearly structured user interface and the slanted operating panel, the device control remains well visible throughout operation and affords the user an ergonomic operating position. You select the AC or DC function, the electrode diameter and the welding current based on the machine you are using. When working in Tiptronic mode, you can then save your ideal setting for each weld.
- **Aluminium welding (AC/DC variant).** Positive polarity ignition and automatic cap shape produce a perfectly shaped arc during aluminium welding. The special amplitude of the alternating current combined with an optimised current balance yields an excellent cleaning effect and a manageable weld pool.
- **Pulsing and fast pulsing up to 20 kHz.** The standard pulse function with up to 20 kHz that is built into every machine offers you additional benefits when welding thin sheets and delivers greater welding speeds during automated applications.

- **In a robust, completely transportable industrial housing.** The tough metal housing safely protects the high-end technological innards of your system. Completely transportable at the handles, the machine is also suitable for crane transport.
- **Remote control.** Welders often experience that the conditions on site do not allow them to place their welding machine right beside them. When faced with this type of situation, they find the use of a remote control helpful as it allows them to intervene and adjust the welding current if necessary. This is why Lorch has included a large variety of different hand and foot remote controls in their V series, which are ready for use right away thanks to their plug & play support.
- **Automatic final current reduction.** Lorch's automatic final current reduction produces perfectly clean weld ends by filling the end crater.
- **Low energy consumption.** The included on-demand function automatically turns the components of the unit on and off as needed. Thermal control sensors monitor the temperature of the components and regulate the speed of the fan accordingly. This smart technology reduces fan noise and dust levels in the machine compartment and helps conserve energy.
- **Mobility.** The mobile version of the V series comes with a trolley wheelset, allowing you to carry the unit or to move it on its wheels. It will, thus, meet all your mobility needs.

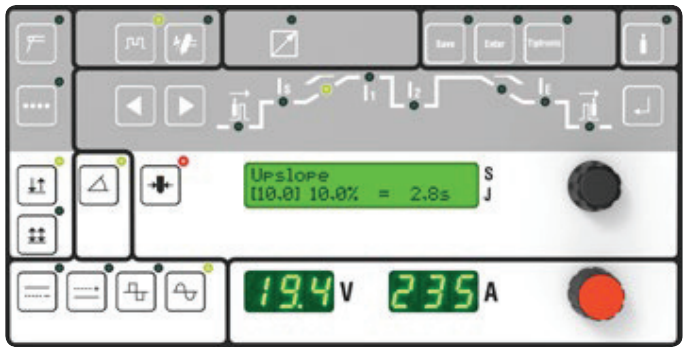
Versions

		V 24 mobile	V 30 mobile	V 24	V 27	V 30	V 40	V 50
Welding range	A	3 – 240	3 – 300	3 – 240	3 – 270	3 – 300	3 – 400	3 – 500
Mains connection 3~400 V		●	●	●	●	●	●	●
Operating concept								
V standard		●	●	●	●	●	●	●
Variants								
DC system		●	●	●	●	●	●	●
AC/DC system		●	●	●	●	●	●	●
with a Lorch Feed cold wire feeder		○	○	○	○	○	○	○
Cooling variants								
Gas		●	●	●	●	●	●	●
Water		●*	●*	●	●	●	●	●
Machine variants								
Mobile system with trolley wheelset		●	●	–	–	–	–	–
Compact system		–	–	●	●	●	●	●
Feeder system		–	–	●	●	●	●	●

* with Mobile-Car transport trolley and separate water cooling unit

● Configuration options ● Standard equipment ○ Optionally available

Operating concept



V standard

- "3 steps to weld" operating concept
- User-oriented guidance using illuminated symbols and detailed welding sequence control
- Infinitely variable current setting
- Digital display for welding current and welding voltage
- Plain text display with language selection
- Switch 2-stroke/4-stroke
- Remote control connection
- LorchNet, e.g. for controlling the optional Feed wire feeder and connecting Lorch automation components
- Pulse function
- Tiptronic job memory for 100 welding tasks

Highlights

The V mobile as a complete system

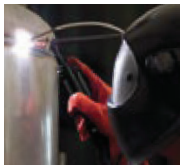
With Mobile Car and water-cooling unit – you are ready to roll. The V mobile sits at an ideal working height, the gas cylinder is fixed in its support and the torch is water-cooled for optimum performance. The V remains "mobile" and at the same time has the functionality of a large compact system.

Water cooling unit WUK 5: High performance cooling unit for water-cooled TIG torch

Mobile Car: Carriage for supporting the V mobile and the water re-circulation cooling unit WUK 5

Everything to benefit your TIG productivity

Using the **UpDown remote control torch**, you are at the place where things happen – directly at your workpiece. You have the torch in your hand, control the welding process from there and also regulate the welding current with it.



The **automatic cold wire feeder Lorch Feed** automates the manual feeding of filler material.

Pulsing and fast pulsing with up to 20 kHz

Every Lorch V-series offers a pulse function for high-frequency pulses with up to 20 kHz. The result is a focused arc with exceptional stability. The unit makes it possible to attain higher welding speeds at reduced heat input – especially for automated applications. The speed increase is particularly beneficial on thin metal sheets as it reduces warpage. The higher the pulse frequency, the more pleasant the welding noise. Depending on the base material, the unit may also help reduce temper colours during TIG welding with high-frequency pulses.

Technical data

			V 24 mobile	V 30 mobile	V 24	V 27	V 30	V 40	V 50
Welding current – TIG		A	3 – 240	3 – 300	3 – 240	3 – 270	3 – 300	3 – 400	3 – 500
Welding current – electrode		A	20 – 200	20 – 250	20 – 200	20 – 220	20 – 250	20 – 300	20 – 400
Current at 100% duty cycle	(DC | AC/DC)	A	220 | 190	270 | 240	220 | 210	250	250	360	380
Current at 60% duty cycle	(DC | AC/DC)	A	240 | 220	300 | 280	240 | 230	270	300	400	500
Duty cycle I max.	(DC | AC/DC)	%	60 | 50	60 | 50	60 | 50	60	60	50	60
Mains voltage		V	3~400	3~400	3~400	3~400	3~400	3~400	3~400
Permitted mains tolerance		%	±15	±15	±15	±15	±15	±15	±15
Mains fuse, delayed action		A	16	16	16	16	32	32	32
Dimensions (L × W × H)		mm	812 × 283 × 518	812 × 283 × 518	1130 × 450 × 815	1130 × 450 × 815	1130 × 450 × 815	1130 × 450 × 860	1130 × 450 × 860
Weight	(DC | AC/DC)	kg	29.4 | 35.1	31 | 37	84.6 | 90.5	85 | 92	86.4 | 93.6	107.6 | 121.5	108.7 | 123.2
Weight – water cooling (filled)		kg	24.1	24.1	14.7	14.7	14.7	14.7	14.7