T-PRO/TF-PRO SERIES T SERIES

TIG for here and there and everywhere.





www.lorch.eu

PROVES ITS CHOPS IN THE SHOP.

LORCH

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DESIGNED FOR THE WORKSHOP

Industrial standard in a compact design

HIGH-PERFORMANCE

Pulse and fast pulse up to 2 kHz – with integrated cold wire feeder, if desired

ECONOMIC MIRACLE

Energy-efficient with outstanding TIG weld characteristics

The T-Pro / TF-Pro series at a glance

- Unrivalled TIG welding characteristics thanks to inverter technology. Distinguished by their high efficiency and superb welding characteristics, inverters utilise digital software control technology that has a significant influence on the outcome of the welding process.
- **Pulse and fast pulse up to 2 kHz.** The standard pulse function with up to 2 kHz that is built into every machine offers you additional benefits when welding thin plates.
- Also available with integrated water cooling. The water-cooled variants of the Lorch T-Pro series come with a water cooling system that is housed in a compact mobile case, making it perfectly suited for use at workshops on site.
- **Changeover DC to AC.** Available as DC and AC/DC versions in all power variants, Lorch's T series provides you with maximum flexibility even during aluminium welding.
- **TF-Pro.** The wire feeder integrated into the TF-Pro 300 reliably feeds the filler metal to the weld pool. A 4-roll feed motor with a specially tuned gearbox combination is in charge of guiding the wire along. The cold wire feed is controlled using the removable operating panel.





- **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 offers a large variety of different hand and foot remote controls that are ready for use right away thanks to their plug & play support.
- Low energy consumption. The included on-demand function automatically turns the components of your Lorch T-Pro 250 on and off as needed. Thermal control sensors monitor the temperature of the machine 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.
- Interval-spot function. Lorch's interval-spot function reduces distortion during thin sheet metal welding.
- Non-contacting HF ignition. The TIG arc is ignited without direct contact by high-voltage pulses. Ignition is triggered 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).
- **Intelligent Torch Control.** Intelligent Torch Control enables each machine to automatically detect whether the welder uses a standard torch or one of the latest, fully digital Lorch i-Torches including Powermaster remote control.

Versions



T-Pro 250	T-Pro 300	TF-Pro 300	
5 - 250	5 - 300	5 - 300	
•	•	•	
•	•	•	
•	•	•	
•	•	•	
•	•	•	
•	•	•	
-	-	•	
-	-	•	
	•	 • •	

Operating concept



ControlPro

- "3 steps to weld" operating concept
- user-oriented guidance using illuminated symbols and detailed welding sequence control
- Infinitely adjustable welding current setting
- Switch 2-stroke/4-stroke

- Remote control connection
- Tiptronic job memory for 100 welding tasks
- TF-Pro also comes with a removable manual operating panel that controls the TIG cold wire feed

Highlights

Maximum TIG productivity thanks to integrated cold wire feed

The fully integrated wire feeder of the TF-Pro with its separate, removable operating panel and special cold wire controller reliably feeds the filler metal to the weld pool. The high-quality 4-roll feed motor with its specially tuned gearbox combination is in charge of feeding the wire in a reliable manner. The wire outlet, which is pointing down diagonally, combined with the Fast Connect System (FCS) of Lorch's TIG cold wire torch ensures that the wires are threaded in easily and unwind in a reliable manner even when made of aluminium.





angled torch connection



Removable control panel for controlling the cold wire feed

Quality wire feeder with 4 rollers

Water cooling including fill level indicator



Well thought out in every detail. The level gauge built into systems that are cooled by water recirculation makes it a breeze to check the fill level of the coolant. Coolant can be refilled through the filler plug installed at the rear.

TOP performance with SmartBase

SmartBase, the Lorch expert database, perfectly controls the arc. The user-oriented guidance uses an array of illuminated symbols to allow for detailed welding sequence control. The Tiptronic facility allows you to store an additional 100 welding jobs.

Technical data

			T-Pro 250	T-Pro 300	TF-Pro 300
Welding current – TIG		А	5 - 250	5 - 300	5 - 300
Welding current – electrode		А	10 - 200	10 - 200	10 - 200
Current at 100% duty cycle	(DC AC/DC)	А	180 200	230 200	230 200
Current at 60% duty cycle	(DC AC/DC)	А	250 230	270 230	270 230
Duty cycle I max.	(DC AC/DC)	%	60 45	45 30	45 30
Mains voltage		V	3~400	3~400	3~400
Permitted mains tolerance		%	±15	±15	±15
Mains fuse, delayed action		А	16	16	16
Dimensions (L \times W \times H)		mm	880 × 400 × 755	880 × 400 × 755	880 × 400 × 755
Weight, gas-cooled	(DC AC/DC)	kg	43.4 45.5	43.6 45.5	52 53.5
Weight of the water cooling unit kg		15.2	15.2	15.2	

TIG FOR HERE AND THERE AND EVERY-WHERE.

ANO

PERFECT MOBILITY

Compact, extremely rugged design – also available with well-engineered optional trolley

TOP WELDING PERFORMANCE

High-end technology and SmartBase parameter database control the arc for outstanding results

PROFESSIONAL TIG FEATURES

Includes everything that professionals need

The T series at a glance

- **Mobile TIG welding inverter.** Jobs that used to require enormous welding machines are mastered with ease today by our T-series machines, which take up only minimal space and boast superior technology as well as extraordinary TIG welding characteristics. Good ergonomics and easy to carry from only 12 kg. Ideal for applications on the go.
- **Pulse and fast pulse up to 2 kHz.** The standard pulse function with up to 2 kHz that is built into every machine offers you additional benefits when welding thin plates.
- 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 machine 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.
- **First-rate welding performance.** High-end technology and the SmartBase parameter database control the arc to produce flawless results.
- Changeover from DC to AC (AC/DC only). Available as DC and AC/DC versions in all power variants, Lorch's T series provides you with maximum flexibility even during aluminium welding.
- Non-contacting HF ignition. The TIG arc is ignited without direct contact by high-voltage pulses. Ignition is triggered 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).



• **Tiptronic.** Using the Tiptronic facility in the ControlPro version, you save your ideal setting for each weld so that you can effortlessly retrieve the settings one at a time using the Up-Down or Powermaster torch when performing recurring welding tasks.

NDUSTRIAL WARRANTY

IORCH

- **Optional equipment.** While designed for mobile applications, the Lorch T series can be converted into a handy, yet fully capable machine suitable for use in the workshop by upgrading it with an optional water cooling system. When mounted on an optional Maxi Trolley, it fully retains its mobile capabilities even with the water cooling system fitted.
- Intelligent Torch Control. Thanks to Intelligent Torch Control (ITC), Lorch's smart torch control system, the machines included in the T series are capable of detecting whether the inserted torch is a standard torch or one of Lorch's i-Torch torches. These systems offer an extensive range of protective features for the torch and afford the welder a significant amount of added convenience.
- Protected against falls from a height of up to 60 cm. Thanks to its exceptionally low weight the Lorch T series is easy to carry, yet fully protected against falls from a height of up to 60 cm.

Versions LORCH . T 180 T 220 T 250 Т 300 А 5 - 250 5 - 300 3 - 180 3 - 220 Welding range Mains connection 1~230 V Mains connection 3~400 V Operating concepts BasicPlus ControlPro Variants DC system AC/DC system Configuration options Standard equipment

Operating concepts



BasicPlus

- "3 steps to weld" operating concept
- user-oriented guidance using illuminated symbols and welding sequence control
- infinitely variable current setting
- exact-ampere digital display
- Switch 2-stroke/4-stroke
- Remote control connection
- LorchNet, e.g. for controlling the optional water cooling unit
- Pulse function
- Possibility for connection of the Lorch Powermaster remote control torch



ControlPro

- "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
- Switch 2-stroke/4-stroke
- Remote control connection
- LorchNet, e.g. for controlling the optional water cooling unit or the Feed cold wire feeder
- Pulse function
- Tiptronic job memory for 100 welding tasks
- Possibility for connection of the Lorch Powermaster remote control torch

Everything you need, perfectly stowed

It is "the" complete TIG system for your business. You also overcome the most demanding continuous use with the watercooling unit, the WUK. The system is quickly fixed and the accessories perfectly stowed on the Maxi Trolley, the stable transport carriage.

The water re-circulation cooling unit, designed to be placed under the T.

The Maxi-Trolley, the ultimate transport trolley.

Space for optional, integrated plug panel (2 x Schuko) double chain gas cylinder lock

Space for welder's tools

Base for machine and cooling unit

TIG rod holders

ITC makes it possible: 2 torches for selection

ITC, intelligent torch control, allows the T series to detect whether a standard torch is connected or you wish to work with a Lorch i-Torch such as a Powermaster with digital display, consequently causing the machine to automatically provide the corresponding functionality.



 Welding current "On/Off"

 Secondary current "On/Off"

 Current "Up-Down"

 Up
 Current "Up-Down"

 Up
 Current "Up-Down"

 Other Current display of your

 Velding current display of your

 Or the welding power source

 Image: Torch UpDown

Technical data

		т 180	Т 220	T 250	Т 300
Welding current – TIG	А	3 - 180	3 - 220	5 - 250	5 - 300
Welding current – electrode	А	10 - 150	10 - 180	10 – 200	10 - 200
Current at 100% duty cycle (DC AC/DC)	А	130	160	175	200 180
Current at 60% duty cycle (DC AC/DC)	А	150	180	200	250 220
Duty cycle I max. (DC AC/DC)	%	35	40	35	35 30
Mains voltage	V	1~230	1~230	3~400	3~400
Permitted mains tolerance	%	±15	±15	±15	±15
Mains fuse, delayed action	А	16	16	16	16
Dimensions $(L \times W \times H)$ (DC AC/DC)	mm	430 483 × 185 × 325	430 483 × 185 × 325	430 483 × 185 × 325	430 483 × 185 × 325
Weight (DC AC/DC)	kg	12.2 13.3	12.3 13.4	14.3 16.3	14.5 16.3

Lorch Schweißtechnik GmbH Im Anwänder 24–26 · 71549 Auenwald · Germany T +49 7191 503-0 · F +49 7191 503-199 info@lorch.eu · www.lorch.eu

