



SOLUTIONS FOR THE INDUSTRIAL WELDING OF THE FUTURE.

Your trusted partner for innovative welding technology.



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The smartest solution is the one that will get you the farthest.

Welding has to meet higher requirements than ever now.

Your welding system must be quick, precise, and efficient. At the same time, operation should be as intuitive and simple as possible. And, of course, the result must meet your high standards.

Innovative solutions that show you new ways to optimally master your daily challenges are, therefore, needed. Putting it simply: They must help you weld better – at greatest work safety and unconditional protection of the welder's health.

These are just the welding solutions we at Lorch develop with all our experience, knowledge, passion, and ambition: "Quality made in Germany".

Lorch will offer anything you need to weld successfully: from the mobile solution to the high-end industrial system with the Lorch Speed processes. If you want to bring the future of welding into your company today, we can also offer the perfect introduction to digitalisation and robotics. This goes from simple automation solutions such as the individually configurable Cobot Welding Solutions, which let you quickly become productive, to efficient robot welding.

Lorch defines smart as being close to you, and as understanding you and your requirements. We always follow the urge of creating even better and more economical solutions for you – for the requirements of the future. After all, smart can only be what makes you more successful!

Truly Smart. **True Lorch.**



Innovations for more than 65 years.

We are a medium-sized company and are clearly committed to our location in Auenwald. Made in Germany represents quality, reliability, and user-friendliness. Take advantage of our experience as an innovative and reliable partner in welding technology.

Our team has more than 280 employees around the world. As a pioneering company that develops technically complex products in welding technology in-house, we employ 50 people in research and development alone. This enables us to understand even highly demanding customer requirements and to solve complex technical problems. As a future-oriented company, we invest in the training of young people and thus in the employees of tomorrow.

50 employees in research + development

16 patents

more than 65% export ratio

partners in more than 60 countries

MADE IN GERMANY

Personal, close, and quick – your Lorch network!



The guarantee for success by Lorch.

Leading expertise in arc welding.



Specific industry solutions.



Innovations – from automation to future.



100% quality as a matter of course.





Customer service – worldwide, reliable, quick.

5



Work safety.
Without any compromises.

6



Technology for the future of industrial welding.

7



Everything from a single source. Systematic solutions.

8

A Lorch system will **weld anything**. **And anywhere**.

The innovative processes keep you well equipped for any application.

Since we always keep an eye on our market and its changes, and thus are closely familiar with the requirements of our customers, we are able to develop further as a brand.

Therefore, it was a logical step to bring our decades of experience in the development and manufacture of welding current sources to the fields of automation and robotics as well.

We are able to offer efficient solutions for every area today – with the right welding process for every task.

Welding any material: **Aluminium, steel, stainless steel, special materials.**



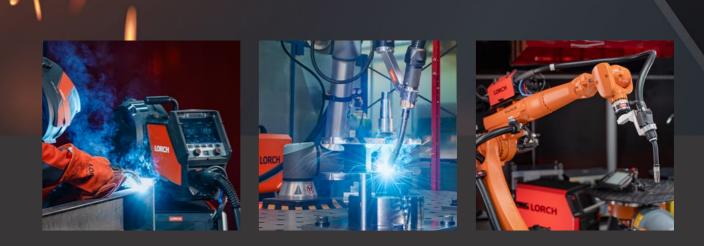
Industrial production, construction site, shipyard, or workshop and assembly – **perfect performance in any application**.

6 welding procedures: MMA, MIG-MAG, MIG-MAG pulse, TIG AC/DC, TIG DC, TIG cold wire

Any material thickness

Welding range between 3 and 600 A

Flexible in use: mobile, stationary, or portable systems



manual, collaborative, or automated welding – simply the way that is best for your welding task.

Perfect weld seams.

Maximum productivity.

Masters of Speed. The innovative welding processes by Lorch.



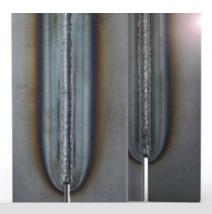
SpeedPulse-XT

Extra fast. Extra low spatter.
Particularly forgiving for the welder.



SpeedArc XT

Stands out with a particularly focused arc and a significantly higher power density and increased arc pressure.



SpeedRoot

For visibly better quality in MIG-MAG root welding



SpeedUp

Feeling great in vertical seam welding



SpeedCold

Icy efficiency in thin sheet welding

Speed, quality, penetration, and weld appearance pose high demands to the welding process to produce a perfect weld seam in a vast variety of welding positions.

Our engineers have developed outstanding MIG-MAG-process innovations for you based on experience from industry practice as well as the wishes of many users.

This has led to Lorch Speed processes that significantly increase your welding speed, noticeably simplify the process, and allow unparalleled productivity.



TwinPulse XT

The most beautiful MIG-MAG weld seams at maximum speed.

SpeedTwin

Maximum speed and individuality for the perfect seam appearance.

MicorTwin

13

The perfect seam appearance – fast, individual, at the push of a button.

Overview of the advantages

- Higher speed
- Better weld seam quality
- Increased penetration
- Optically pleasing weld seams
- Lower welding fume emissions
- Quieter work
- Higher result security due to improved process control

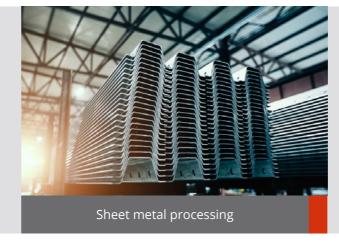
The right welding process for every task – the Lorch Speed processes in detail: www.lorch.eu



Profit from our documented industry knowledge.















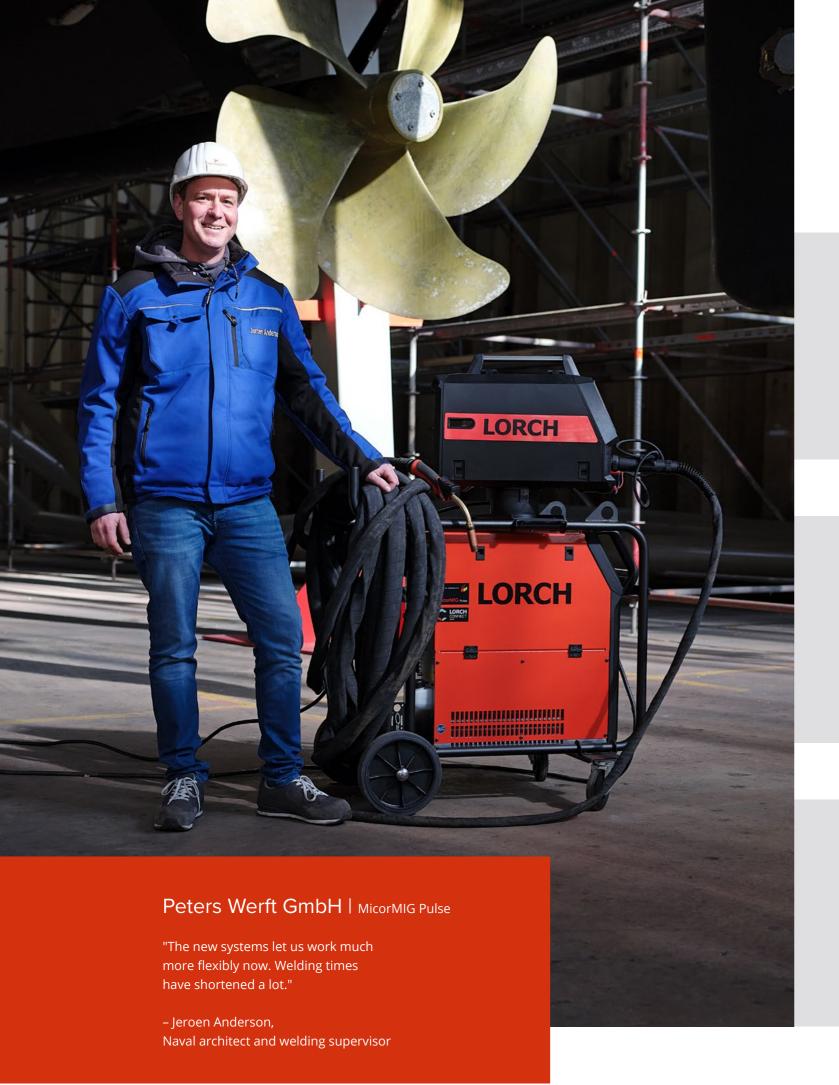












Strong in application. **Reliable** in use.



Michelfelder Edelstahltechnik GmbH | T-Pro

"We get the outstanding weld seams that we need for our demanding customers. The energy input of the T-Pro is perfectly precise, as is vital for our products that are mainly made of thin sheet metal."

Werner Huprich,
 managing director of Michelfelder Edelstahltechnik GmbH



Jorado Maschinenbau GmbH | Cobot e-series

"The perfect interaction of Cobot, power source, and software has created important new capacities for us. The new system also relieves our welders, who are now able to focus on their core competence much more. Young people who like to program and handle EDP will also find welding more attractive thanks to being able to handle the Cobot."

- Jürgen Tippe, works manager at Jorado Maschinenbau GmbH



Stivent Industrie | S-RoboMIG

"We have increased our welding speed by up to 40 percent with the S-RoboMIG and achieved great savings in the welding cycle and power consumption,"

- Philippe Becel, Managing Director at Stivent Industrie

Find even more testimonials from convinced customers online: www.lorch.eu



Smart welding technology.

High quality. Innovative. Economical.

Innovations in welding technology – made in Auenwald.



Automation for medium-sized enterprises and industry.

Welding small to medium-sized series quickly, easily, and at a manageable investment. Nothing could be easier than this with Lorch Cobot Welding Solutions. The service portfolio is subject to constant expansion with new functions and features.



Greater efficiency, quality, and safety for all batch sizes.

Our systems can be operated with any welding robot. The interaction of all components from the control system to the arc ensures perfect results.

Lorch has always set new technological standards in the market as a leading manufacturer in arc welding systems. Many patents, prizes, and awards are proof that our engineers and developers work unceasingly to produce even better controllable welding processes, innovative operating concepts, measures for digitalisation and automation and new welding systems.

With a single goal in mind:

Perfect welding results. For more productive welding.





Welding – clearly better with the patented MicorBoost technology.

Our patented MicorBoost technology helps in making welding units even lighter and more compact while increasing power output.



Lorch technology to the tip of the torch.

The LMS Performance torch has a unique design that provides maximum output from system to sheet metal – be it steel, stainless steel, or aluminium, be it thin or thick sheet. This torch is getting the best out of your Lorch system.



The innovative MIG-MAG welding processes by Lorch.

Our processes significantly increase your welding speed, noticeably simplify the process and allowing unparalleled productivity.



Your perfect gateway into the digital era.

Lorch Connect makes the productivity and processes of welding production comprehensible in detail. Simple and digital. Overview of all welding data.



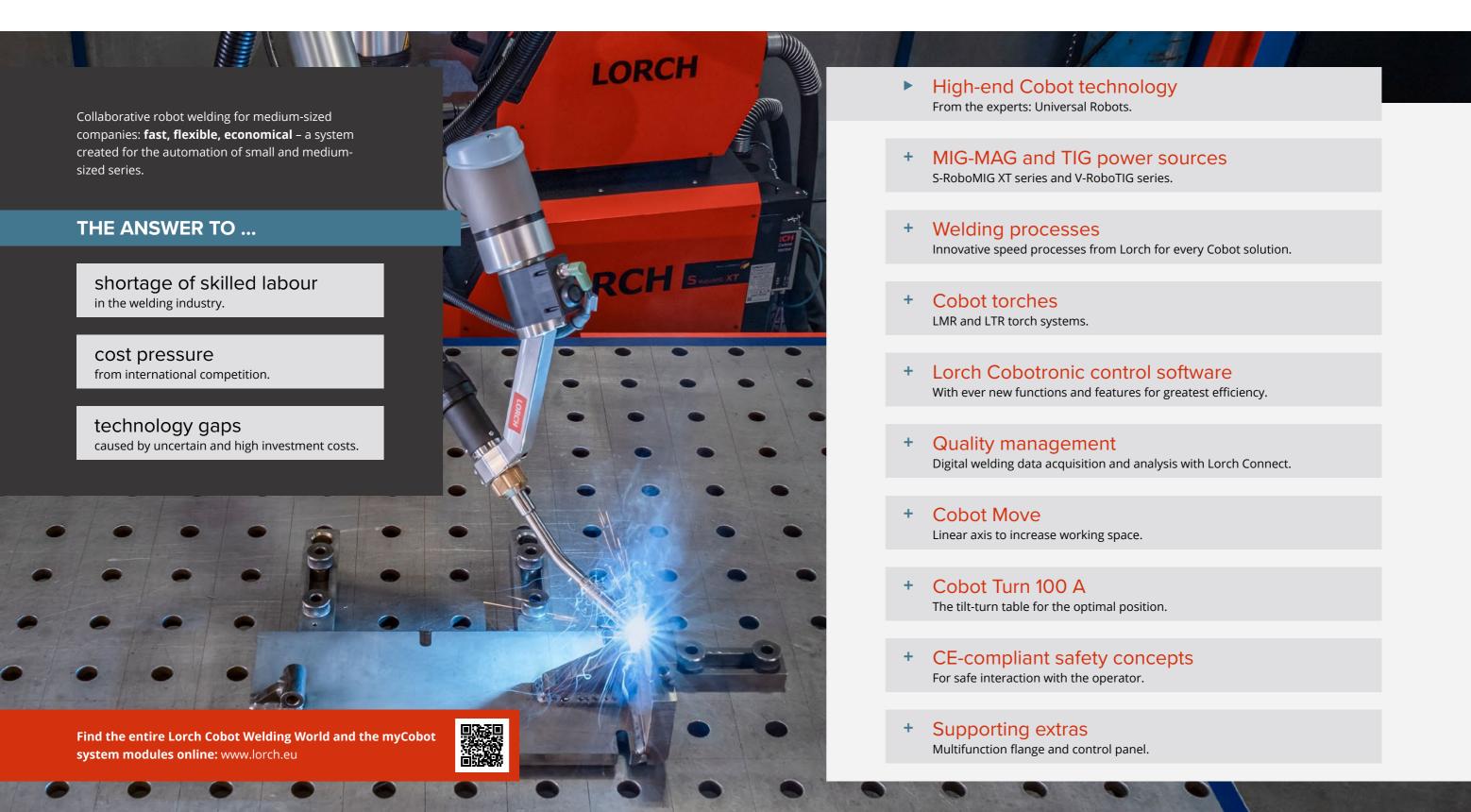
The result: A perfect connection.

Learn more about the innovation location Auenwald on our website: www.lorch.eu

Cobot welding – the market leader offers the best solution.

The Lorch Cobot Welding World: the lever for SMEs.

The complete Cobot system: Individual, perfectly coordinated.



Highest **quality** for greatest **efficiency**.

Lorch sets standards in arc welding.

Our in-house R&D department allows us to develop technologically leading products to set standards in quality and productivity in arc welding.

We consider quality to go beyond individual components. It's not just about the individual welding system, the torch, or a specific process. **We treat quality and efficiency as an integrated approach.**

It covers everything from the enquiry to the feasibility study, from the perfect weld seam to the service afterwards and to our digital solutions. You will have the greatest benefit from this attitude.

Reliable partners for your quality management.

All welding data in view at all times. This is how quality management works.

Whether for your own inspection, to prove compliance with standards (e.g., EN 1090) or because the client's quality specifications require precise recording of the welding data – collecting data has an enormous potential of providing additional information on the key factors in the value chain that ultimately determine the quality, productivity, and profitability of your processes.

The Lorch quality management systems are ready for immediate use. They will record without gaps, analyse your data, and evaluate them well structured. This will let you keep everything in sight.

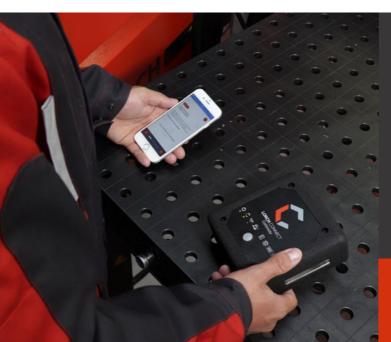
Document. Monitor. Analyse. Evaluate. Stand-alone or in the cloud.

Q-Sys

- Perfected for automation.
- Fault-free series production warranted.
- Industrial stand-alone solution.
- Calibrated sensors on board.
- Flexible specification of limits and tolerances of weld seams.

Q-Data

- Industry-capable offline solution.
- Will store welding data for up to one month in shift operation.
- Data transmission also via USB.
- Real-time monitoring of the parameters.
- User management.
- Simple recording of production data.



Lorch Connect

- Retrofitting digitalisation. Simple and quick.
- Analyse processes and optimise them reliably.
- Connect. Weld. See clearly.
- Flexibly expansible for different series.
- No investments in IT infrastructure necessary.

Details of our quality management solutions can be found on our website: www.lorch.eu



Your **robust** backbone: Our **smooth** service.

You can rely on Lorch products – and on its support.



Best customer service.
Practical services. Warranted quality.

Works service.



Maintenance



Calibration



Rental equipment

Torch service



Warranty extension



Repair



A high-quality product from Lorch always includes high-quality technical support to assist you at all times.

Preventive maintenance of your Lorch products is recommended to ensure the productivity of your welding production. A competent network of qualified technicians is available for the maintenance of your welding system. We at Lorch make no compromises in terms of quality.



That's why we can easily give you an **extended manufacturer's warranty of 3 years** when you buy Lorch welding units. We even offer a 5-year warranty for selected components. Quality made by Lorch – that pays off for you in the long term.

Detailed information on all Lorch services: www.lorch.eu



Welding fumes? Not a chance!

Protect your welders.

Welding will always produce smoke, gases, and vapours. Quite frequently you will hear welders complain about headaches or nausea. Some consequences will not be immediately evident, such as illnesses of the respiratory system and lungs, damage to the nervous system, or even cancer. How harmful the released welding fumes are exactly will depend on the welding procedure, basic material, and filler materials, as well as the shielding gas used.

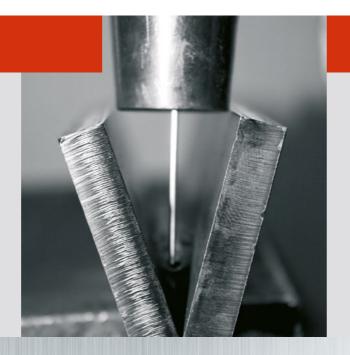
Substitution

Low-emission welding procedures

Modern welding processes ensure special stabilisation and control of the arc. This not only avoids spatter but also reduces welding fume emissions.

Low-emission shielding gases

Examinations have shown that argon-based mixed gases with a lower CO₂ share can help in lowering welding fume emissions. The outstanding properties of the Lorch welding processes help users in lowering welding fume emissions with standard gases.



The principle for health protection.

Protection by **S**ubstitution, **T**echnology, **O**rganisational and **P**ersonal measures. The STOP principle.

We at Lorch have made it our motto to consistently implement the **STOP principle** with a ranking of protective measures. That is why we offer products and solutions that minimise health hazards from welding fumes.

Your employees are your most valuable asset. They deserve the best protection for their health.

Organisational protective measures

Maintenance schedules and safety inspections

Health protection must not be left to chance. Work safety is a mandatory, permanent task of companies.

Regular training of the employees regarding options for protection against welding fumes are important as well.

Ensuring hall ventilation

This is particularly useful when extraction is no longer sufficient in the area where work and welding is performed. Hall ventilation is to be turned on in time before starting work and should continue to run for a while after the working day is over.

It should also run in addition to the local extraction.

Regular ventilation of rooms

Ensure regular ventilation where extraction or ventilation systems are not installed or cannot be placed.

Further measures

- Obtain advice from your local employer's liability insurance association
- Regularly perform wet cleaning of the hall to remove dust

Technical protective measures

Extraction torch - manual

The welding fumes are extracted right where they are produced. This protects the welder and everyone nearby.

Automation

Automated welding, such as the collaborative Cobot welding, also helps in reducing welding fume expositions thanks to its glare protection and extraction.



Personal protective measures

Welding helmet with fresh air

The matching helmet is important as well to protect the welder from welding fumes. The APR 900 air with fresh-air unit is equipped with particle filter for use in good working conditions. If ventilation is restricted, or if the material requires it, the helmet is also available with a gas filter. It offers greatest protection at highest wearing comfort.



Fresh air and comfort in every welding position.

The APR 900 air fresh air system.

Pleasant fresh air

Ventilation draught-free, comfortable, and quiet. The supplied airflow does not create a draft on the eyes or ears.

Ventilation hose with bayonet quickrelease fastener and hose holder

Effective sealing

Pleasant to wear against the skin. The better the seal between the welder's helmet and face, the less smoke can penetrate.



The figure shows the APR 900 air with the fresh-air unit APR FLOW

Fresh-air unit APR FLOW

The lightweight filter and fan unit will adjust to the shape of the back to be barely perceptible. Particle and gas filters are TH3 certified.



Contemporary USB-C charging socket

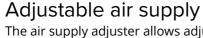
USB-C is always at hand today, making sure that the APR Flow can be charged at all times.

Tough conditions?

With optional heavy-duty battery for extra long welding without recharging.

No compromise on safety

Battery capacity and filter clogging are displayed by LEDs during operation, allowing timely preparation of the unit.



The air supply adjuster allows adjustment of the air flow – only to the mouth/nose area in the closed position and additionally to the forehead in the open position.

Draught-free air distribution

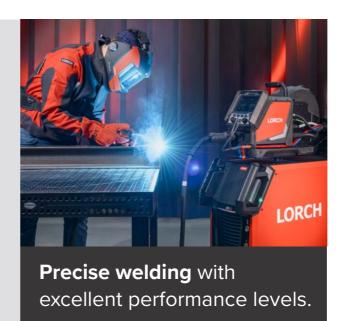
The supply air flows out diffusely in the mouth-nose area - without tiring the eyes. Comfort plus: Dial for additional air supply at the forehead.

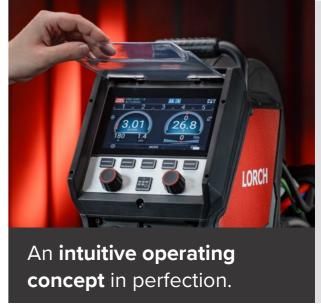
Perfectly protected from helmet to shoe. **Lorch protective work clothing:** www.lorch.eu



Are you ready for the future?

What makes your future safe?



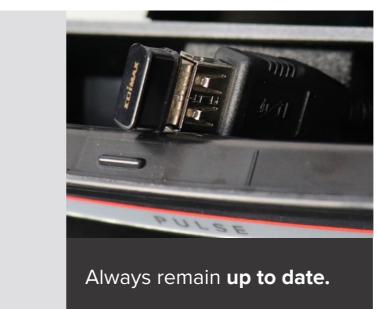


The welding system you can rely on.

Soaring costs, increasing competitive pressure, ever more complex customer requirements we understand the challenges you are facing in order to combine investment security and solution competence.

Our solution is using the best technology available in a smart manner. Further digital development that keeps coming, combined with greatest efficiency and performance, makes a decisive difference in Industrial welding production.

We have put all we have into delivering on this value proposition with the iQS. A completely new inverter ensures control stability and the best arc available from within the Lorch portfolio. Our highest priority is giving our customers greatest availability in their production with the iQS. Every part has been tested for tough industrial use and adapted accordingly. This, combined with the intuitive operation, makes the technology accessible to every welder.







Convince yourself of a secure future for welding. www.lorch.eu

Absolute high-end welding performance.



New Smart Process Control Engine (SPC Engine) Faster to new processes.

Time equals money – it certainly does in production. A new SPC engine allows us to develop welding processes and suitable synergic lines and to transfer them to your iQS even more quickly.

We are also happy to incorporate our customers' ideas in this. This makes it easy to create new innovations – in record times. In any case, you will always get cutting-edge equipment – no matter the market developments.

Clean weld seams, barely any spatter. Brought to you by the reverse voltage source (RCS)

A newly developed RCS module (Rapid Current Shutdown) has enabled us to further improve our short arc processes.

The result is a particularly clean process with less spatter and even higher weld seam quality. This saves your welders the need for elaborate rework and thus plenty of time and money.

Another advantage for the user: The weld pool can be better controlled and manipulated. This improves welding greatly, in particular thin sheets <3 mm.

Our high-end welding unit series guarantees optimum results through advanced development and experience – for greater efficiency, cost savings and satisfaction.



A calm process. Thanks to the new inverter.

A new, robust inverter was developed for the iQS. It makes processes run even more stably and smoothly. Users can steplessly adjust parameters and select the perfect working point for them. This improves the weld seam quality and minimises rework.

Its high performance also makes the iQS ideally suited for robot connections – offering an opportunity for companies to further optimise operator comfort, cost efficiency, and welding results. Experience welding 4.0.

Optimal welding behaviour saves time.

Three times over.

From the moment of its market launch, the iQS has come with a vast range of processes and synergic lines, which Lorch is also continuously expanding.

For you, this means three times more efficiency in your work processes:

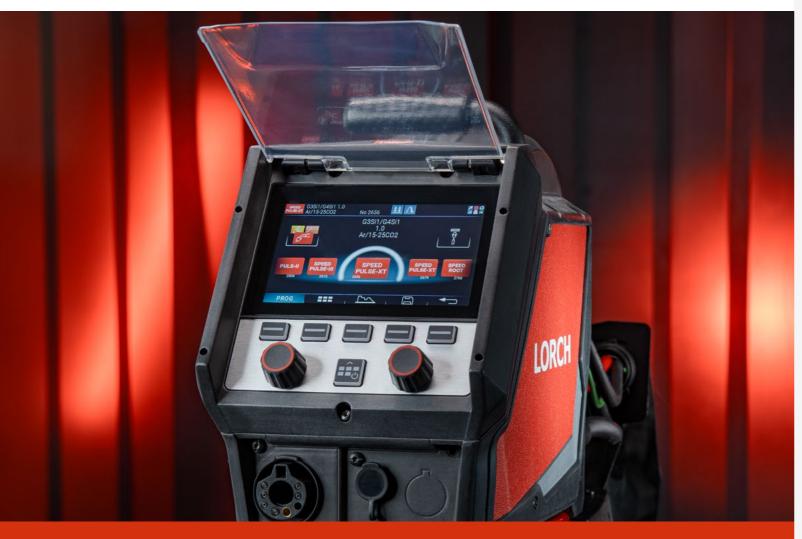
Faster to get started: The iQS offers the right synergic line for virtually any application – rendering major corrections unnecessary.

Faster in the process: Our speed synergic lines enable faster welding for the user.

Faster to finish: Our processes are particularly low-spatter, saving elaborate rework.

The Smart-Cockpit. 3-2-1 welding. The next level.

Operating a welding machine has never been so comfortable.



Intuitive. Fast. Precise.

Robust 7-inch display.

High-quality TFT display for welding unit and feeder case. Large, in brilliant colour, and easy to read from any distance and any viewing angle. The display can even be operated with welding gloves. This increases both comfort and safety for the welder.

Optimal display protection.

A robust film protects the display from flying sparks, welding spatter, and dirt. It is also easy to replace, and the matt surface prevents annoying reflections.



Clear display cleverly presented.

The Smart Cockpit always provides a clear overview of the current settings and additional information.



Incorrect settings are prevented.

The software will only display suitable wire/gas/material combinations and settings that are relevant for the process and task at hand.



Different complexities to suit the user.

From easy to comprehensive, all modes are clearly structured. The JobMode remains perfectly for fast saving of personalized-prefered welding values.



Configurable QuickAccess menu.

The QuickAccess menu, accessible via a central button, provides quick and easy access to important settings at any time.



Simple and self-explanatory menu navigation.

Whether by touch or completely via the rotary-push controllers – intuitive operation ist guaranteed.



All important parameters always in view.

The graphic display visualises the secondary parameters of the welding process during welding. The hold function shows whether the parameters have been complied with after welding.

Digitise, analyse, and reliably optimise your **welding processes.**

Use the enormous potential in the data recorded by you.

Lorch Connect will let you easily and comfortably recognise productivity of all connected systems. Keep the costs of all orders fully in view and track the quality of all recorded weld seams at any time. Lorch Connect is ideal for small and medium-sized enterprises:

The smart **Lorch Connect Cloud** will let you use all advantages without any great investments or time-consuming adjustments of your IT infrastructure.





Connect.

The iQS lets you connect directly to the Lorch Connect portal by Wi-Fi. Get going.



Weld.

Welding data and other production-relevant details are directly recorded by the iQS and transferred to the Lorch Connect Portal in the cloud in real time.



See clearly.

The indicative dashboards give you a perfect overview of everything in the Lorch Connect Portal – anywhere, at any time in the app and web browser.

Lorch Connect: Your perfect gateway into the digital era. Get going.

Because it is so very simple.



The iQS makes it easier than ever to get a welding solution that is fully integrated into the cloud. The cloud lets you comfortably access the portal from any internet-capable device anywhere in the world.

Because it is cost-efficient.



Lorch Connect is entirely cloud-based and does not require additional investment in new IT systems. Start with the free functions of iQS and take out a subscription with suitable functions as required.

Because it is safe.



Data processing within Lorch Connect takes place based on all required safety standards. Lorch welding technology and the data centres used within the EU meet the highest European data protection directives. The offline memory in the iQS keeps your data connection stable at all times. Interruption of the connection can be bridged for up to 30 days.

Because it is flexible.



Lorch Connect always stays up to date with the IQS and is subject to constant further development. This keeps you flexible. Functions such as remote service and flexible upgrades can thus be used as soon as they become available.

Because it is **smart.**



Processes are monitored, documented, and visualised in real time. The Lorch Connect Portal gives you a perfect overview of all data from your connected systems in your personal account, enabling you to make processes comprehensible in detail and optimising your welding production in quality, productivity, and profitability.

Manual product world.

Detailed information on the products can also be found at www.lorch.eu

MIG-MAG



iQS 3 | iQS 5 iQS 8



iQS-LMS

Torch for

iQS-series



S-series S 3 mobile | S 3 | S 5 | S 8 SpeedPulse-XT



P-series P 3000 mobile | P 3500 P 4500 | P 5500



MicorMIG pulse series MicorMIG pulse 300 350 | 400 | 500



MicorMIG series MicorMIG 300 350 | 400 | 500



R-series R 200 | R 300



MX-series MX 350 MF-07

TIG





V-series V 30 mobile | V 30 | V 40 | V 50 Feed 1 | Feed 2



T-Pro series T-Pro 250 | 300 | TF-Pro 300 with integrated cold wire feeder





T 180 | 220 | 250 | 300





MicorTIG series MicorTIG 200 DC



HandyTIG series HandyTIG 180 DC 180 AC/DC 200 AC/DC

MMA



X 350 | 350 PST



MicorStick series MicorStick 160 180 | 200

OCCUPATIONAL SAFETY







APR 900 standard helmet APR 900 XF with flip mechanism APR Flow fresh-air system

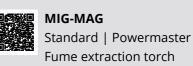
TORCH





LMS Performance Standard | Powermaster Compatible with: S-series, P-series, MicorMIG-MicorMIG Pulse-series









Double button UpDown Powermaster Cold wire torch

The world of **automation**.

Detailed information on the products can also be found at www.lorch.eu

Cobot Welding World



















Robotics + welding cells









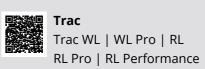












Everything about welding. Everything from a single source.





ARE YOU READY FOR THE FUTURE?

GET STARTED NOW AND HELP
SHAPE THE FUTURE OF WELDING!

Your local Lorch partner:





www.lorch.eu

