

Industry 4.0 Connectivity
and Big Data Management

**CONNECT.
WELD.
SEE CLEARLY.**



True Lorch.

www.lorch.com.au | www.lorch4-0.com.au

LORCH
smart welding

MAKE IT SIMPLE!

Everyone talks about digitisation. Production is becoming smart. Processes are monitored, documented and visualised in real time. The reason is simple: Embedded in this data is a huge untapped potential - especially for your welding processes.

We have no doubt that you too are under tremendous cost pressure and need to calculate your projects to the penny – without cutting corners on quality. In the past, this task presented a monumental challenge because the welding process had remained rather uncharted and undocumented territory. Now at last you are given the option to analyse and optimise every detail of your processes instead of being perplexed by them or engaging in guesswork. This will help you not only save unnecessary cost but also improve quality, possibly giving you the decisive edge over your competition.

Sound good? It is still the case that, a great many companies are still hesitant to take this important step. Not surprising in light of the fact that digitisation is often linked to substantial investments and time-consuming interventions in IT infrastructure. However, no one can predict exactly how great the benefit of the conversion will be and what kind of follow-up costs may be involved.

Lorch makes digitisation a cinch – and risk-free!

Lorch already made a significant step towards smart welding when we introduced the innovative Speed processes. Now, we are taking the next logical step by networking these processes digitally. We are setting out to do so and focussed on two essential prerequisites: It needs to be simple. There must be an immediate practical benefit. The result is Lorch Connect – your easy – and risk-free – entry into the world of digitally interlinked welding!

This is how it works:



LORCH CONNECT GATEWAY – The Future for Connectivity.

The Lorch Connect Gateway acts as the interface between the user and the welding system plus Lorch Connect. Aside from the welding data, which is transmitted directly from the system, the gateway can also receive such production-relevant data as order number or information on components via a scanner that can be connected as an option.

All data combined can then be made available quickly and directly on the Lorch Connect Portal via a WLAN connection. If WLAN coverage is poor or the production environment is prone to faults, a hard-wired network connection via cable is still possible as well.



3 features for a more transparent production process:

Stability of the data connection

Your data is important to us. This is why we attach paramount importance to data stability. Thanks to its offline storage capacity our gateway will not be affected by connection disruptions lasting for up to 30 days.

Recording of production-relevant data

An optional scanner can be used to scan barcodes and QR codes in order to gather such additional information about each weld seam as the order number, part number, serial number, and WPS number. Based on this information, you will then be able to perform analyses and cost calculations for each and every one of your tasks.

Optional: Staff login

Naturally, every weld seam is also greatly influenced by the welder. In many cases, the ability to attribute work to specific welders is essential for traceability and documentation. The option to log in by NFC card, RFID chip or scanner can be integrated into your organisation with great ease and speed.

THE LORCH CONNECT Dashboard at a glance.

The 1-page management summary of production efficiency.

The Lorch Connect Portal can be accessed conveniently via all standard Web browsers. This is the place where all information converges for you as a customer.

You will receive your own custom account in which all data gathered across all of your connected systems is stored and made available to you.



See clearly everywhere:

Simply use your Web browser to access your digital services – which means that you can gain access with any Web-enabled device from virtually anywhere in the world.

See everything at a single glance:

A highly advanced dashboard shows you everything you need to see. It also allows you to use functions that are useful for the evaluation and analysis of your welding production.

Be on the safe side of the future:

Lorch Connect is constantly developed further. This gives you the assurance of always remaining on the cutting edge.

Data integrity front and centre:

Top priority during the selection of the cloud service is given to data integrity. All data processed by Lorch Connect is treated in accordance with all mandatory safety standards. In addition, both Lorch Schweißtechnik and all data processing centres within the EU are subject to the strictest European standards on data privacy.

Flexible expansion options:

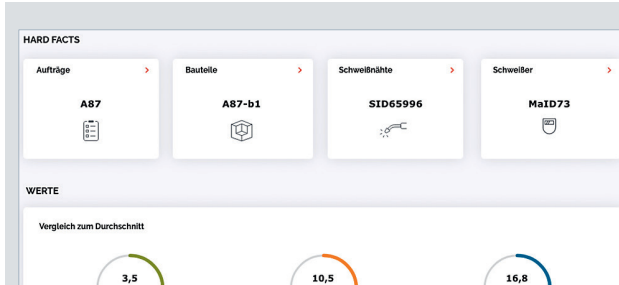
Lorch Connect can be paired with the following systems: S-series, P-series, MicorMIG series, and MicorMIG Pulse series. Other series of machines are under preparation. This allows you to stay flexible and add on to the network of your production machines at any time.

THE LORCH CONNECT

Drill down to specific individual data.

Online monitoring: Performance in numbers.

The dashboard represents the central feature / app of the Lorch Connect platform. It shows all key production indicators such as duty cycles, arc times or parameters in a quick and easy-to-understand manner. This offers a straightforward and convenient way for you to identify the productivity of all connected systems.

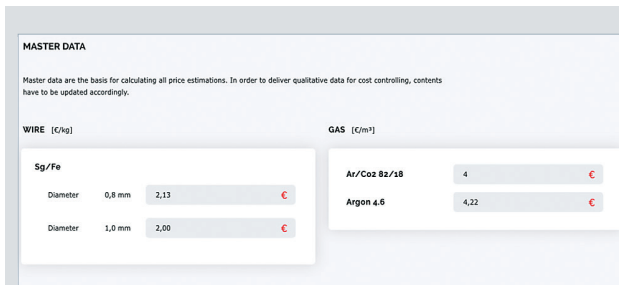


Your benefits:

- Enhanced transparency of your welding processes
- Easier detection of deviations and errors
- Improved predictability of production control
- Uncovering of productivity potentials
- More accurate calculation of orders
- Process optimisation for repeat orders

Cost controlling: Paying off in the end.

How profitable was an order or specific component? The answer to this question is held by the cost controlling tool. This tool automatically adds up all consumption figures and monetises them. The basis for the calculation is formed by your individual master data and includes such information as the prices of different welding wires and gases, the cost of energy and the labour costs associated with your welders. The result is a calculation of profitability that is comprehensive and dependable.

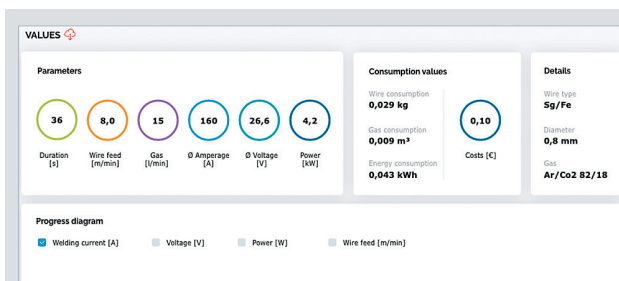


Your benefits:

- Quick visualisation of the actual cost
- Effortless recalculation of orders
- More realistic calculation of quotes for comparable orders
- Cost optimisation for recurring components

Documentation: All essential data in one location.

The Lorch Connect Gateway records each individual weld seam along with all data that may be relevant to production and passes this information on automatically to the Lorch Connect Portal. At this portal, all weld seams are documented with their associated parameter values. The real-world advantage: You can now draw important conclusions from such individual, process-defining parameters as current and voltage and apply them to the quality of the seam or the compliance with welding procedure specifications.



Your benefits:

- Easier detection of deviations and abnormalities in each specific weld seam
- Traceability in the event of complaints thanks to simple search options
- Effortless export of all weld seams for advanced analyses in Excel

Notes

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Lorch South Pacific Pty Ltd

A subsidiary of

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.com.au

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