

Headquarters of QST division



Our core competences

- Process quality assurance systems for resistance welding and other joining technologies
- Component documentation and visual inspection
- Marketing and servicing of control systems from Harms & Wende GmbH & Co. KG
- Services in the fields of training, analysis, optimisation and commissioning
- Specialist advice for micro joining, component design and joining solutions

Our approach

We think in processes

Optimised process management is the foundation for constant high quality and efficiency

We think in products

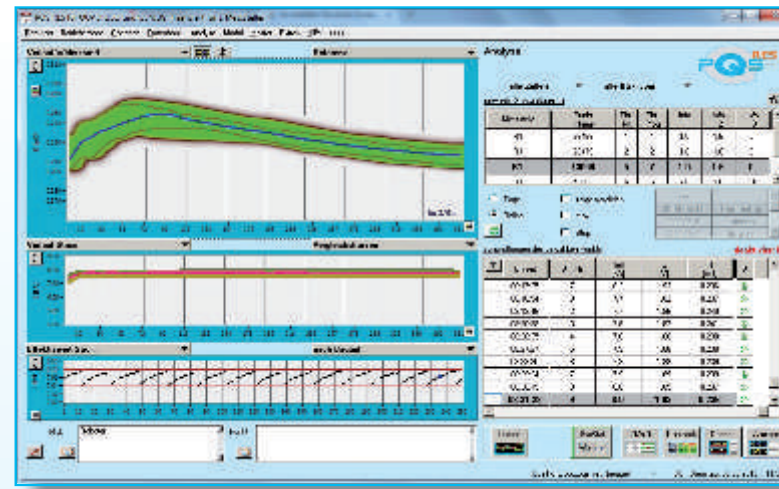
Quality assurance requires optimised control technology and process monitoring

We think as a team

Objectives are defined in close cooperation with our customers.



Process quality assurance systems for resistance welding



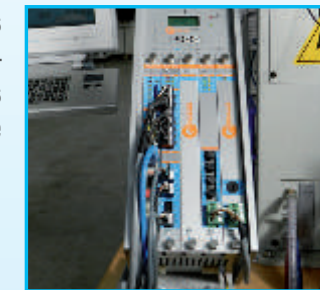
PQS Res offers you continuous inline monitoring of your resistance welding processes

Our concept

- Analysis of current process
- Provision of optimisation tool
- Certified process capability
- Inline monitoring
- Documentation of monitoring results

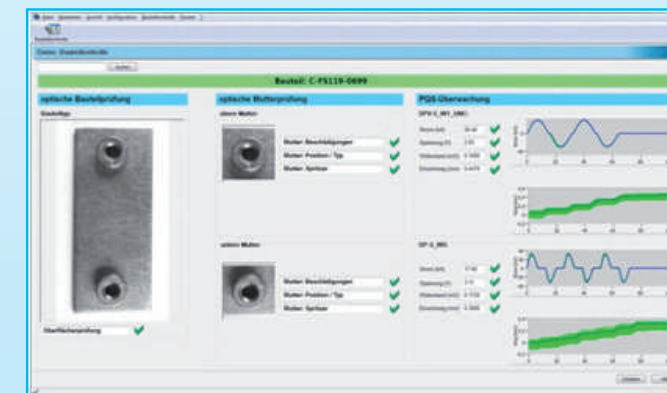
We specialise in quality assurance through process monitoring. Our services cover everything from micro joining to large-series car body production. We primarily focus on seamless component monitoring. To this end, we combine process parameter monitoring with visual inspections of the components. Our process technology specialists and experts in hardware and software development meet with you

to discuss your objectives and challenges and assist at every step towards the implementation of the jointly devised solution.



Component documentation and visual inspection

With its **PQS Vision** software, Harms & Wende QST has come up with a completely new tool for visual inspection. The program allows you to link visual evaluation data with joining process data. To avail of this extraordinary tool, you need to integrate **PQS Res** into your joining process. Our solution is primarily designed for resistance welding processes. **PQS Vision** can also be used as a stand-alone evaluation and monitoring solution.



PQS Vision allows for a comprehensive inspection of your components whereby the findings are linked to your joining process data.

Our solutions – your guarantee for safe processes

Harms & Wende has been providing innovative welding technology for more than 65 years

Harms & Wende QST offers practical and reliable high-end products for welding and process monitoring.

Our product range covers welding control systems from 50 Hz to 10 kHz including comprehensive monitoring systems for both components and processes.

With these excellent products and the know-how of our staff, we can offer our customers optimised solutions that meet their specific needs.

We would be delighted to assist you in tackling your challenges. In order to optimise the efficiency of your joining processes, we customise our products to suit your requirements.

GENIUS inverter:

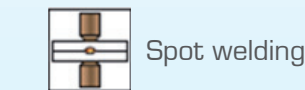
Modular control system with networked welding modules.
Workstation with PC-based visualisation and graphic user interface.
XPegasus / **X**Comand

FILIUS welding control - single workstation with machine-integrated control system.

Complete automation solution with **SINIUS** welding processor (PLC-based visualisation and function).

The devices of the **iSpot** series have been specifically developed for CD welding, resistance welding at manual workplaces, semi-automated micro joining and soldering.

The **Primus** welding control system is designed for integration into automated plants for micro joining.



Spot welding



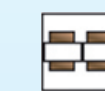
Seam welding



Friction welding



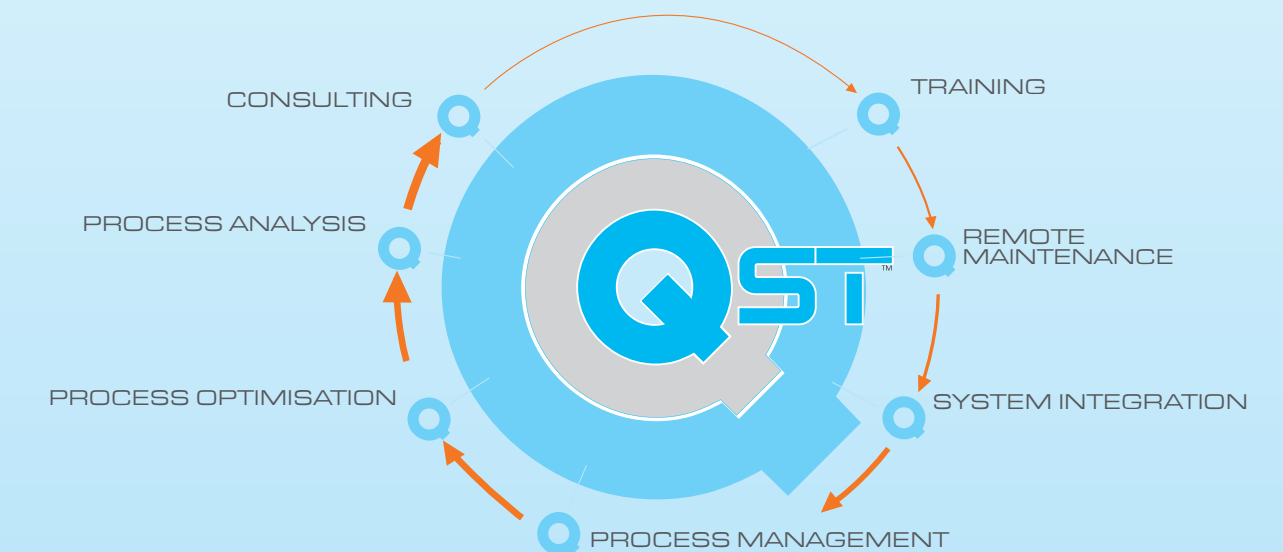
Projection welding



Flash butt welding

Training, analysis, optimisation and commissioning services

Our team of experts meticulously analyse your requirements and assist you in implementing and optimising the devised process quality assurance solution, customised for your Harms & Wende welding control systems and welding processes.



Thanks to our practical know-how and experience in advanced applications, we can offer you tailor-made service packs that meet your needs.



Micro joining is a highly specialised and adapted resistance welding technology. Harms & Wende QST provides special micro joining control solutions and power sources (e.g. iSpot or Primus) and assist you in choosing the best welding head for your application.

Harms & Wende QST thus acts as your competent technology partner for welding processes.

Our process quality assurance solution for micro joining comes with a comprehensive range of analysis, evaluation and monitoring functions.

the **QST** top 10 for your production

"Our process and quality management solutions are widely used by leading automotive companies and parts suppliers. Whether you specialise in resistance welding, micro joining or mechanical joining – we have the optimised solution for you."

- | | |
|---|--|
| <p>1 Welding control, process monitoring and component inspection systems from a single supplier – tailor-made to suit your production plants and processes.</p> <p>2 Suitable for a wide range of welding and joining technologies (spot welding, clinching, projection welding, inert gas welding, micro joining).</p> <p>3 Universal system and measuring technology allows for seamless integration into new plants and retrofitting in all conventional control and joining units.</p> <p>4 Fast and reliable process capability assessment after restart.</p> <p>5 Cost savings thanks to short pay-back time and significant reduction of in-process testing expenses</p> | <p>6 Permanent availability of all key process and QA data for quick response in the event of an error.</p> <p>7 Comprehensive process analysis & visualisation functions for further optimisation.</p> <p>8 Comprehensive component monitoring by linking joining process data and visual inspection through PQS Visionsoftware</p> <p>9 Competent on-site support by experienced team of experts</p> <p>10 Used by many renowned automotive suppliers and car manufacturers. References on request.</p> |
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Productivity & efficiency when and where you need it!

Advances in-line monitoring technology tailor-made for your production!

To find out more, simply give us a call!
+49 3722 89081 0

www.hwh-qst.de

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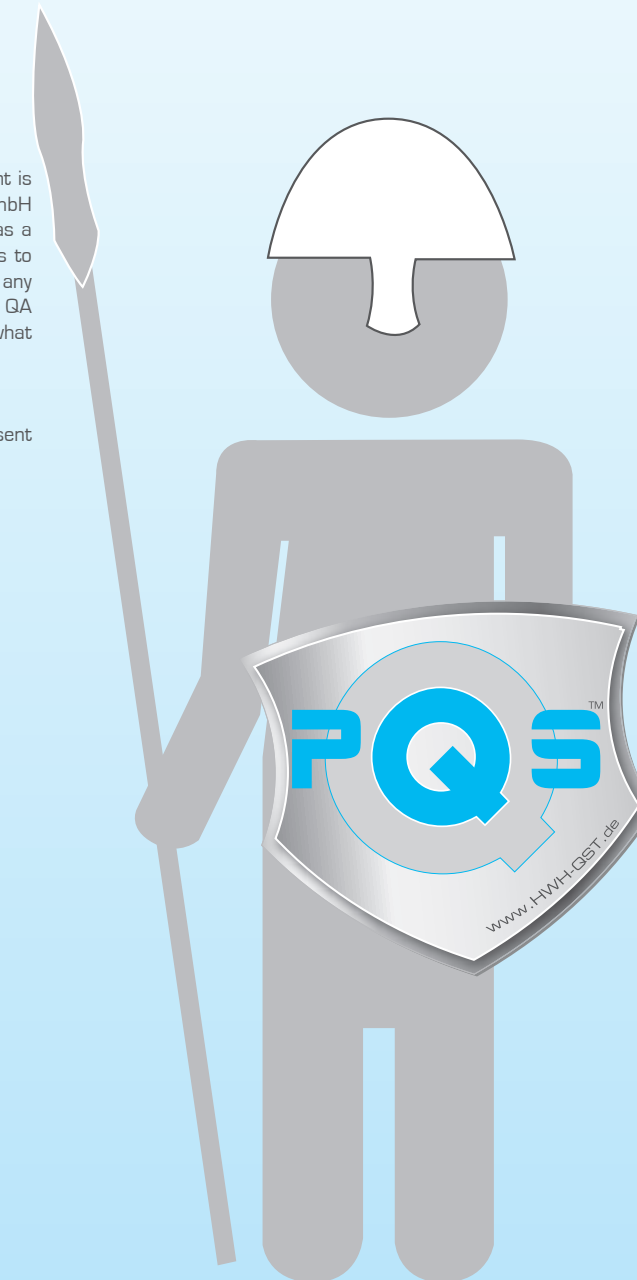
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The specialist for high-end Quality Assurance Technology, resistance welding & micro joining



HARMS & WENDE QST GmbH



POWER

SERVICE

PQS RES

PQS VISION