



Service at a new level



SERVICES

**QST** <sup>TM</sup>

2008/09

MADE IN GERMANY



HARMS+WENDE QST GmbH  
Qualitätssicherungstechnologien



QST Services - is exchanging knowledge!

*Cutting-edge hardware and software are important factors in successful solutions and hence customer satisfaction.*

*As a pioneer in the field of inline process monitoring and quality assurance technology we have always been aware of the importance of expert and well-founded service.*

*You quite rightly expect not only reliable and economical assurance of your process and product quality but customer service tailored to your need and resulted-oriented.*



## HIGHLIGHTS QST Services

- *efficient service performance*
- *tailored service and training modules*
- *profound practical experience based on demanding client specifications*
- *result-oriented solutions for practical use*
- *wide range of services and training*
- *oriented to leading QM standards*
- *a single source for everything from analysis to optimized process*
- *define and realize goals mutually*

*We offer the services you expect and want with our hardware and software solutions from a single source. Active support in everything pertaining to any queries you may have on anything to do with your processes can be taken for granted.*

*It does not matter whether it is analysis, parameterization or training. Our experts and products are always well prepared to offer the support you need.*

A product is only as good as the services offered with it.

*QST GmbH are the specialists in economical and reliable assurance of process and product quality in your welding processes. Our core expertise is joining technology.*

*We offer you services that precisely meet your specific needs.*

*The range of service we offer is based on profound practical experience of demanding client applications.*



*That experience is combined with the commitment and expertise of our staff with the aim of achieving a result-oriented solution for practical use.*

*Our services are oriented to the state-of-the-art standards of leading quality management systems.*

*We offer team support.  
Defining and realizing goals mutually.  
Progress is exchanging knowledge.*

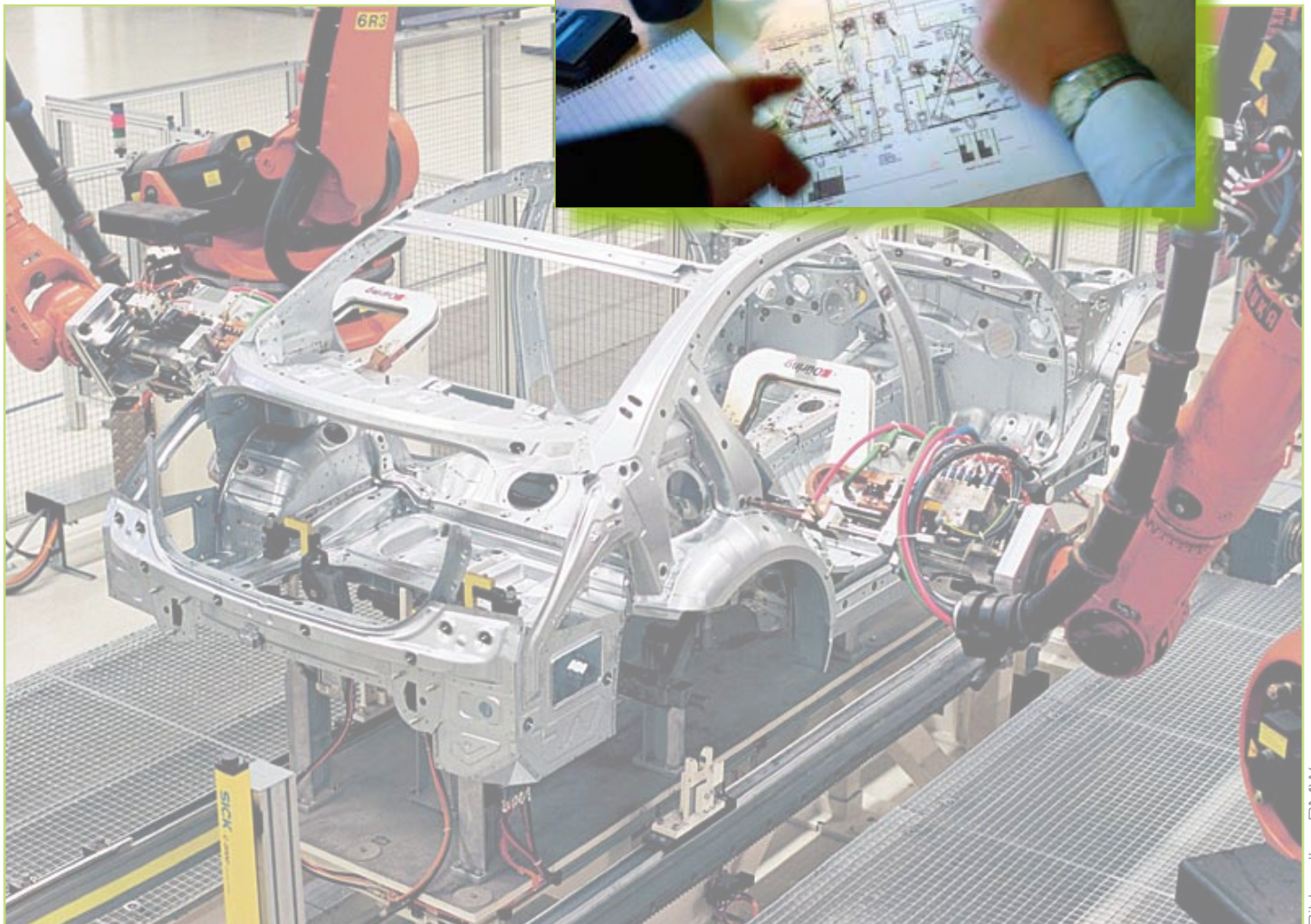
**Service at a new level!**



We listen to you – Time to define goals

*Our individual solution proposals are drafted for you after discussing the matter in detail with you.*

*We offer you a tailored combination of goods and services, software modules and hardware systems from our wide range of products.*



Bildquelle - BMW

WE LISTEN TO YOU



A vision becomes reality - a safe process.



Permanent and economical quality assurance!



# QST Services Process analysis



## Facts for a profound process analysis

*A thorough investigation and analysis of your joining processes is the first step. This reveals any possible weaknesses and potential for improvement.*

*The information thus acquired is used to draft a comprehensive report and targeted improvement proposals based on it.*



Bildquelle - BMW

## WE HAVE A CLOSE LOOK

### We have a close look

- Inspection of the production facilities.
- Visual inspection of the production facilities helping to find faults of the equipment.
- A mobile PQS measuring system collects data and analyses the actual process situation.
- Parameter checking.
- Quality inspection of the produced components.
- Summarizing the results in a report including proposals for process optimizing.



Technology	Analysis 1	Analysis 2	Analysis 3	Analysis 4
Place and time of support	1 day on-site 8h Service Germany	2 days on-site 16h Service Germany	1 week on-site 40h Service Germany	1 month on-site 160h Service Germany
RES Resistance Welding	QTS-ANA-RES-V101-GER	QTS-ANA-RES-V201-GER	QTS-ANA-RES-V301-GER	QTS-ANA-RES-V401-GER
ARC Arc Welding	QTS-ANA-ARC-V101-GER	QTS-ANA-ARC-V201-GER	QTS-ANA-ARC-V301-GER	QTS-ANA-ARC-V401-GER
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# QST Services Process Optimization



## Target in sight - Path defined

*The improvement measures are then applied on the basis of the process analysis.*

*This includes both parameterization and proof of the product and process quality reached.*

*A detailed report is made out to document success.*



Bildquelle - Bosch



## Standard Package: Optimization

- Implementing concrete optimizing measures after a thorough process analysis by QST company.
- Testing of new set parameters and modifications of the technical settings.
- Proof of the obtained process and product quality in a detailed status report.



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RES Resistance Welding	QTS-OPT-RES-V101-GER	QTS-OPT-RES-V201-GER	QTS-OPT-RES-V301-GER	QTS-OPT-RES-V401-GER
ARC Arc Welding	QTS-OPT-ARC-V101-GER	QTS-OPT-ARC-V201-GER	QTS-OPT-ARC-V301-GER	QTS-OPT-ARC-V401-GER
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# QST Services Process Management



## Risk identified - risk banned

*Risks minimized by monitoring prototypes and pre-series products.*

*The purpose here is early detection of possible process risks affecting the series product. Analysis and monitoring of the series production commencement with well-founded proof of the process and product quality achieved.*

*All work steps and results are comprehensively documented.*



Bildquelle - BMW

## Standard package: Process Management

- Data collection and documentation of process and quality from prototypes, pre-series and series products.
- Supervising final inspections of machines.
- Proof of the obtained process and product quality in a detailed report, drawn up with data measured by the PQS measuring system.



Technology	Process Management 1	Process Management 2	Process Management 3	Process Management 4
Place and time of support	1 day on-site 8h Service Germany	2 days on-site 16h Service Germany	1 week on-site 40h Service Germany	1 month on-site 160h Service Germany
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# QST Services Integration

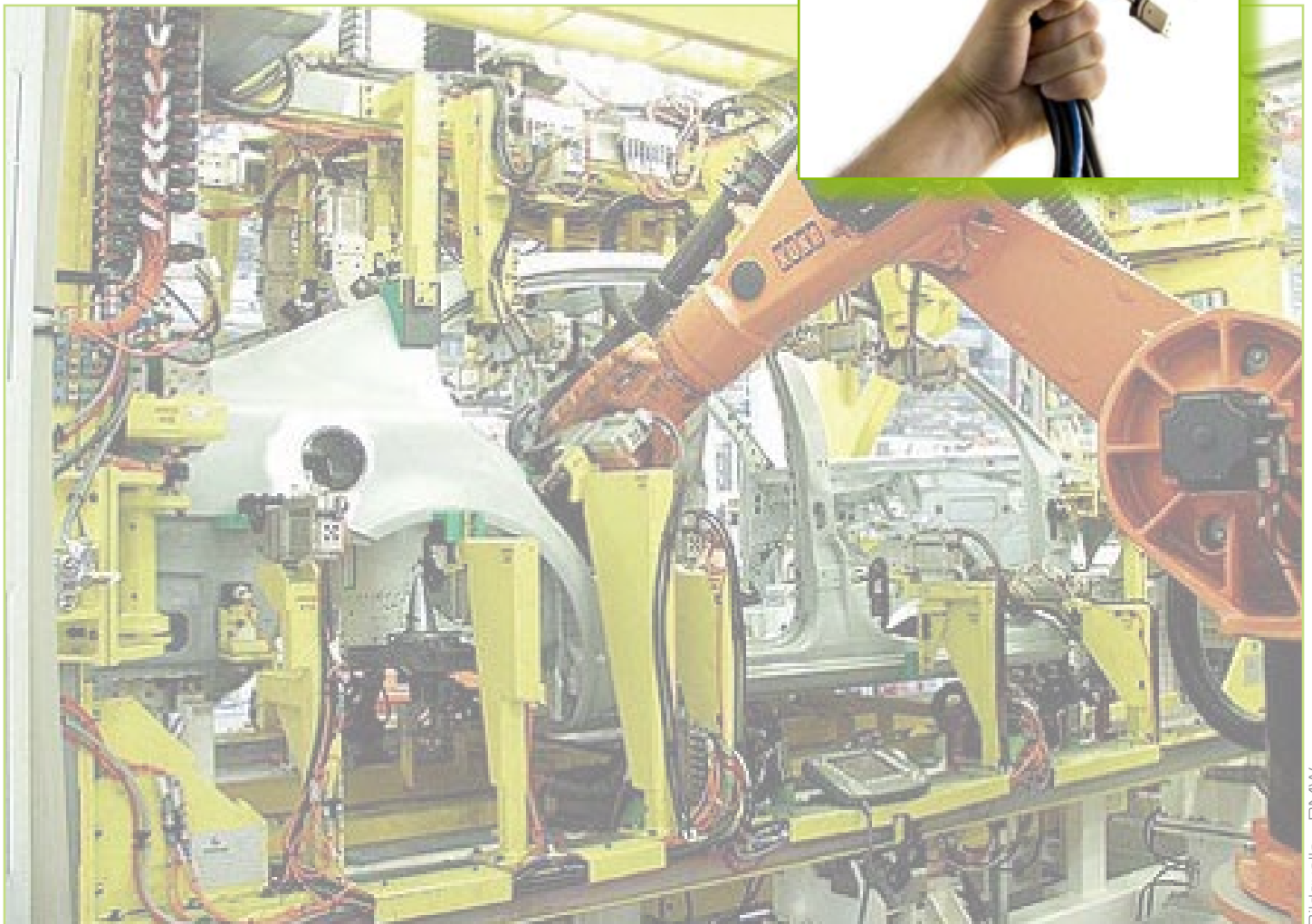


## Communication - Our systems and your machines

*Comprehensive implementation advice and assistance is offered for the products we supply.*

*This covers integration of control and analogue signals needed and the field bus connections. Data backup concepts and database interfaces are included too.*

*We offer you specific tailored solutions on this basis.*



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## Standard package: Integration

- Explanation and coordination of the technical interfaces between actual installation and software / hardware of QST.
- Advice / Consulting for installation of necessary signal lines, field bus interfaces and control pulses.
- From system integration of the required QST soft- and hardware to a ready for use handing over to the operator.
- Consulting for specification and implementation of data assurance concepts.



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Place and time of support	1 day on-site 8h Service Germany	2 days on-site 16h Service Germany	1 week on-site 40h Service Germany	1 month on-site 160h Service Germany
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ARC Arc Welding	QTS-INT-ARC-V101-GER	QTS-INT-ARC-V201-GER	QTS-INT-ARC-V301-GER	QTS-INT-ARC-V401-GER
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# QST Services Training



## Communication – Man and Machine

*The basis for the efficient and safe handling of your processes and our products is the thorough training of your staff.*

*Profit from the expertise, commitment and training of our instructors.*

*Training modules with field-relevant content guarantee quick, reliable realization of your goals.*



Bildquelle - BMW

## Standard package: Training

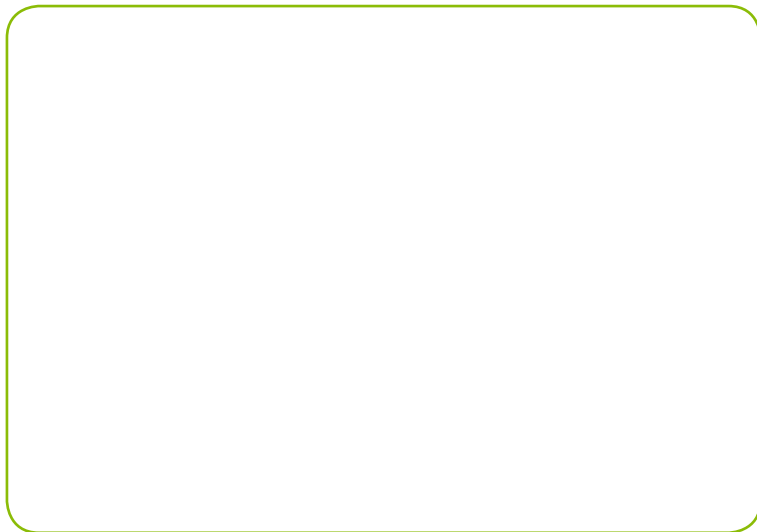
- Specific qualification for the user in his area of responsibility.
  - The participants follow a modular training concept.
  - All training modules are accorded consecutively.
  - There are max. 6 participants in the course in order to assure individual and effective learning.
- Thus performance achieves a maximum.



Technology	Training Level 1 Base	Training Level 2 User	Training Level 3 Maintenance	Training Level 4 Superuser
Place and time of support	1 day on-site 8h Service Germany	1 day on-site 8h Service Germany	1 day on-site 8h Service Germany	1/2 Tag vor Ort 4h Service Germany
RES Resistance Welding	QTS-TRA-RES-V101-GER	QTS-TRA-RES-V201-GER	QTS-TRA-RES-V301-GER	QTS-TRA-RES-V401-GER
ARC Arc Welding	QTS-TRA-ARC-V101-GER	QTS-TRA-ARC-V201-GER	QTS-TRA-ARC-V301-GER	QTS-TRA-ARC-V401-GER
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presented by:



**HARMS+WENDE QST GmbH**  
Quality Assurance Technology  
**NORTH OFFICE**  
Am Berge 8 | D-21335 LÜNEBURG  
Telephone: ++49 4131 223-1115 or -1114  
Telefax: ++49 4131 223-1113

**HARMS+WENDE QST GmbH**  
Quality Assurance Technology  
**CHEMNITZ HEAD OFFICE**  
Lützowstraße 15 | D-09116 CHEMNITZ  
Telephone: ++49 371 303-755  
Telefax: ++49 371 350-325

Website: [www.hwh-qst.de](http://www.hwh-qst.de)