SERVICE FOR PRODUCTION- AND TESTSYSTEMS (PTS)

ALWAYS ONE STEP AHEAD IN TERMS OF AVAILABILITY AND EFFICIENCY
Our service concept? To do more faster.

Up to individual components and right down to the smallest detail, our innovations are focussed on one objective: To make your production safer, more efficient and more economic. This does not only include hardware and software. This also includes service activities that offer added value: More safety, more reliability, more availability – from a single source. Made by HEITEC PTS.

Together with you we will plan what you need. So that you get services which are oriented towards your needs and are tailored exactly to them. Incidentally, the same applies to machines which are not manufactured by us. Our manufacturer-independent service assists you over the entire life cycle of your investment irrespective of whether the challenges are of mechanical or electrotechnical nature or associated with the control.

On the following pages we are going to show you what you can rely on at any time with us. At this point, we already recommend our maintenance and service offerings. While you are focussing on your tasks, we do our work.

With experienced employees who think about solutions and not about problems, as well as with innovative service activities, not only we but also you will always be one step ahead!
We are in close contact with you – right from the beginning. That is why we know your challenges and your machine thoroughly and can support you in all machine and application-specific matters. We are aware of the fact that urgent issues require fast and reliable answers. We are at your service with competent advice and comprehensive assistance. Be it in planning your machine, in mechanical design, in software development for your machine control or in commissioning.

Optimal planning minimizes the risk. So by means of virtual commissioning, for instance, we can check and adjust parameters in advance, if necessary. We have a broad range of possibilities to verify processes in the run-up to realization. These and many other service activities at first hand can only be found with us.

Your benefits put in a nutshell

- Optimal support at every stage of life
- Rapid assistance and purposeful responses by means of our phone and online support
- Cost security due to digital twin and virtual commissioning
- Maximum availability through repair and maintenance in a short time
- Highest performance, also of older machines, through conversions/retrofits
- Long service life, optimal value preservation and minimum downtimes by means of service and maintenance contracts
- Qualified personnel due to our training courses and thus more efficiency and safety
- Maximum operational safety through regular reviews and preventive maintenance

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With a HEITEC PTC service contract, you will get fast expert help for your machine, if needed. The service packages have been designed to satisfy various customer needs in a flexible way. The target: We want to make your processes as easy and uncomplicated as possible.

Remote maintenance – quick access, fast assistance
Take advantage of the remote maintenance access of HEITEC PTS for your machine. This will save time in case of an incident, because we can then immediately access the machine and diagnose and remove malfunctions. Downtimes are minimised and you will benefit from higher availability.

Your benefits put in a nutshell
› Safety at first hand
› Fast restart following a malfunction
› Minimisation of downtime and costs involved with it
› Maximisation of productivity

What you can rely on in the event of an incident
› Guaranteed availability and response time
› Recording of fault description
› Help through telephone support
› Access via remote maintenance, where available
› Quickest possible dispatch of spare parts
› Consistent operational planning
› Constant coordination
› Complete documentation

It could not be really more comfortable – and also not faster.

Service contracts

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Service model

<table>
<thead>
<tr>
<th>Basic</th>
<th>Basic +</th>
<th>Advanced</th>
<th>Advanced +</th>
<th>Ultimate</th>
<th>Ultimate +</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.30 a.m. - 5 p.m.</td>
<td>6 a.m. - 8 p.m.</td>
<td>24 hours</td>
<td>24 hours</td>
<td>24 hours</td>
<td>24 hours</td>
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Availability
Service centre
7.30 a.m. - 5 p.m. | 6 a.m. - 8 p.m. | 24 hours

Response time for telephone support and remote maintenance
Within 2 hours of the selected availability

Departure of service technician
Option 1: Departure of service technician within 2 hours
Option 2: Departure of service technician on the same day (when asked for by 11 a.m.) or on the following day (when asked for after 11 a.m.)

Example: You have made a decision for the service model ADVANCED. Our service centre is thus available to you from 6 a.m. - 8 p.m. on working days*. Our response time for telephone support and remote maintenance (where available) is within 2 hours after first contact by you. Option 2 has been selected for „Departure of service technician“. Departure of our service technician travelling to you will take place on the same day (when asked for by 11 a.m.) or on the following day (when asked for after 11 a.m.). When asked for support after 11 a.m. on Friday, departure of the service technician will take place on the next working day (e.g. Monday).

*Working days: Monday - Friday, without public holidays
We will take a precise look – regular maintenance is a matter of expert hands.

Maintenance contracts

Good planning will relieve you in everyday life. With a maintenance contract, you do not need to care for anything, because this is our job after all. Thanks to continuous documentation, we exactly know the condition of your machine and are aware of what it needs and what has to be done. This saves working time and the costs involved with it.

Together with you, we will specify the maintenance intervals. All work is carried out by our experts who will also do repairs right away, on request. You will get complete documentation of the measures carried out, including secure data storage and versioning. Software components are an integral part of any contract. So maintenance also comprises preservation and restoration of the operational readiness of the software, updates, regular maintenance work such as software tests and many other things.

Your benefits put in a nutshell

› Maintenance costs will keep being transparent and predictable
› Significantly reduced risk of failure, shorter downtimes and costs involved with it
› Higher overall machine effectiveness
› Prolonging the service lives and better value preservation of your machines
› More process reliability and increase in efficiency

Software maintenance

› Updates and further developments are included
› New program functions and additional modules are included
› New specifications from standards are incorporated
› Corrections/eliminations of errors are included
› Price transparency of the total costs

Maintenance services/Intervals

<table>
<thead>
<tr>
<th>Maintenance interval*</th>
<th>half-yearly</th>
<th>annually</th>
</tr>
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<tbody>
<tr>
<td>Basic maintenance</td>
<td>•</td>
<td></td>
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<tr>
<td>Calibration + image quality</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>X-ray system</td>
<td>•</td>
<td></td>
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<tr>
<td>Mechatronic units</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Software maintenance**</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

*Recommended maintenance interval. Should deviating intervals be reasonable with your machine, we will specify them together with you.
**Depending on the availability of software updates, half-yearly or annually.
Repairs and maintenance

Our employees have experience with your machine and thus an unparalleled know-how, especially when fast and competent help is in demand. What is more, we have the corresponding tools and most of the original spare parts in stock, so they are quickly available. That means: Professional maintenance or troubleshooting is less time-consuming.

Prior to beginning the repair, you will get a cost estimate, on request. Potential guarantee claims will be automatically checked and taken into consideration.

Your benefits put in a nutshell
- Safety due to service competency at first hand
- Time saving, because the right tools and spare parts are quickly available
- Long service life and maximum availability due to original spare parts
- Reliability also with manufacturer-independent service

Original spare parts are available with us!

We play it safe and install high-quality spare parts and units of renowned premium manufacturers. Because a long service life will maximise availability. Nevertheless, should something has to be replaced, we guarantee you timely delivery of the required parts. Because we have most parts in stock or can quickly obtain them.

HEITEC PTS tip: Keep a spare parts package in stock. In the course of the project we will compile a spare part and wear part list from which we would like to put together a package for you. This way, we can quickly access your stock in case of on-site services.

We offer premium service – manufacturer-independently

Also in case of other brands, benefit from our know-how as an innovative and customer-oriented machinery and plant manufacturer.

We have all relevant trades on our premises. Whether it is a failure in the mechanics, electrical engineering or the control – our experienced service technicians will get your machine started.

If time is in the focus, we will ensure timely solutions.
Training courses

More knowledge enhances safety and efficiency. We are convinced about that – whether it be operating training (including retraining), maintenance staff or tool setter training. So we achieve sustainable learning successes and our „pupils“ are able to implement their knowledge. We would also like to train your employees in the handling of your HEITEC PTS machine. That way, you can immediately work more productively and also safer. Depending on the focus, our training courses will take place at your premises or in our workshop.

Your benefits put in a nutshell
- Expert knowledge at first hand
- Optimal handling of your machine
- Efficient and safe working
- Time saving due to qualified trouble shooting in case of failure

Operator training courses
Are very much geared to practical applications. Afterwards, your employees will be able to efficiently and safely operate the machine.

Refresher training for operators
Build on operator training courses.

Refresher training courses for setters
These are special, very much practice-oriented training courses which ensure that employees will learn routine handling of the system of the relevant machine.

Maintenance staff training courses
These courses aim at avoiding cost-intensive downtimes or reduce them to a minimum by means of qualified maintenance and repair.

Individual training courses
They are customized to meet your wishes and needs.

Expert training courses on image processing applications
They make your employees fit in parameterizing your application and in evaluating the test results. The training course will take place in our training centre.

What you should know: We develop our training courses according to our own experiences from practice. That is why we can guarantee that the contents correspond to the current state of the art and can be used a hundred per cent in practice. The duration of the respective training course depends on the level of knowledge of the participants. Every participant will get a certificate of participation.
You need more than hardware? 
We offer suitable solutions.

Engineering services I

Mechanical and electrical engineering
The years of experience in the field of mechanical and electrical design make us a competent partner in all questions around machines and automation, no matter if it is about electrical engineering, information technology or mechatronics. So our engineers and technicians are able to support you in 3D-CAD (Inventor) and in 2D-CAD (AutoCAD) applications, for instance. The images of your mechanical requirements are complemented and extended by electrical design engineering in EPLAN P8, on request.

Virtual commissioning
Especially with machines which shall be integrated in existing manufacturing systems, commissioning can be shortened by starting programming already during construction. Virtual commissioning as part of digital engineering saves time and costs.

Benefit from these services
› Preparing simulation models
› Simulation of robot plants
› Digital development and construction of machine and plant models (digital twin)
› Virtual commissioning of machine software in real-time
› Reliable planning on account of real-time data
› Optimization of processes and machines
› Quicker commissioning and start-up
› Parallel project flow

Software engineering / programming
HEITEC PTS is at your service – from consultation, planning and conception to implementation of an integrated solution. On request, our software specialists will put your machine completely into operation and optimize it until acceptance. They will also support you in refurbishments. For instance, when you want to extend your machine or adjust it to current production needs. What is unusual about our employees: They are engineers and technicians with years of experience in machinery and automation engineering. They develop perfect solutions and that pays off – for you and your machine.

Benefit from these services
› Consultation, planning and conception
› Engineers with experience as project leaders and specialists
› Software development and application, inter alia in the fields of control software and interfaces, e.g. C++ and C#
› PLC programming
› Visualisation, e.g. HMI/SCADA
› Robot programming
With us you will be on the safe side.

Safety and functional inspections
Our objective is a safety concept which simultaneously ensures greatest possible flexibilization of your processes. In close coordination with you, we will check the behaviour of integrated robots or automation axes with regard to design and programming. Furthermore, we will support you in the compliant implementation of the safety concept.

Safety check – checking components, mechanics and interfaces
We will check the built-in safety-related components and the mechanics of your machine according to standardised established safety requirements. Further modules of our safety check include the validation of safety interfaces as well as verification of functions.

Robot safety inspections for safe cells
Especially limited installation conditions require „safe robots“. By representing virtual movement spaces and stopping distances in consideration of the nominal load and maximum speed, safe cells can be optimally realised. We not only program them, but also check existing safe spaces, on request, prepare test reports and talk to you about possible optimisations.

Benefit from these services
- Consultation with safety topics by means of CMSE®
- Checking safety-technical components and the mechanics according to established safety requirements
- Validation (I/O Real to Plan, Logic)
- Design of safe machines and robot cells
- Robot safety inspections
- Inspection and documentation of fail-safe controls
- Functional and process inspections
- Design of safety functions and calculations with SISTEMA
- CE certifications based on the current Machinery Directive

Retrofits
At times, only parts of your machine must be replaced, modernised or extended. HEITEC PTS is, among other things, specialized in carrying out control retrofits for various target systems with preferably little downtime.

By mapping a virtual machine we can test your new control on a functionally identical machine using the real software. While your machine can go on working productively.

Benefit from these services
- New development and replacement of controls
- Replacement of automation components (Planning, procurement, replacement, integration as well as commissioning)
- Extension of existing machines
- Design of safety functions and calculations with SISTEMA
- CE certifications based on the current Machinery Directive

Mobile measuring services
Whether there is a lack of know-how or the right tools – we will be glad to support you in everything that can be measured. That way, you will be on the safe side with us.

Benefit from these services
- Electrical measurements (with initial commissioning, installation or recurring): Obligatory audit according to DGUV A3 (German Social Accident Insurance), including measurement protocols and explanations
- Network measurements (Profinet, Profinet, Ethernet...)  
- Control analysis with highly automated machines and systems in case of malfunctions with long-term recording and evaluation
- Radiation protection measurements for X-ray devices in the non-medical field (every 5 years or after essential changes) including legally-secure documentation

Engineering services II
What applies equally in terms of service: Nothing is better than the original one.

Contact persons

Our customers feel in good hands. Not only in the sales process, but also after that. This is because of our service team with many experienced employees. They are specialists who have accompanied your machines from design to assembly to commissioning. They will gladly provide assistance to you during care, maintenance, service or troubleshooting. In the same way as our machines, our service employees have also the claim to be always one step ahead. Get to know us. We are looking forward to your request.

HEITEC PTS Service Centre

Phone: +49 7331 3046 80*
Fax: +49 7331 3046 980
Email: service@heitec-pts.de
Web: heitec-pts.de/service-support.html

*Monday to Friday from 7.30 a.m. until 5 p.m., optionally, within the bounds of our service contracts, our hotline number is also available to you outside our business hours.

Service worldwide

Together with our partners, we offer a worldwide service network. Not only through our parent company, the HEITEC AG, but also through our close collaboration with our cooperation partner VJ Technologies, an American provider of non-destructive workpiece testing, we can offer you service activities around the world. Please contact us!