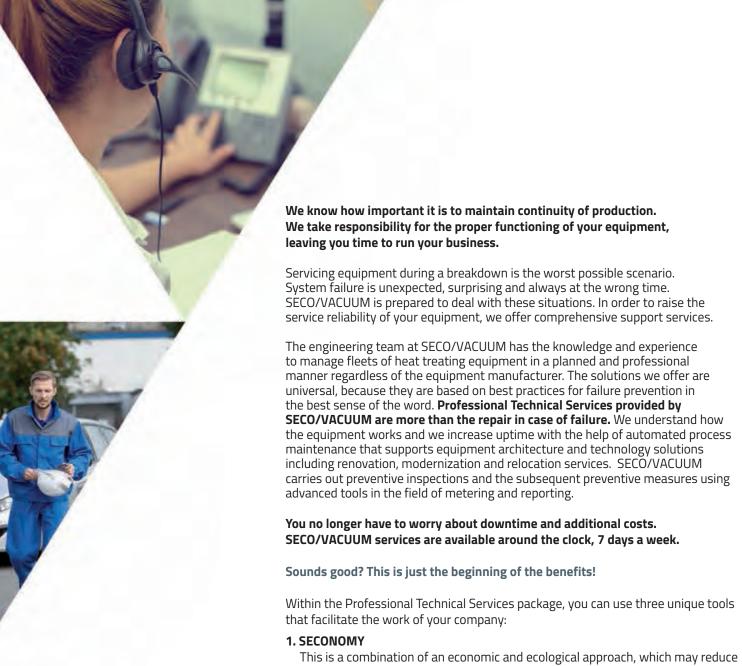


Professional Technical Services

A new dimension of support for heat treating equipment & processes

SECO/VACUUM



costs up to 50%*!

2. SECOLUTION

This is a set of powerful tools supporting key business decision-making.

3. FREE SERVICE VISITS

Our experienced experts visit whenever you need support.

This is the only comprehensive service package on the market. You can trust us - we have excellent technical skills and years of experience and your needs define our development direction.

This how we see **Professional Technical Services**.



- Modernization of technology; adding the potential to implement new processes, for example, LPC + PreNit
- ► Start up of the individual pieces of equipment or entire lines
- ► Repairs and modernization
- ► Equipment relocation
- ▶ Preventive programs service agreements
- Services (installation of spare parts, replacement of insulation, burner adjustments, updating equipment to necessary standards, etc.)
- ► Sale and replacement of spare parts

Not a customer of SECO/VACUUM? Not a problem. The benefit from our solutions is unlimited!

The SECO/VACUUM complete range of spare parts includes:

- ▶ The complete replacement of sections of technological lines
- Heating chambers for vacuum furnaces with graphite and molybdenum insulation
- ► Heat-resistant or ceramic muffles
- Retort
- Heating elements (spirals, molybdenum, graphite, etc.)
- Insulations
- Burner systems, recuperators
- Convection fans
- Ceramic insulators
- ▶ Belt conveyor
- Chains
- Typical furnace parts (thermocouples, sensors, valves, etc.)





SECOLUTION | Business decisions based on facts

The SECOLUTION offer facilitates both system control and facilitates making key decisions in the heat treating process. With SECOLUTION, gaining a competitive advantage is easier, thanks to a better understanding, control and use of the existing machine ecosystem. The functionality of the offer provides system optimization and advanced data analysis, enabling users to respond and monitor the progress of work-in-process. SECOLUTION is also a smart preventive maintenance tool with advanced data analysis of equipment operations.

To serve your business interests, we have implemented new and innovative tools to support your daily operations.

1. SECO/PREDICTIVE

This is a smart tool that can detect potential failures before they occur, thus the risk of unplanned shutdowns and failures is minimized and the availability of equipment is increased.

2. SECO/STATISTICS

SECO/STATISTICS is a software for monitoring and analyzing the most important indicators of equipment operation, which enables efficient its use and optimal downtime scheduling.

3. SECOPTIMIZER

This tool monitors recipe times and ongoing heat treating processes, and automatically manages the loading and unloading, measurably reducing the costs related to the use of equipment by minimizing the idle time and maximizing their use time. It increases use of the existing machine park, which is possible by optimizing the batch queuing.

4. SENERGY

Monitors, controls, reports and optimizes energy demand and minimizes overall costs of energy consumption.

5. Manufacturing Execution System (MES)

MES, a manufacturing execution system, takes full advantage of the company's entire IT capabilities, including the complete manufacturing process. Some of the system's features are:

- ► The visualization and real-time management of energy resources and production
- ► The display of alarms and events
- ► Heat treating recipe management
- Access to historical data on heat treating processes
- ▶ Remote diagnostics and access to data via the internet
- Backing up data
- ► The ability to mark batches with barcodes or QR systems
- Remote notifications of selected events on the phone or mailbox
- ► Generating periodic or batch reports
- Advanced data analytics





FREE SERVICE VISIT | We are here to help!

Do you need a consultation?

Make an appointment with our Service Engineer!

We offer a FREE SERVICE VISIT program to our customers. If you have a problem with your equipment - contact us and benefit from the experience of our best Service Consultants. The visit is free!**

It does not matter what the scope of support is that you may need. Whether it is a temperature distribution test, analysis of technological problems or simple bricklaying work on an old furnace, we are always there for you, ready to help.

Customer needs can vary just like the areas of the world of heat treating. SECO/VACUUM has specialists in the field of design, technology, service or supervision, ready to provide support.

** Our employees perform their work at a designated place for free. Travel, accommodation costs of the consultants as well as any other additional costs of spare parts shall be billed to the contracting authority.





