

Easier. More secure. More efficient.

Increasing machine availability is
your key to business success.



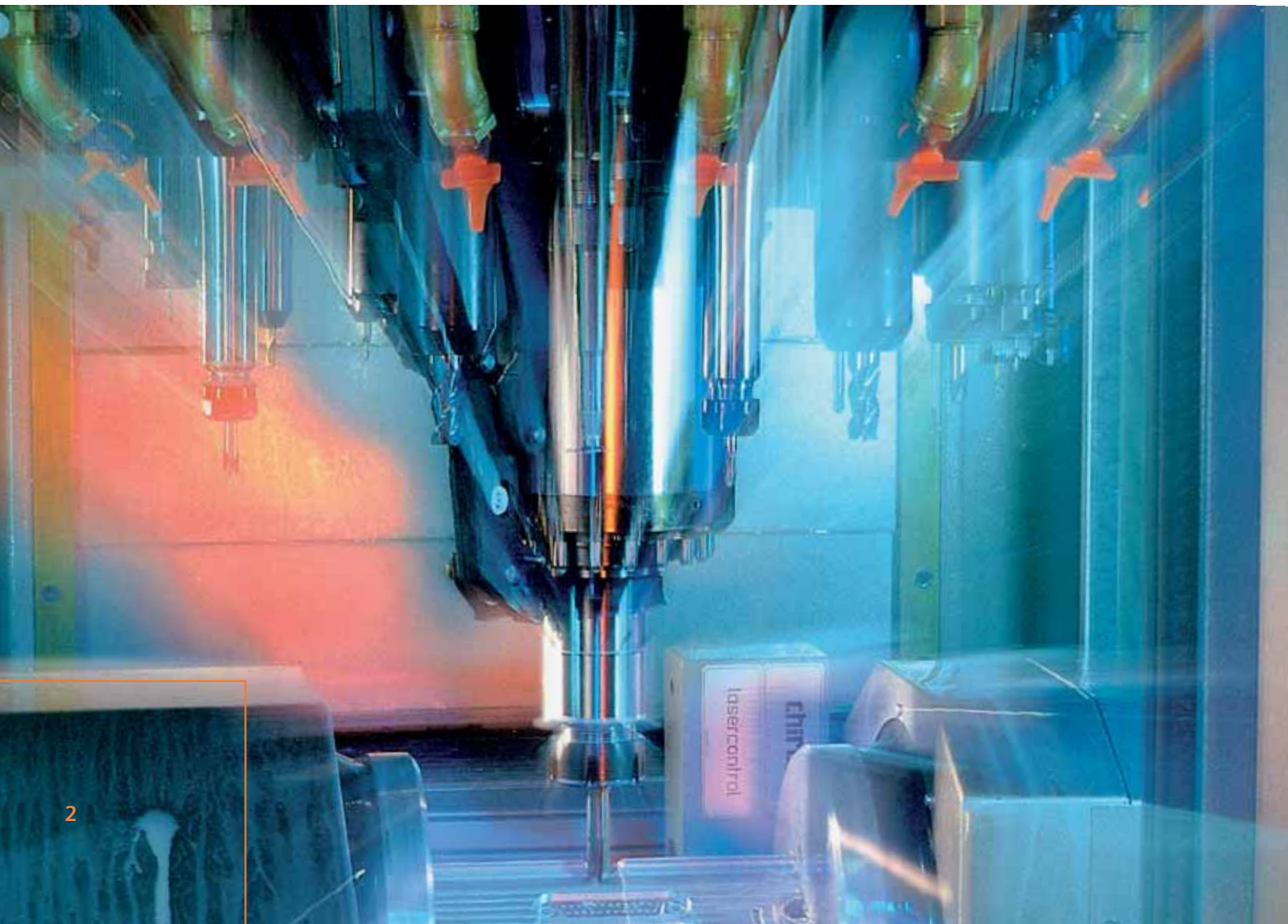
eps network services



SIEMENS

ePS Network Services from Siemens: More cost-effective service and production.

Maximum machine availability is key to greater profitability. Web-based services from Siemens monitor the status of your machines so you can anticipate maintenance work and keep unplanned downtimes to a minimum. Siemens delivers a complete IT infrastructure to provide the technical basis for fast and successful services.

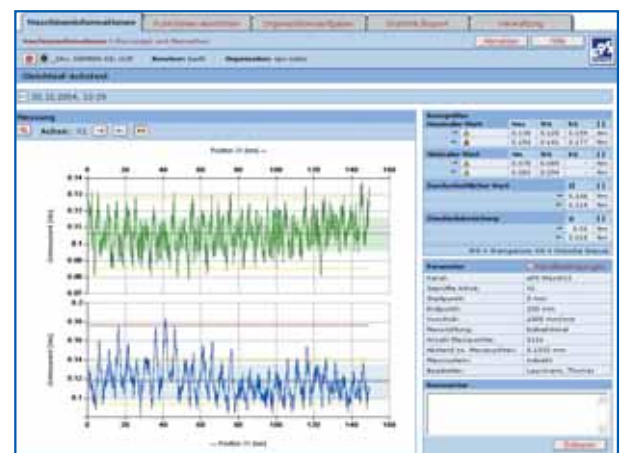


Life-cycle costs affect profitability

The total cost of running a machine for its entire life-cycle has become an increasingly important factor when it comes to investment decisions. In addition to consumption variables, production is subject to the cost drivers inherent in downtimes. Condition-dependent inspection and maintenance can minimize these downtimes.

Status monitoring delivers reliability and security

ePS Network Services offer comprehensive functions for machine status evaluation. Automatic test routines cyclically monitor the machine state and display information on the real machine load. Knowing the state of individual components is the first step to increasing productivity. ePS Network Services are available for machine tools and production machines in different industries. That means that machine manufacturers, maintenance personnel or service providers can increase machine availability and raise productivity to new levels.



ePS has many advantages!

Can you afford to be without them?

Increase your machine availability, increase your productivity

Condition-monitoring helps you reduce unplanned machine and plant downtimes. With the knowledge of the machine's status and real load, an expert can determine the actual stress on the machine and issue a fault prognosis. Efficient malfunction localization and fault elimination gets your machine back into the production process fast. A mutual database shared by machine manufacturers, operators and Siemens supports and optimizes these processes.

Inspection and maintenance that is less complicated

- Machine status is automatically detected, in some cases even without user interaction (load analysis, monitors)
- Verification of machine capability through tests enables adjustment of maintenance intervals based on usage
- Workflow can be integrated from the controller into MES systems via the service

Concentrate on your actual business

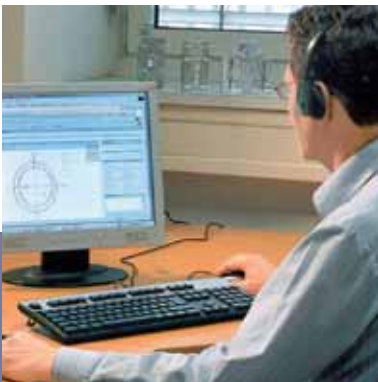
- The IT infrastructure for ePS Network Services is provided and operated by Siemens. In other words, there's no need for ePS customers to spend time on the operational details or obtain any special training
- Proactive service concepts from the machine manufacturer support the factory service work for the maintenance of machines and plants

Lower your service costs

Service work can be performed independently of use: only as often as necessary and at just the right time

Secure communication between company networks

- No need to dial into outside networks
- Only outgoing http connections (128 bit SSL-encoded)
- Communications via secure Siemens conference server located within a data center
- Service workplaces separated from the machine controllers
- The cooperation between many individual measures provides an extremely high level of security for the overall system





Low investment costs

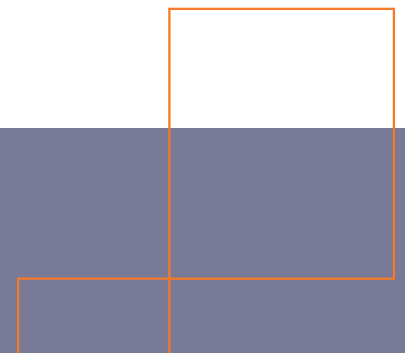
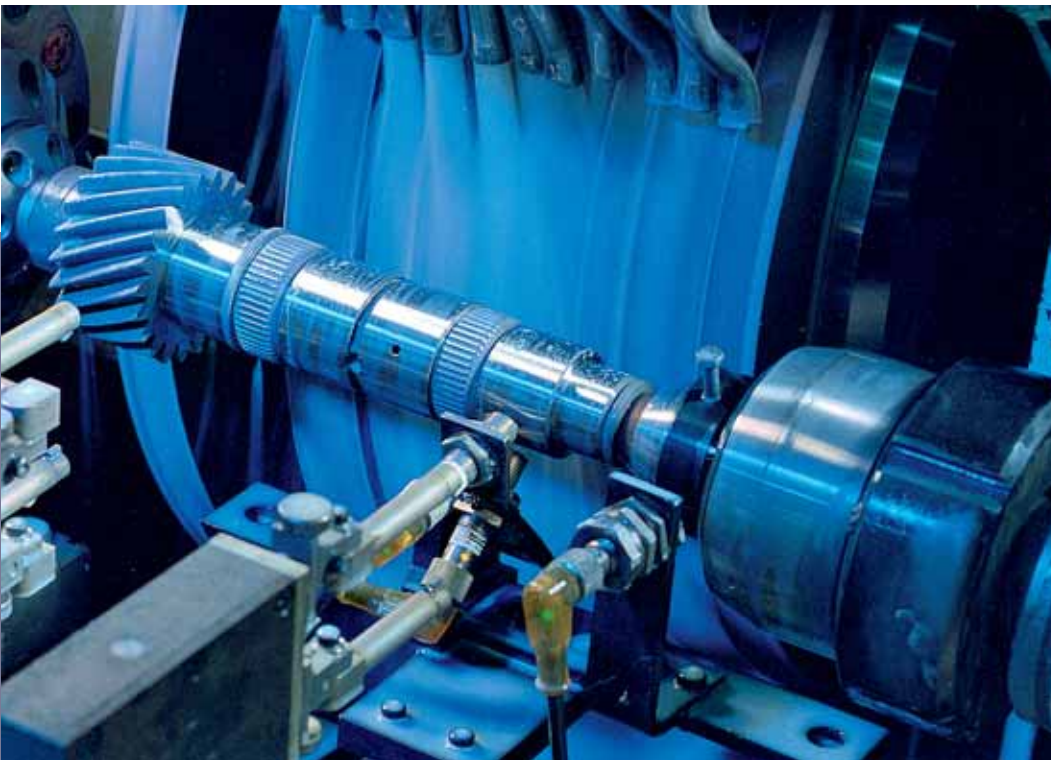
- Fewer capital resources are tied up in hardware and software
- No additional IT personnel are required
- Easy-to-use: minimal training is needed for system users
- Range of functions is adapted to the specific needs of your user groups
- Software updates and functional expansions are performed without installation and data backup overhead

Predictable, easy-to-calculate costs

- The service level agreement, as part of the contract, ensures users the availability of the overall system
- Individual utilization level is scaled for each machine
- Pay-per-use: costs are incurred based only on actual use

Reduced service costs

- Optimized and shortened commissioning procedure
- Minimized travel expenses, lower restart costs
- Better prepared service operations
- Change identification: takes fingerprints, optimizes and documents the original state
- Lowered life-cycle costs thanks to system availability from the very first day



ePS services from Siemens makes servicing even more productive!



Anticipatory maintenance – with eP-Performance

Monitoring machine components, such as the axes and spindles on machine tools, is especially important for anticipatory and status-oriented maintenance. Service technicians and maintenance personnel can take advantage of interactive testing and measuring procedures for the continuous assessment of the machine state. In addition, individual machine components can be monitored cyclically and automatically via load monitors.

Test results can be evaluated over the machine's entire life cycle using trend analysis. That makes it possible to carry out anticipatory and targeted planning of corrective maintenance measures and optimize inspection and maintenance intervals. Critical conditions can be identified early on, leaving enough time to plan proper action, thus minimizing unplanned machine downtimes.

The servicing system identifies which spare parts need to be where and when depending on the process and usage. As a result, it can order spare parts just in time and reduce the costs of maintenance even further.

Optimized malfunction diagnosis with eP-Dynamic

Despite early identification of state changes, malfunctions will always lead to some downtimes. With ePS Network Services these malfunctions can be quickly and easily analyzed – even company-wide!

As soon as a fault occurs, the ePS servers provide detailed diagnostic information with parameters for analysis. The high quality of the information drastically cuts the time needed to localize the malfunction. If necessary, experts can join forces to analyze the information from anywhere in the world.

If the information that is automatically collected is insufficient, ePS Network Services present all of the operating controller's functions online to service personnel through the eP-Access service as if they were working right at the machine. This means that you can radically cut the need for expensive on-site work by specialists.

An attractively priced platform for efficient data management and global communications

ePS from Siemens means powerful and reliable IT infrastructures for your business success. Services, including functional expansions, are operated centrally on the ePS servers. There is hardly any strain on machine controllers thanks to the innovative, Internet-based information and communications architecture.

Service parameters can be set from any standard PC with a web browser and Internet connection to the ePS servers. The machines can be cyclically synchronized to the ePS servers and import the changed service parameters from there. Another main feature of ePS Network Services is the collection, processing, compression and archiving of specific data from the machine controller. High-performance servers and storage media make it all possible. You can even connect to e-mail and SMS systems through Siemens rather than through the machine operator.

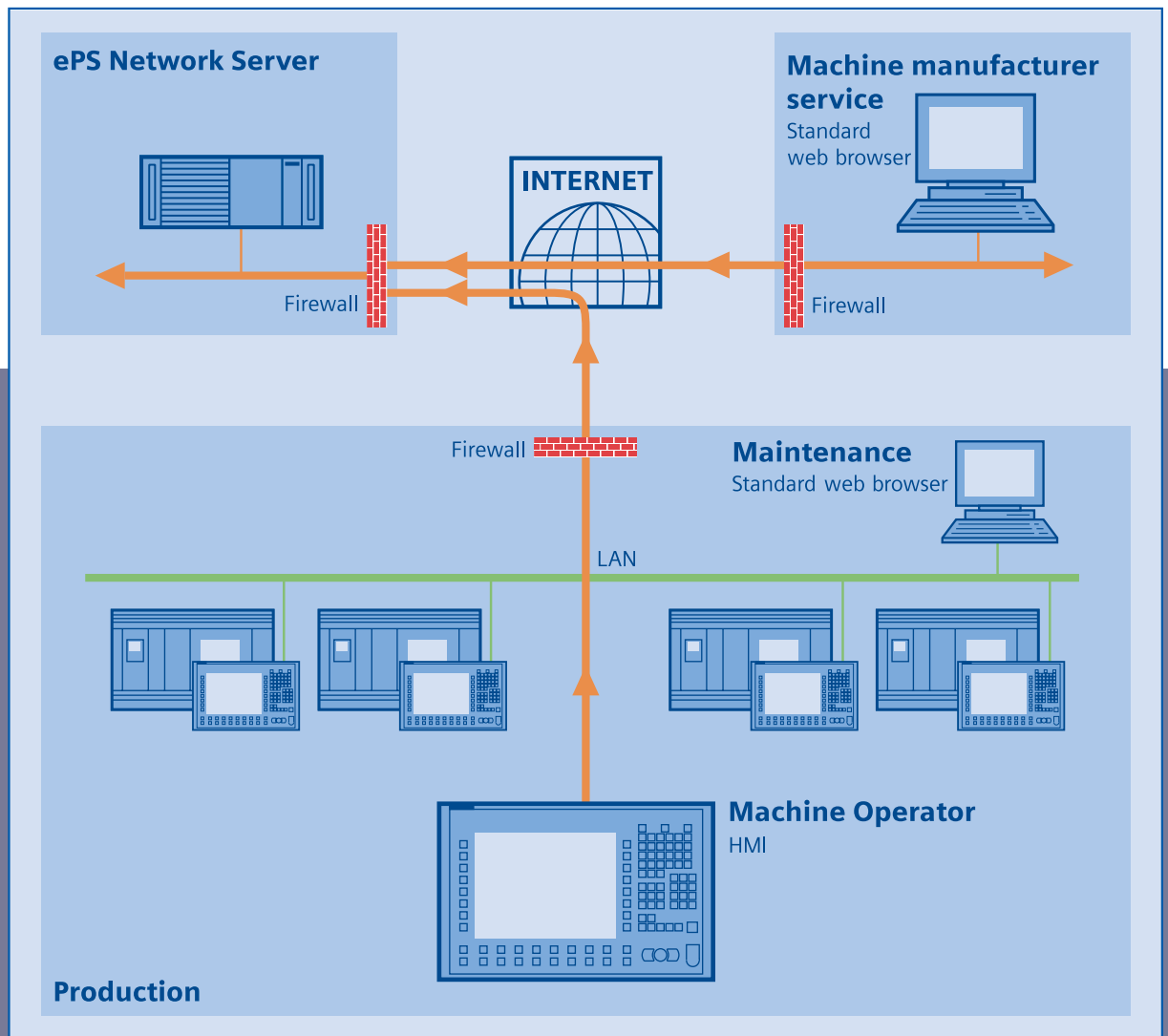
ePS Network Services can be implemented into your business environment without additional hardware and software investments. The scope of the services can be scaled to size over the machine's life cycle according to your needs and circumstances.


Data security comes first

Comprehensive measures guarantee maximum data security at all times:

- Robust firewalls protect the ePS Network server
- Virus protection is installed on all servers with automatic virus pattern updates
- Secure backups with repeated internal recovery tests are performed
- Constant (24/7) monitoring of the redundant server systems
- Regular performance of security audits
- State-of-the-art system adaptation

You retain sole control over the administration of your users and machines. Only authorized service personnel or administrators from your service organization decide who can access various services and the corresponding data. Web-based architecture and communications provide maximum security. For example, the ePS servers will never act on their own. This means that it is impossible to misuse ePS Network Services to gain unauthorized network access from the outside. The overall concept consists of a chain of individual measures, which provide an extremely high level of security for the availability of services, for remote machine operation and data protection.



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