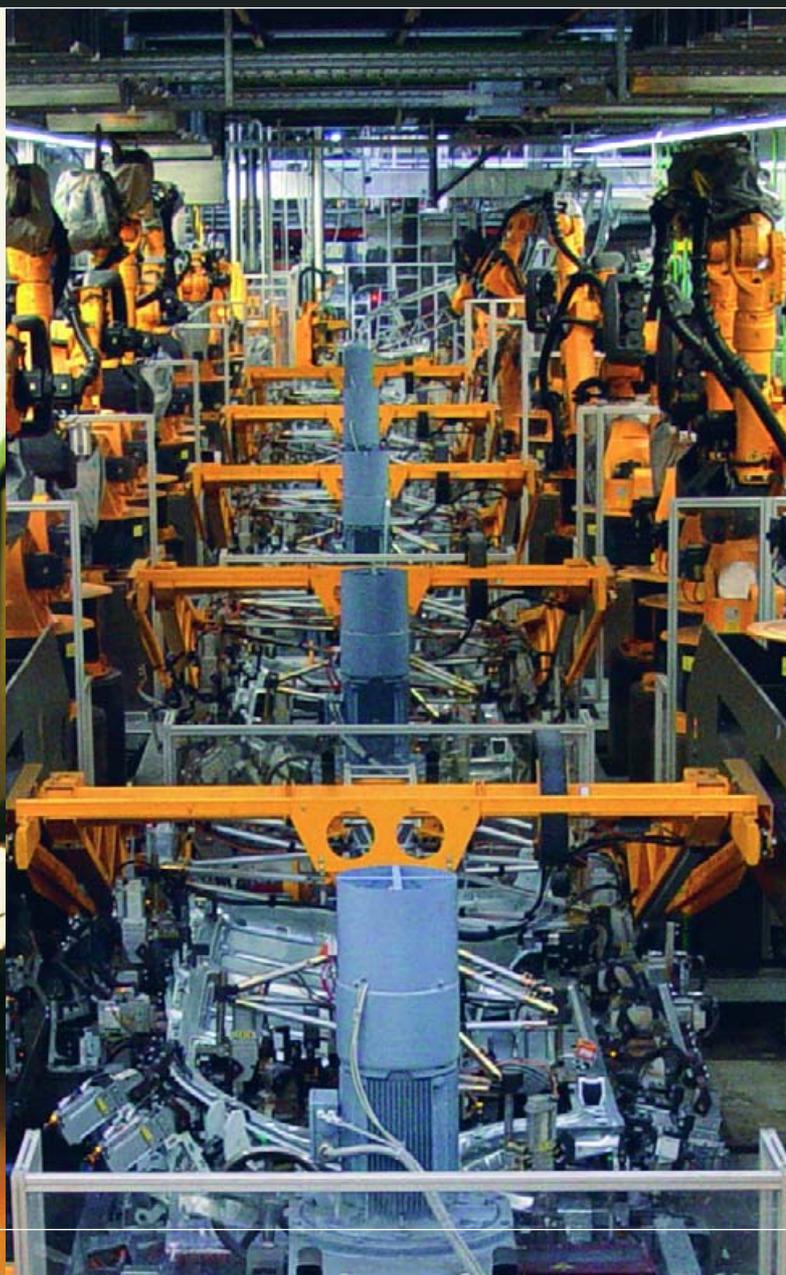


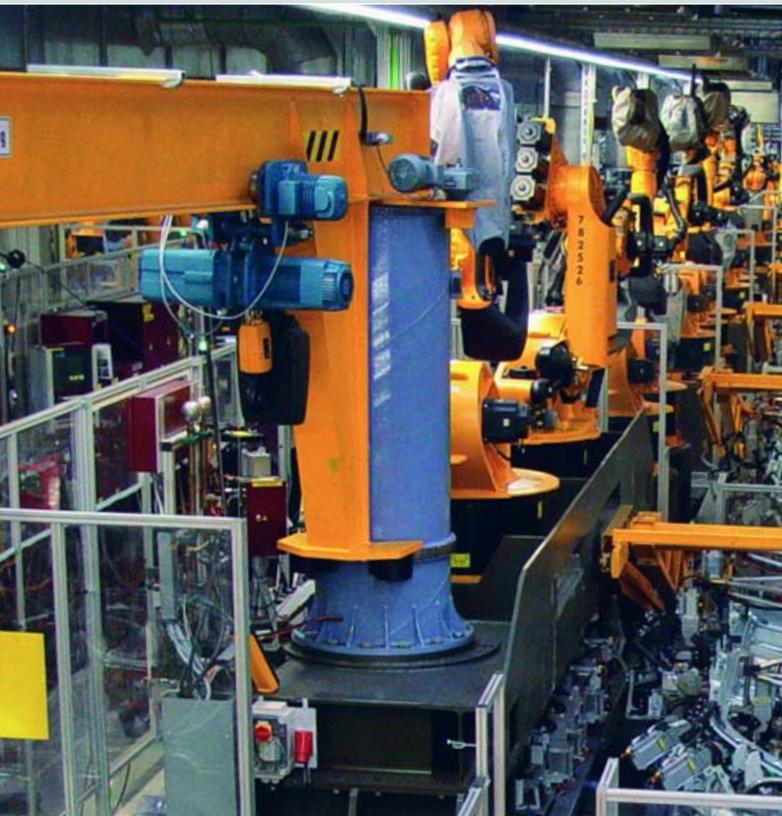
Systematic solutions for centralized and decentralized drive engineering:
Versatile, cost-effective and simple to install

Remote Maintenance Concepts for Drives



Investment for the future with reliable and cost-effective systems

The development of decentralized drive systems was a milestone for modern automation technology in the same way as the introduction of fieldbus systems. However, continuous improvements in the performance and flexibility of today's system and drive concepts mean that the demands on startup and diagnostics concepts are also becoming more exacting.



Reliability is never an issue for system operators that use remote maintenance concepts from SEW-EURODRIVE. The sophisticated remote maintenance solutions are adapted to individual system profiles and are fully compatible with all drive components from SEW-EURODRIVE. As such, the solutions ensure a high degree of reliability in daily operations.

Thanks to intelligent networking of individual units and consistent integration of the drive engineering components in a standard diagnostics architecture, SEW-EURODRIVE can also offer complete solutions for remote maintenance and diagnostics in innovative drive concepts.

Driving the world – with innovative drive solutions for all branches of industry and for every application. Products and systems from SEW-EURODRIVE for any application – worldwide. SEW-EURODRIVE products can be found in a variety of industries, e. g. automotive, building materials, food and beverage as well as metal-processing. The decision to use drive technology “made by SEW-EURODRIVE“ stands for safety regarding functionality and investment.



The more efficient alternative

Whenever system designers or operators choose system solutions from SEW-EURODRIVE, they not only reduce the number of components required, they also save valuable installation space and have the option of retrofitting their systems

quickly and cost-effectively. The system's modular design in accordance with the modular principle ensures that all mechanical and electronics components can be replaced and adapted as required without any problems.

Maximum system reliability at all operating levels

To prevent faults, and the associated production downtimes, SEW-EURODRIVE offers a range of effective solutions for the remote maintenance of drive components. A constant comparison of the actual and setpoint values means that a lot of faults can be detected before they cause costly damage. Regardless of whether the remote maintenance system from SEW-EURODRIVE is to be integrated by the designers in the planning phase, or whether the components are to be retrofitted in an existing system, the simple im-

plementation of the entire concept sets standards in the area of automation.

Faults can be detected quickly and reliably even over long distances using the diagnostics interfaces integrated in the drive electronics in combination with user-friendly software tools. Service engineers do not have to be on-site to perform the fault analysis. They can take all the steps to arrange the elimination of the error from wherever they are.

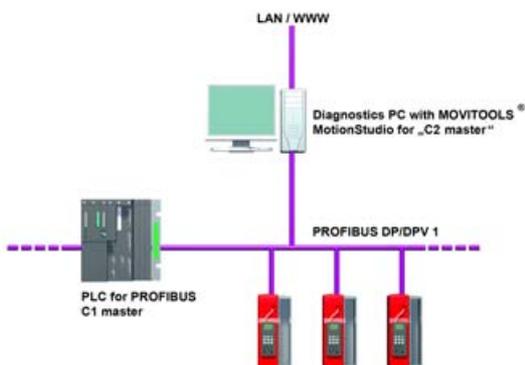


With remote maintenance concepts from SEW-EURODRIVE you can check operating conditions, reduce downtimes and ensure the best possible system reliability in daily operation.



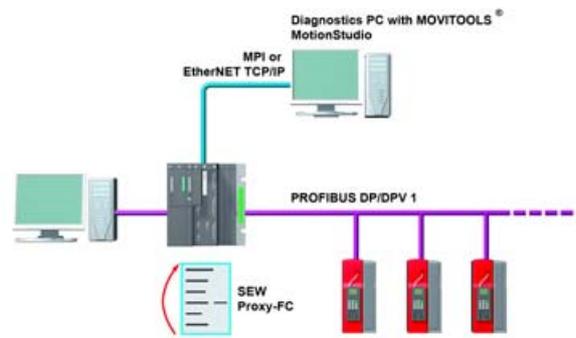
Designed to suit all requirements

Thanks to their extremely high level of flexibility, the remote maintenance systems of SEW-EURODRIVE can be adapted to suit any system requirements. The systems allow for maintenance and diagnostics independent of the location or time. This means for users that they can perform data backup, restore data, track a status, or diagnose errors as well as set parameters or change existing parameter settings.



Remote maintenance via PROFIBUS DPV1 C2 master (system)

Access to the diagnostics interface via the PROFIBUS C2 master makes for fast access to all the data and parameters of the drive engineering components – regardless of the PROFIBUS master installed. In this way, the MOVITOOLS® MotionStudio software can be used to perform diagnostics and startup directly from the PC. (The diagnostics PC has to meet the necessary hardware requirements to operate as C2 master).

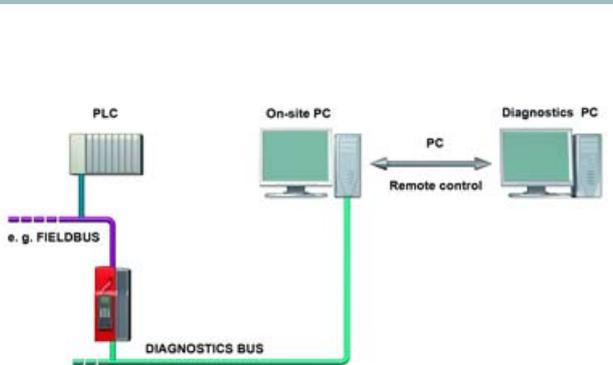


Remote diagnostics via MPI, ETHERNET or PROFIBUS connection (system, LAN)

The maintenance and remote maintenance concept via PROFIBUS and MPI or ETHERNET connection to the PLC is a reliable and user-friendly system solution from SEW-EURODRIVE characterized by a very transparent design. The SEW-EURODRIVE drives connected to the PROFIBUS can be accessed via the Siemens-PLC using the MOVITOOLS® MotionStudio diagnostics software. SEW-EURODRIVE offers software modules for controlling SIMATIC S7. These modules have to be integrated into the control program. The unit can then be diagnosed via teleservice adapter (modem) or ETHERNET.

There are a number of variants to choose from, depending on the requirements that have to be met for operating the relevant automation system. Three remote maintenance levels are available:

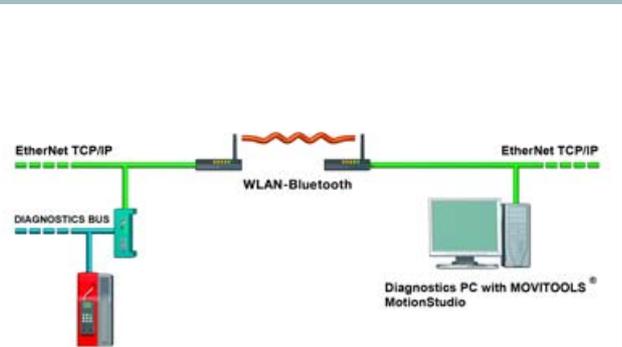
- Diagnostics via operation terminals or a PC in the direct vicinity of the system (system)
- Remote diagnostics via the internal company ETHERNET network (LAN)
- Remote maintenance from anywhere in the world (WW)



Remote diagnostics via SEW communication server (SECOS) or PC remote operation (LAN, WW)

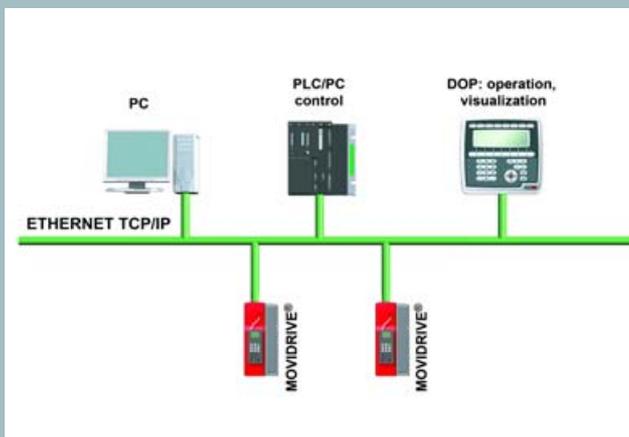
This remote maintenance solution makes a variety of individual applications possible thanks to its flexibility. The “on-site diagnostics PC” connected to the internal company ETHERNET-LAN or the telephone network is always connected to a diagnostics interface of the SEW drives.

Another diagnostics PC can access the “on-site diagnostics PC” from anywhere in the company’s internal LAN or from anywhere in the world, for example via modem. The operator can then operate the on-site diagnostics PC remotely or use it as a gateway to the SEW-EURODRIVE drives. The SEW communication server (SECOS) is part of the MOVITOOLS® MotionStudio.



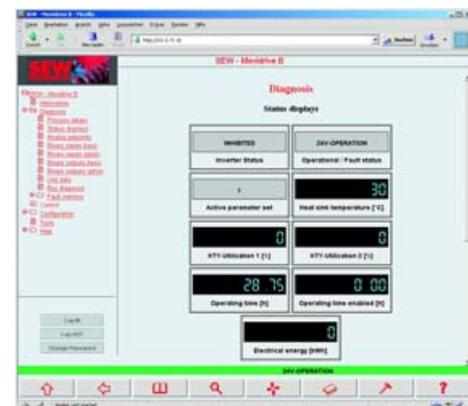
Remote maintenance with a COM server via ETHERNET (LAN, WW)

If it is not possible to use an “on-site PC” or you do not want to use one, a COM server (such as drive operator panel DOP11B) can be used as an alternative to perform remote diagnostics via the internal company LAN. The diagnostics PC can be located anywhere in the company where there is access to a TCP/IP connection. The advantage of this system is the option to monitor and service several systems centrally at the same time. The MOVITOOLS® MotionStudio software from SEW-EURODRIVE is also used with this option and offers the same range of functions as a diagnostics interface located directly on the drive. As standard TCP/IP functions are used, it is possible to perform remote diagnostics from anywhere in the world across the borders of the internal company LAN, for example, by means of DSL or dial-in connections.



Remote maintenance via TCP/IP (LAN, WW)

Diagnostic access via ETHERNET allows for quickly accessing all necessary drive technology data and parameters. Diagnostics and startup can be performed directly with a PC on site using the MOVITOOLS® MotionStudio software. The drives must be equipped with an ETHERNET interface type DFE11 / 12 / or 13B for this purpose.



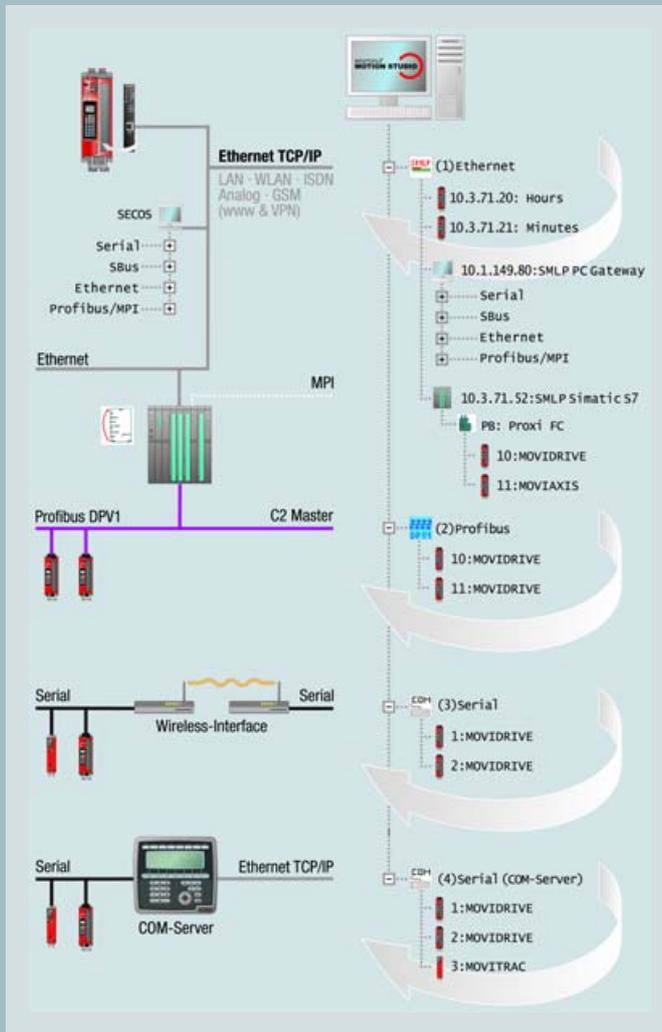
Remote diagnostics via Internet (LAN, WW)

Drives from SEW-EURODRIVE that are equipped with an industrial ETHERNET interface, such as ProfiNet, EtherNet/IP or Modbus TCP, have an integrated WEB server like the drive operator panels from SEW-EURODRIVE. This WEB server enables simple diagnostics access using standard programs such as the Internet Explorer or Netscape Navigator. No special programs or in-depth knowledge are required to monitor the system status from anywhere in the Intranet or, if required, the Internet.

Integrated intelligence included

Software solutions tailored to meet the specific requirements of individual system profiles are needed to control and monitor a complete mechatronics concept effectively for today's drive engineering components. The MOVITOOLS®

MotionStudio from SEW-EURODRIVE is a universal software package developed for remote maintenance and diagnostics. It is characterized by a number of user-friendly features.



MOVITOOLS® MotionStudio is:

- Fully compatible with the entire range of drive engineering components from SEW-EURODRIVE
- Reliable and user-friendly
- Available free of charge
- Ideal for control, parameter setting and data backup



The MOVITOOLS® MotionStudio together with the matching drive engineering from SEW-EURODRIVE offer the ideal concept for remote maintenance and diagnostics in complex automation systems.

How we're driving the world

With people who think fast and develop the future with you.

With a worldwide service network that is always close at hand.

With drives and controls that automatically improve your productivity.

With comprehensive knowledge in virtually every branch of industry today.

With uncompromising quality that reduces the cost and complexity of daily operations.



SEW-EURODRIVE
Driving the world

With a global presence that offers responsive and reliable solutions. Anywhere.

With innovative technology that solves tomorrow's problems today.

With online information and software updates, via the Internet, available around the clock.

SEW-EURODRIVE is right there for you:

Argentina

Phone +54 3327 4572-84
Fax +54 3327 4572-21
sewar@sew-eurodrive.com.ar

Australia

Phone +61 3 9933-1000
Fax +61 3 9933-1003
enquires@sew-eurodrive.com.au

Austria

Phone +43 1 617 55 00-0
Fax +43 1 617 55 00-30
sew@sew-eurodrive.at

Belgium

Phone +32 10 231-311
Fax +32 10 231-336
info@sew.be

Brazil

Phone +55 11 6489-9133
Fax +55 11 6480-3328
sew@sew.com.br

Canada

Phone +1 905 791-1553
Fax +1 905 791-2999
l.reynolds@sew-eurodrive.ca

Chile

Phone +56 2 75770-00
Fax +56 2 75770-01
ventas@sew-eurodrive.cl

China

Phone +86 22 25322612
Fax +86 22 25322611
gm-tianjin@sew-eurodrive.cn

Colombia

Phone +57 1 54750-50
Fax +57 1 54750-44
sewcol@sew-eurodrive.com.co

Czech Republic

Phone +420 220121234
Fax +420 220121237
sew@sew-eurodrive.cz

Denmark

Phone +45 43 9585-00
Fax +45 43 9585-09
sew@sew-eurodrive.dk

Finland

Phone +358 201 589 300
Fax +358 3 7806-211
sew@sew.fi

France

Phone +33 3 88 73 67 00
Fax +33 3 88 73 66 00
sew@usocome.com

Great Britain

Phone +44 1924 893-855
Fax +44 1924 893-702
info@sew-eurodrive.co.uk

Hong Kong

Phone +852 2 7960477
Fax +852 2 7959129
sew@sewhk.com

Hungary

Phone +36 1 437 06-58
Fax +36 1 437 06-50
office@sew-eurodrive.hu

India

Phone +91 265 2831086
Fax +91 265 2831087
mdoffice@seweurodriveindia.com

Italy

Phone +39 02 96 9801
Fax +39 02 96 799781
sewit@sew-eurodrive.it

Japan

Phone +81 538 373811
Fax +81 538 373814
sewjapan@sew-eurodrive.co.jp

Malaysia

Phone +60 7 3549409
Fax +60 7 3541404
sales@sew-eurodrive.com.my

Mexico

Phone +52 442 1030-300
Fax +52 442 1030-301
scmexico@seweurodrive.com.mx

Netherlands

Phone +31 10 4463-700
Fax +31 10 4155-552
info@vector.nu

New Zealand

Phone +64 9 2745627
Fax +64 9 2740165
sales@sew-eurodrive.co.nz

Norway

Phone +47 69 241-020
Fax +47 69 241-040
sew@sew-eurodrive.no

Peru

Phone +51 1 3495280
Fax +51 1 3493002
sewperu@sew-eurodrive.com.pe

Poland

Phone +48 42 67710-90
Fax +48 42 67710-99
sew@sew-eurodrive.pl

Portugal

Phone +351 231 20 9670
Fax +351 231 20 3685
infosew@sew-eurodrive.pt

Russia

Phone +7 812 3332522
Fax +7 812 3332523
sew@sew-eurodrive.ru

Singapore

Phone +65 68621701
Fax +65 68612827
sewsingapore@sew-eurodrive.com

Slovakia

Phone +421 2 49595201
Fax +421 2 49595200
sew@sew-eurodrive.sk

South Africa

Phone +27 11 248-7000
Fax +27 11 494-3104
dross@sew.co.za

South Korea

Phone +82 31 492-8051
Fax +82 31 492-8056
master@sew-korea.co.kr

Spain

Phone +34 9 4431 84-70
Fax +34 9 4431 84-71
sew.spain@sew-eurodrive.es

Sweden

Phone +46 36 3442-00
Fax +46 36 3442-80
info@sew-eurodrive.se

Switzerland

Phone +41 61 41717-17
Fax +41 61 41717-00
info@imhof-sew.ch

Thailand

Phone +66 38 454281
Fax +66 38 454288
sewthailand@sew-eurodrive.com

Turkey

Phone +90 216 4419163
Fax +90 216 3055867
sew@sew-eurodrive.com.tr

Ukraine

Phone +380 56 3703211
Fax +380 56 3722078
sew@sew-eurodrive.ua

USA

Phone +1 864 439-7537
Fax +1 864 439-0566
cslyman@seweurodrive.com

Venezuela

Phone +58 241 832-9804
Fax +58 241 838-6275
sewventas@cantv.net

**SEW
EURODRIVE**

SEW-EURODRIVE GmbH & Co KG
P.O.Box 30 23
D-76642 Bruchsal/Germany
Phone +49 7251 75-0
Fax +49 7251 75-1970
sew@sew-eurodrive.com

→ www.sew-eurodrive.com