



DEPRAG Apps

Software Solutions and Updates



Contents

| | |
|---|-----------|
| DEPRAG Cockpit the Digital Platform for Screwdriving Technology | 5 |
| DEPRAG Cockpit – Summary | 6 |
| The software packages and their features / Part numbers | 7 |
| Software Solutions for Screwdriving System DEPRAG Plus with sequence controller AST12 as well as for the Sequence Controllers AST5-S/AST40 | 8 |
| Possible combinations with AST controllers | 8 |
| Interface Graph Loader | 9 |
| Datalogger | 9 |
| Statistics | 9 |
| ASTxx Serial Remote | 9 |
| DEPRAG Clamp Force Control | 10 |
| DEPRAG Friction Value Process | 10 |
| DCON DEPRAG CONnect | 10 |
| DEPRAG Smart | 10 |
| DEPRAG Graph Viewer for evaluation of screwdriving curves | 10 |
| DEPRAG Data eXchange | 11 |
| TIA Link / TwinCAT Link | 11 |
| Visualisation of the Process | 11 |
| DEPRAG Cockpit | 11 |
| DEPRAG Operator Guidance | 12 |
| Safety & Change Tracking | 12 |
| DEPRAG Universal Robots Link | 12 |
| Open Protocol | 12 |
| Process Control | 12 |
| Allen-Bradley Link | 12 |
| AST12 Industry 4.0 Interfaces | 12 |
| DEPRAG iSERVE for the independent parameterisation of screwdriving programs | 13 |
| DEPRAG GraphViewer Cloud | 14 |
| Software Solutions for MINIMAT-ED Digital Electric Screwdriver, handheld | 16 |
| ComCenter ED for MINIMAT-ED digital electric screwdriver, handheld | 16 |
| Software Solutions for MINIMAT-ED Digital Electric Screwdriver, stationary | 17 |
| Interface 330E for MINIMAT-ED digital electric screwdriver, stationary | 17 |
| Software Solutions for MINIMAT-EDS Digital Electric Screwdriver, stationary | 18 |
| Possible combinations with MINIMAT-EDS, the digital electric screwdriver, stationary | 18 |
| Software Solutions for ADAPTIVE DFS DEPRAG FASTENING SYSTEM | 19 |
| Possible combinations with ADAPTIVE DFS, the DEPRAG FASTENING SYSTEM | 19 |
| DEPRAG Graph Viewer for evaluation of screwdriving curves | 20 |
| ADFS Threaded Fastener | 20 |
| ADFS Calibration | 20 |
| DEPRAG Data eXchange | 20 |
| ADAPTIVE DFS Two Step Penetration | 20 |
| ADAPTIVE DFS MQTT | 21 |
| ADAPTIVE DFS Synoptic | 21 |
| ADAPTIVE DFS Adaptive Tightening | 21 |
| ADAPTIVE DFS Clamp Force Control | 21 |
| ADAPTIVE DFS OS BASIC | 21 |

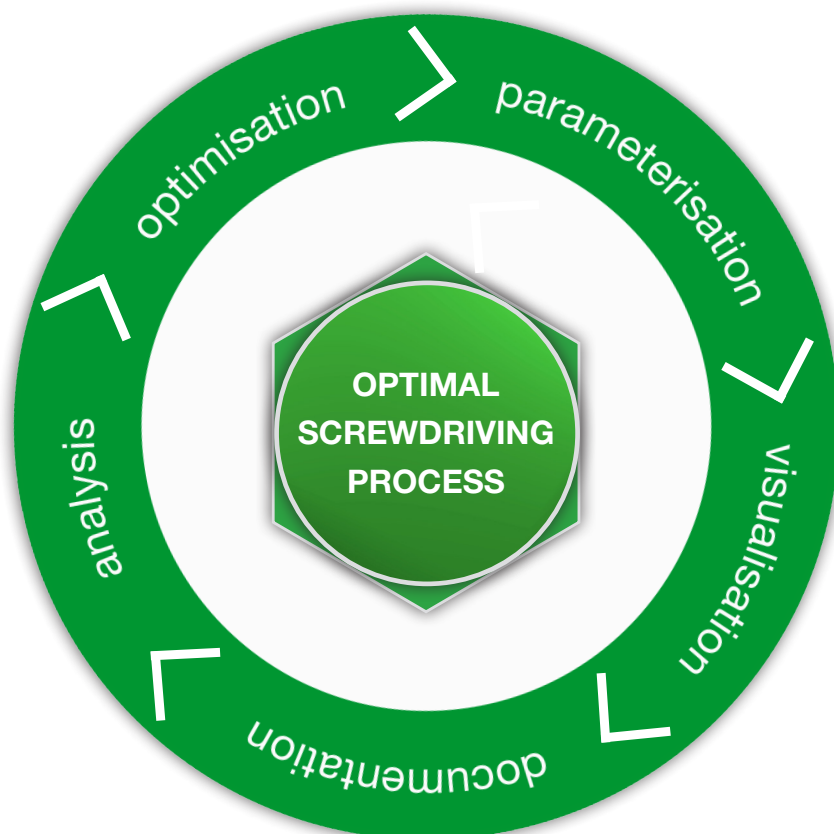
Contents

| | |
|--|-----------------|
| Software Solutions for Position Control Stand PKS | 22/23 |
| DEPRAG Cockpit | 22 |
| TIA Link | 23 |
| TwinCAT Link | 23 |
| Scanner | 22 |
| Update PKS | 22 |
| PKS Simulation | 22 |
| Extended Process Control | 23 |
| Industry 4.0 Interfaces | 23 |
| Safety & Change Tracking | 23 |
| Software Solutions for Screwdriver Function Module with electronic stroke (E-SFM) | 24 |
| E-SFM Manager | 24 |
| Software Solutions for DEPRAG Feeding Technology | 25 |
| PFC100 Manager | 25 |
| Software Solutions for DEPRAG Automation | 27 |
| Software packages for DCOS processing and system controllers | 27 |
| Software Updates | 28 |
| Process description for a software update | 29 |
| Part number index | 30/31/32 |
| Categories of our software products | 32 |
| Activation of software products via the myDEPRAG customer portal | 33 |
| Activation of software products via the back office | 33 |

DEPRAG Cockpit Software for the Networked Factory!

Advantages

- Data supply via OPC UA
- Central platform for screwdriving and assembly technology
- Reliable processing data acquisition
- Detailed capacity and usage statistics
- Process monitoring and notifications
- Analysis and recognition of trends from system messages



DEPRAG Cockpit

the Digital Platform for Screwdriving Technology

Software to reduce costs and save time through the ...



of your process.

Parameterisation

- Central platform
 - One software for a wide range of hardware
 - Web-based solution → worldwide availability
 - Device specific documentation: Central management of documents, e.g. operating manuals, factory certificates, machine capability study certificates,...
 - Automatic reminder function, e.g. for alignment or maintenance → Minimising downtime, increasing processing reliability, increasing system availability, raising productivity levels, planning convenient maintenance schedules

Visualisation

- Top processing reliability (OK/NOT OK feedback)
- Fast error analysis
- Minimal training requirements
- Error avoidance
- Quality assurance

Documentation

- Automatic processing data acquisition → eliminates time-consuming manual data collection
- Minimises complaints and product recalls
- Prepares all processing data for analysis as Big Data → eliminates manual marrying of different data sets

Analysis

- User-oriented, individualised and clear display of processing data
- Development of expertise
- Quick detection of NOT OK processes
- Analysis of trends

Optimisation

- Detection of optimisation potentials, such as cycle time, capacity, standstill, improved quality of the process

DEPRAG Cockpit – Summary

- Continuous processing optimisation
- Maximum availability due to analysis of trends and detection of anomalies
- Entire process and device documentation in one place – available worldwide
- Ultimate cost savings due to recognition of potentials and early detection of possible problems
- Intelligent software: 80 % data saving
- Responsive design
- Integration of multi-brand products



DEPRAG Cockpit

As part of the screwdriving system DEPRAG Plus you also receive in the DEPRAG Cockpit Basic **your central user interface** in responsive design

- for parameterisation

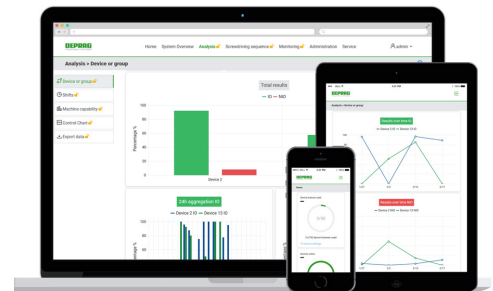
- administration of global settings
- creation and organisation of screwdriving programs
- activation of additional features under DEPRAG Apps
- creation of back-ups and logic functions

- for visualisation

- processing data acquisition for single user

- for documentation

- automatic processing data acquisition of end values and screwdriving curves



Organizer

Organize screwdriving programs > create program groups:

- Simple structuring of screwdriving programs according to component version or product
- Fast change of screwdriving programs for different product versions > saves assembly time
- Easy retrieval of screwdriving programs relating to a specific product

Back-up function

Convenient back-up of system settings, screwdriving parameters, screwdriving results and screwdriving curves

We now have the software packages Professional and Advanced available to augment the software package Cockpit Basic.

The OPC UA interface is available in all versions of Cockpit Advanced and Professional.

The software is available as a download. To activate this software, proceed as described on page 33.

Demo version to test the DEPRAG Cockpit Professional free of charge:

You can try the DEPRAG Cockpit Professional version free of charge for 30 days.
The licence is valid for 10 devices.

30 days demo version
activation key no.164785

New free of charge software Cockpit Programming Samples

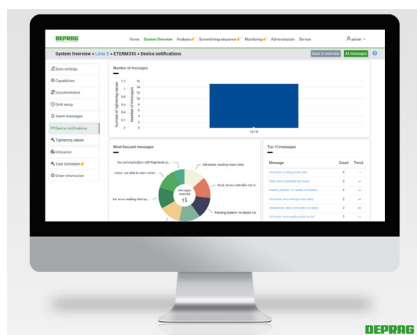
The software contains quick start projects for the programmer of Beckhoff TwinCat and Siemens TIA environments. A demo procedure indicates how order information is transferred from a PLC to the DEPRAG Cockpit. These demos can be integrated quickly and simply in the PLC.

Cockpit Programming
Samples no. 166217

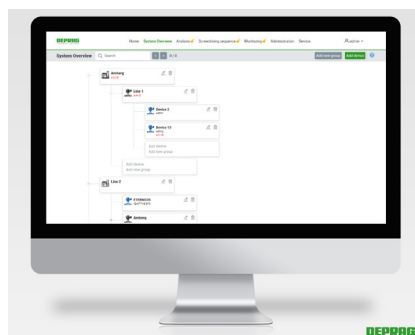
To establish a connection to the DEPRAG Cockpit, the following parameters must be entered:

Server address, authentication, serial number, part serial number, product number

After the order information has been transmitted, the DEPRAG Cockpit links all screwdriving results with the transferred product or serial numbers. At the same time, the screwdriving results are stored in a drive and, depending on configuration, grouped according to serial numbers.



visualisation



documentation



optimisation

The software packages and their features

| Basic 1 license | Advanced 1, 5, 10, 20, 50 licenses | Professional 1, 5, 10, 20, 50 licenses |
|--|--|---|
| PARAMETERISATION <ul style="list-style-type: none"> Web-based parameterisation interface in responsive design Management of global settings Creation and organisation of screwdriving programs Activation of screwdriving strategies and Industry 4.0 interfaces Creation of backups | PARAMETERISATION <ul style="list-style-type: none"> Basic features Preventive maintenance: reminder function for realignment / maintenance or other tasks relating to your screwdriving tools Central management of documents, e.g. machine capability certificates, factory certificates, repair reports, operating manuals | PARAMETERISATION <ul style="list-style-type: none"> Basic features Central creation and parameterisation of screwdriving programs for all devices logged in |
| VISUALISATION <ul style="list-style-type: none"> Intuitive processing data display | VISUALISATION <ul style="list-style-type: none"> Basic features System overview: Structured overview of all screwdriving tools – digital twin System monitoring: automatic notification if anomalies occur with your screwdriving tools | VISUALISATION <ul style="list-style-type: none"> Basic & Advanced features Process supervision and recognition of trends: automatic messaging function if anomalies occur in your process |
| DOCUMENTATION <ul style="list-style-type: none"> Process data acquisition: automatic process data acquisition of final values and screwdriving curves | DOCUMENTATION <ul style="list-style-type: none"> Basic features Automatic process data acquisition => no need for complex manual data collection Preparation of all process data (final values + screwdriving curves) for additional analysis tools | DOCUMENTATION <ul style="list-style-type: none"> Basic & Advanced features |
| ANALYSIS <ul style="list-style-type: none"> - | ANALYSIS <ul style="list-style-type: none"> - | ANALYSIS <ul style="list-style-type: none"> User-oriented, individualised and clear display of process data => recognition of optimisation potentials such as cycle time, capacity, downtime, processing quality Fast development of expertise Fast detection of NOT OK processes Execution of machine capability studies (MFU) Analysis of shift models Creation of digital quality control charts |
| OPTIMISATION <ul style="list-style-type: none"> - | OPTIMISATION <ul style="list-style-type: none"> - | OPTIMISATION <ul style="list-style-type: none"> Predictive maintenance: The software determines the status of your screwdriving tools using various parameters and gives an early warning of potential breakdowns |

Part numbers

| DEPRAG Cockpit Activation key | Part no. | Number of licenses | Comment |
|---------------------------------|----------|--------------------|--|
| DEPRAG Cockpit Basic | 145806 | 1 | included in delivery of the screwdriving system DEPRAG Plus and pre-installed on the AST12 |
| DEPRAG Cockpit Advanced1 | 145795 | 1 | |
| DEPRAG Cockpit Advanced5 | 145796 | 5 | |
| DEPRAG Cockpit Advanced10 | 145797 | 10 | |
| DEPRAG Cockpit Advanced20 | 145798 | 20 | |
| DEPRAG Cockpit Advanced50 | 145799 | 50 | |
| DEPRAG Cockpit Professional1 | 145440 | 1 | |
| DEPRAG Cockpit Professional5 | 142967 | 5 | |
| DEPRAG Cockpit Professional10 | 142968 | 10 | |
| DEPRAG Cockpit Professional20 | 142978 | 20 | |
| DEPRAG Cockpit Professional50 | 142979 | 50 | |

Software Solutions for Screwdriving System DEPRAG Plus with sequence controller AST12 as well as for the Sequence Controllers AST5-S/AST40

Possible combinations with AST controllers

Which software is suitable for the screwdriving system?

| Hardware including software | Part no. | AST5-S | AST(i)40 |
|---------------------------------------|----------|--------|----------|
| Interface Graph Loader | 385834A | ✓ | ✓ |
| Interface Graph Loader activation key | 118742 | | |

| Software | Part no. | AST5-S | AST(i)40 | AST12 | ComCenter ED Interface 330E |
|---|--|--------|----------|--------|--------------------------------|
| Datalogger activation key | 202699 | ✓ | ✓ | ✗ | ✗ |
| Statistics activation key | 206081 | ✓ | ✓ | ✗ | ✗ |
| ASTxx Serial Remote activation key | 206565 | ✓ | ✓ | ✗ | ✗ |
| DEPRAG Clamp Force Control activation key | | ✗ | 109108 | 142961 | ✗ |
| DEPRAG Friction Value Process activation key | | 201820 | 201820 | 142959 | 201820 |
| DCON DEPRAG CONnect activation key | 136244 | ✗ | ✓ | ✓ | ✗ |
| DEPRAG Smart activation key | 190789 | ✗ | ✗ | ✓ | ✗ |
| DEPRAG Graph Viewer activation key | 128901 | ✓ | ✓ | ✓ | ✗ |
| DEPRAG Data eXchange activation key | 132680 | ✓ | ✓ | ✓ | ✗ |
| TIA Link activation key | 135839 | ✗ | ✓ | ✓ | ✗ |
| TwinCAT Link activation key | 140996 | ✗ | ✓ | ✓ | ✗ |
| DEPRAG Operator Guidance activation key | 146536 | ✓ | ✓ | ✓ | ✓ for ComCenter ED |
| Visualisation of the process activation key | 144248 | ✗ | ✗ | ✓ | ✗ |
| Safety & Change tracking activation key | 144251 | ✗ | ✗ | ✓ | ✗ |
| DEPRAG Universal Robots Link activation key | 164982 | ✗ | ✗ | ✓ | ✗ |
| DEPRAG iSERVE (software download) | 145458B/C/E/F | ✗ | ✓ | ✗ | ✗ |
| DEPRAG Cockpit Advanced 1/ 5/ 10/20/ 50 | 145795/145796/ 145797/145798/ 145799 | ✗ | ✓ | ✓ | ✓ |
| DEPRAG Cockpit Professional 1/ 5/ 10/20/ 50 | 145440/142967/ 142968/142978/ 142979 | ✗ | ✓ | ✓ | ✓ |
| Open Protocol | 178341 | ✗ | ✓ | ✗ | ✗ |
| Process Control activation key | 179966 | ✗ | ✗ | ✓ | ✗ |
| Process Control (duration 30 days) activation key | 179972 | ✗ | ✗ | ✓ | ✗ |
| Allen-Bradley Link activation key | 190928 | ✗ | ✓ | ✓ | ✗ |
| DEPRAG GraphViewer Cloud activation key | 193198 | ✓ | ✓ | ✓ | ✗ |
| AST12 Industry 4.0 interfaces activation key | 142962 | ✗ | ✗ | ✓ | ✗ |

Note: Please find details on the DEPRAG Cockpit on pages 4 to 7.

Interface Graph Loader

the hardware with installed software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5-S and AST40

Interface Graph Loader
385834A

Activation key
118742

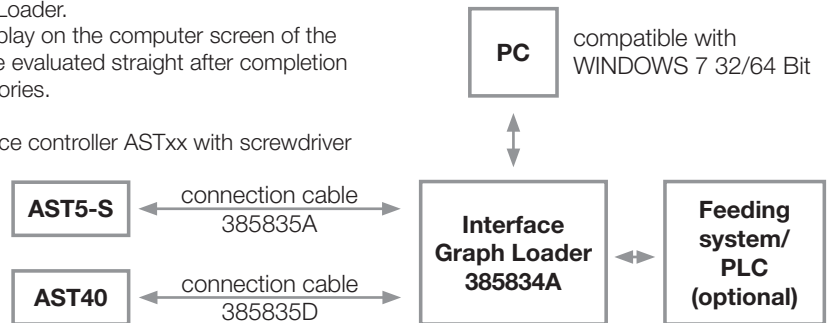
The Interface Graph Loader is an optional accessory for the automatic transfer of screwdriving curves and final value data sets from DEPRAG screwdriving controllers. The Interface can be used with EC and EC servo screwdriving systems in combination with screwdriving controllers AST5-S and AST40.

The storage of screwdriving graphs and end value data sets (e.g. torque, angle etc.) for manual work stations and screwdriving stations can be carried out automatically using the Interface Graph Loader.

The corresponding software enables immediate display on the computer screen of the current screwdriving graph, the screw assembly can be evaluated straight after completion and *.csv and *.bin files can be saved in individual directories.

The device requires a suitable adapter cable, a sequence controller ASTxx with screwdriver and a PC to save the data.

The software requires a free activation (118742).
A description of the procedure can be found on page 35.



Datalogger

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5-S and AST40

Activation key
202699

The software datalogger can be used to record and archive the final-values of up to 10 sequence controllers. This storage format corresponds with the required format of the software statistics, so that the data sets can be analyzed with the software statistics. Select whether the data is collected automatically while the program is running, or whether the data reading should be triggered manually. The connection to the controllers is done by Ethernet and TCP/IP. The software is available in the following languages: German, English, French, Italian, Spanish

To activate this pre-installed software, proceed as described on page 33.

Statistics

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5-S and AST40

Activation key
206081

The software statistics can be used to produce statistical evaluations of the screwdriving results, that are made available by the software datalogger.

When using the software statistics, we also recommend the installation of the software datalogger.

To activate this pre-installed software, proceed as described on page 33.

ASTxx Serial Remote

the software for EC- and EC-Servo screwdriving systems
in combination with the sequence controllers AST5-S and AST40

Activation key
206565

The program ASTxx Serial Remote is started on a PC and is controlled by commands over a serial interface (COM-Port). With this program, screwdriving curves and result-data can be transferred quickly and simply onto a PC. The PLC controls when and which data should be stored. The storage location (also the directory) on the PC is determined by the PLC as well. The directory is setup automatically on the PC.

To activate this pre-installed software, proceed as described on page 33.

DEPRAG Clamp Force Control

the software for screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controller AST12(*) /AST40

The adaptive screwdriving procedure DEPRAG Clamp Force Control ensures uniform output for the follow-on end tightening due to the reliable detection of the seating point. Consequently, there is a better constancy in the pre-load force. Typical application examples are direct screw assemblies in plastic or metal.

In the case of a delivery with the associated sequence controller and FAT (e.g. as part of a special machine project), the parameters are set either with application-independent standard parameters or in this case (e.g. by performing a screwdriving analysis) based on the specifications for the differential torque.

The software is already pre-installed on your hardware (e.g. sequence controller, position control stand). Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

Single license
activation key
109108 / 142961 (*)

5 licenses
171939 / 171966 (*)

10 licenses
171941 / 172017 (*)

20 licenses
171961 / 172019 (*)

50 licenses
171964 / 172022 (*)

DEPRAG Friction Value Process

the software for screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers AST5-S/AST12(*) and AST40

With the friction-value process, it is possible to measure and compensate varying friction-values (e.g. on self-forming screw-joints). Additionally, this procedure can be used for monitoring of predetermined friction values at verification processes.

In the case of a delivery with the associated sequence controller and FAT (e.g. as part of a special machine project), the parameters are set either with application-independent standard parameters or in this case (e.g. by performing a screwdriving analysis) based on the specifications for the friction torque.

The software is already pre-installed on your hardware (e.g. sequence controller, position control stand). Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

Single license
activation key
201820 / 142959 (*)

5 licenses
172193 / 172231 (*)

10 licenses
172194 / 172257 (*)

20 licenses
172209 / 172276 (*)

50 licenses
172229 / 172286 (*)

DCON DEPRAG CONnect

the software for the screwdriving system DEPRAG Plus in combination with the sequence controller AST12 and for the sequence controller AST(i)40

DEPRAG Connect is the software for PLC programmers who program using Beckhoff TwinCAT and DEPRAG end devices. The software product provides a simple, fast connection of DEPRAG devices in the programming environment. Time-consuming and error-prone individual programming and parameterisation is a thing of the past. Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

Activation key
136244

DEPRAG Smart

the software for the screwdriving system DEPRAG Plus in combination with the sequence controller AST12

DEPRAG Smart supports PLC programmers by providing ready-to-use functions for a variety of tasks. It provides access to the function library in form of a OPC UA server. Through the standardised OPC UA interface, the system can communicate with many different PLCs and other customer systems, regardless of manufacturer.

As well as the actual OPC UA server, DEPRAG Smart also provides example applications and libraries for the PLC environments Beckhoff TwinCAT 3 and Siemens TIA Portal. These facilitate the commissioning of the system within just a few minutes and simplify the integration of functionalities in already existing PLC solutions. The complete range of functions can be found at smartdocu.deprag-software.com.

The software is available for operating systems from Windows 10. Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

Activation key
190789

Free trial software in
demo mode 190828

DEPRAG Graph Viewer for evaluation of screwdriving curves

the software for screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers ASTxx and ADAPTIVE DFS

During each screw assembly when using a sequence controller AST, the relevant measurement values are recorded in a file. There is the DEPRAG Graph Viewer, to simply and easily evaluate and analyse these measurement values. As well as the screwdriving curves, the processing and parameter data is also accessible. The complete process can be analysed and evaluated using a single piece of software. The process data can be printed as documentation.

The software can be downloaded via the myDEPRAG customer portal (my.deprag.com).

The software is also available as free trial software in demo mode.

Single license
activation key 128901

Upgrade to the current
software version 139522

5 licenses 172649

10 licenses 172650

20 licenses 172689

50 licenses 172713

DEPRAG Data eXchange

the software for the screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers ASTxx and ADAPTIVE DFS

Activation key
132680

AST sequence controllers and the adaptive screwdriving system ADAPTIVE DFS document relevant processing data for every screw assembly, which is then saved in an internal format. The so-called “graphic files” contain all screw curves, end values and details relating to the screwdriving process and are only readable by DEPRAG’s own software solutions.

In order to enable the use and analysis of this data in other systems, the internal format must be converted into an external format. DEPRAG Data eXchange exports the DEPRAG graphic file either as a csv or as an Excel file. This data can now be used in other software solutions. The software can be downloaded via the myDEPRAG customer portal (my.deprag.com).

TIA Link / TwinCAT Link

the software for the screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers AST12, AST40, for the position control stand and for the screwdriver function module with electronic stroke (E-SFM)

Activation key
TIA Link 135839

Activation key
TwinCAT Link 140996

TIA Link: Integration in the Siemens programming environment (Totally Integrated Automation (TIA) Portal) is required to operate DEPRAG devices with the current SIMATIC controllers.

TwinCAT Link: Integration in the Beckhoff programming environment is required to operate DEPRAG devices with the current Beckhoff controllers. This integration is quite time-consuming and requires expert domain knowledge of the DEPRAG devices. Therefore, the software TIA link and TwinCAT link have been created to enable simple integration of the following DEPRAG products: AST12, AST40 incl. i-versions, position control stand, E-SFM

The software not only includes integration for the above products but also several Quick-Start projects in the “structured text” programming language which enable immediate execution of screw assemblies without first setting up communication using the user manual. As well as the fieldbus connection, there are additional examples provided for controlling the screwdriving system.

Software TIA Link: The following SIMATIC controllers are supported: SIMATIC S7-1200, SIMATIC S7-1500 and SIMATIC ET 200SP (CPU)

Software TwinCAT Link: The following Beckhoff software systems are supported: TwinCAT 2 and TwinCAT 3

The software can be downloaded via the myDEPRAG customer portal (my.deprag.com).

Visualisation of the Process

the software for the screwdriving system DEPRAG Plus in combination with the sequence controller AST12

Activation key
144248

The user receives detailed feedback relating to the screwdriving process. There is a visualisation of relevant parameters, such as end values and error messages for each phase of the screwdriving process. The AST12 sequence controller screen can be projected onto another device, e.g. tablet, touch screen, PC screen or the AST12 display can be integrated into your HMI project. The remote function even enables external operation of your screwdriving system. The software can be downloaded via the myDEPRAG customer portal (my.deprag.com).

DEPRAG Cockpit Advanced and Professional

The sequence controllers AST12 and AST(i)40 support the connection to the DEPRAG Cockpit. Please find details on pages 4 to 7.

DEPRAG Operator Guidance

the software for the screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers AST5-S, AST12 and for the ComCenter ED

The software allows for the creation of as many digital assembly instructions as required without the need for knowledge of a high-level language. The App guides the operator step by step through the assembly process. New employees can therefore be trained up quickly and efficiently. Productivity and processing quality increase as unnecessary assembly errors are avoided.

Time and cost savings are attained due to the automatic documentation of processing data. Positioning data, screwdriving results and the component's serial number are matched together and automatically stored on the selected drive. There is also the option for automatic saving of screwdriving curves.

In user management you can determine which parameters can be created or altered and by whom.

System requirements:

Operating system: From Windows 7 (64 Bit)

The software can be downloaded via the myDEPRAG customer portal (my.deprag.com). The software is also available as free trial software in demo mode.

Single license
activation key 146536

5 licenses 172733

10 licenses 172734

20 licenses 172735

50 licenses 172736

Safety & Change Tracking

the software for the screwdriving system DEPRAG Plus in combination with the sequence controller AST12



Processing reliability and traceability – Protect your process! With this software can you track any changes made. Unauthorised alterations to the processing parameters can be traced quickly. The software can be downloaded via the myDEPRAG customer portal (my.deprag.com).

Activation key
144251

DEPRAG Universal Robots Link

the software for the screwdriving system DEPRAG Plus in combination with the sequence controller AST12

The DEPRAG Universal Robots Link is available for quick and easy integration of the DEPRAG AST12 sequence controller into the robot's program sequence. The URcap for the screwdriving system DEPRAG Plus means the system has an intuitive user interface for the whole process - from feeding to fastener assembly. The interface guarantees smooth integration of the screwdriving system.

The URcap can be downloaded from the AST12 sequence controller or from software.deprag.com. The robots of the „e-series“ generation from software version 5.9.1 or higher are supported. The software download is available from the myDEPRAG customer portal (my.deprag.com).

Activation key
164982

Open Protocol

the software for the EC-Servo screwdriving systems in combination with the sequence controllers AST40

Protocol for active efficient data exchange. The software is already pre-installed on your hardware (e.g. sequence controller, position control stand). Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

Activation key
178341

Process Control

the software for the screwdriving system DEPRAG Plus in combination with the sequence controller AST12

The process control provides a logic function which can be configured intuitively to realise simple control tasks without a higher-level controller. Ready-made function blocks such as „screw“ or basic logic functions such as „AND links“ are used.

In addition, the process control can evaluate the signals of 8 digital inputs (for example, evaluating a sensor to ascertain whether a part is present) and set 5 digital outputs (for example part locking). The sequences for the process control are configured on the AST12 website.

Available from AST12 software version 2022.09. Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

Activation key
179966

Activation key
179972 (duration 30 days)

Allen-Bradley Link

the software for the screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers AST12, AST(i)40 and for the position control stand

Integration in the programming environment “Studio 5000 Logix Designer” is required for the operation of DEPRAG devices with the current Allen-Bradley (Rockwell Automation) Logix controllers. The Allen-Bradley Link software is used for simple quick integration of the AST12, AST(i)40 controllers as well as the DEPRAG position control stand. The software contains integration in the Studio 5000 Logix Designer as well as several Quick Start projects in the “Kontaktplan” (contact plan) programming language which enable immediate screw assembly without having to spend time mastering the time-consuming communication processes using the user manual.

All Logix series controllers which are programmable with Studio 5000 Logix Designer are supported. The software is available for Windows 10 onwards. The software download is available from the myDEPRAG customer portal (my.deprag.com).

Activation key
190928

AST12 Industry 4.0 Interfaces

the software for the screwdriving system DEPRAG Plus in combination with the sequence controller AST12

OPC UA: Currently not yet available | MQTT: Protocol for active efficient data exchange (M2M)

REST: Interface for communication (M2M) | FTP: Process documentation

The software is already pre-installed on your hardware (e.g. sequence controller, position control stand). Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal.

Activation key
142962

DEPRAG iSERVE

DEPRAG iSERVE for the independent parameterisation of screwdriving programs

for sequence controller AST(i)40

DEPRAG iSERVE is available as a cloud application on the myDEPRAG customer portal and enables the creation and optimisation of screwdriving programs, without the need to be in the same physical location as the controller and screwdriving tool. This means that from one central location, screwdriving programs can be configured, analysed and, after completion, made available to all decentralised users for transfer to their screwdriving systems (24/7, worldwide).

A licence is needed to save program packages created with DEPRAG iSERVE. There are various options available for a usage period of 12 months:

up to 50 storage spaces
part no. 145458E

up to 100 storage spaces
part no. 145458F

up to 250 storage spaces
part no. 145458B

up to 500 storage spaces
part no. 145458C

DEPRAG iSERVE quick guide:

1. Select the required screwdriving system
2. Create new program package or open/upload existing package
3. Save the newly created or edited program package in the customer portal
4. Download the program package from the customer portal and transfer to the screwdriving controller

DEPRAG Cloud Solutions

the web-based applications



DEPRAG GraphViewer Cloud

the web-based application for the visualisation of screwdriving curves
the software for the screwdriving system DEPRAG Plus in combination
with the sequence controller AST12 as well as for the EC-Servo screwdriving
system in combination with the sequence controller AST5-S and for the ADAPTIVE DFS

This software allows you to analyse and optimise your tightening process.
For more information, please visit graphviewer.deprag.com.
Duration: 12 months

Activation key 193198
Duration: 12 months

DEPRAG Cloud Solutions

the web-based applications



Software Solutions for MINIMAT-ED Digital Electric Screwdriver, handheld



Possible combinations with MINIMAT-ED, the digital electric screwdriver

| Software | | MINIMAT-ED | |
|---|----------|---|--|
| | | ComCenter ED with software OS BASIC 103196A | ComCenter ED with software OS ADVANCED 103196B |
| Upgrade to software OS ADVANCED activation key | Part no. | 160491 | - |
| DEPRAG Friction Value Process activation key (details on page 11) | Part no. | - | 201820 |
| DEPRAG Operator Guidance activation key (details on page 13) | Part no. | 146536 | 146536 |

The ComCenter ED supports the connection to the DEPRAG Cockpit. Please find details on the DEPRAG Cockpit on pages 4 to 7.

ComCenter ED for MINIMAT-ED digital electric screwdriver, handheld

The ComCenter ED enables user-friendly parameterisation of screwdriving programs using the web interface. The integrated input/output port can now also be used to select MINIMAT-ED screwdriving programs. In addition, an external start release of the screwdriver is available. The main advantage: If this function is activated, the handheld screwdriver can be used in combination with other products or a higher-level PLC. This value-for-money option presents attractive opportunities. One example is combination with a position control stand (PKS). Only when the screwdriver has reached the right position is the correct screwdriving program selected and the start approval given.

Furthermore, there is the option of use in applications where sensors are used for supervision, such as in the detection of components, pick-and-place procedures or the use of a toolbox or scanner.

Your advantages:

- flexible
- low cost solution
- for varying tightening parameters
- upgraded communication

ComCenter ED
OS BASIC 103196A

ComCenter ED
OS ADVANCED 103196B

ComCenter ED – comparison of the software

| Characteristics | ComCenter ED in combination with standard software OS BASIC | ComCenter ED in combination with software OS ADVANCED |
|---|--|--|
| Maximum number of screwdriving programs | 5 tightening programs / 5 loosening programs | 16 |
| Maximum number of program steps | 3 | 25 |
| Tightening to torque | ✓ | ✓ |
| Tightening to torque with angle control | ✗ | ✓ |
| Tightening to angle | ✓ | ✓ |
| Tightening to angle with torque control | ✗ | ✓ |
| Loosening to angle | ✓ | ✓ |
| DEPRAG Friction Value Process | ✗ | ✓ |
| Search run / save values / waiting time | ✗ | ✓ |
| Statistics | ✗ | ✓ |
| Automatic speed reduction | ✗ | ✓ |
| Documentation | 7 days production | 7 days production |
| DEPRAG Operator Guidance | ✗ | ✓ |
| Communication interfaces | I/O interface | I/O interface and http interface |
| Category B (VDI/VDE 2862) | ✓ | ✓ |
| Category C (VDI/VDE 2862) | ✓ | ✓ |

Please note: In combination with OS ADVANCED, the MINIMAT-ED screwdriver requires display version 2.0. The display can be upgraded in house at DEPRAG. Please send the MINIMAT-ED screwdriver to Amberg for the update.

Software Solutions for MINIMAT-ED Digital Electric Screwdriver, stationary



Possible combinations with MINIMAT-ED, the digital electric screwdriver

| Software | | MINIMAT-ED | |
|---|----------|---|--|
| | | Interface 330E with software 330 OS BASIC 106744B | Interface 330E with software 330 OS ADVANCED 106744C |
| Upgrade to software 330 OSADVANCED activation key | Part no. | 117244 | - |
| DEPRAG Friction Value Process activation key | Part no. | - | 201820 |

The Interface 330E supports the connection to the DEPRAG Cockpit. Please find details on the DEPRAG Cockpit on pages 4 to 7.

Interface 330E with software 330 OS BASIC

the hardware with integrated software for the stationary, digital electric screwdriver MINIMAT-ED

**Interface 330E
OS BASIC 106744B**

There are five screwdriving programs (PG1 to PG5) available on the screwdriver for implementing individual screwdriving procedures; the process consists of a search run, torque, and angle screw assembly. There are also five loosening programs available (PG6 to PG10). Enhanced functionality is always available by activating software 330 OS ADVANCED.

Interface 330E with software 330 OS ADVANCED

the hardware with integrated software for the stationary, digital electric screwdriver MINIMAT-ED

**Interface 330E
OS ADVANCED 106744C**

With the software 330 OS ADVANCED the range of functions of the BASIC software and additional an extended range of functions is available:

- 15 different screwdriving programs can be stored
- Screwdriving programs can be freely compiled using the following screwdriving templates and commands:
 - assembly to torque
 - extended assembly to torque
 - assembly to angle / loosening to angle
 - DEPRAG friction value process (optional, the part no. is 201820, see page 10 for details)
 - search run / save values / waiting time
- Statistics
- Speed reduction setting
- Extended end values

Software Solutions for MINIMAT-EDS Digital Electric Screwdriver, stationary



Possible combinations with MINIMAT-EDS, the digital electric screwdriver

| Software solutions for MINIMAT-EDS, the digital electric screwdriver with integrated power electronics | | | |
|--|----------|--------|---|
| 330EDS Application Programming Interface API (activation key) | Part no. | 185130 | PLC module, Quick start - for simple integration into the Beckhoff TwinCAT III development environment. |
| DEPRAG Friction value process activation key (details page 11) | Part no. | 201820 | License for 1 screwdriving system |

The MINIMAT EDS screwdriver supports the connection to the DEPRAG Cockpit Professional. Please find details on the DEPRAG Cockpit on pages 4 to 7.

330EDS Application Programming Interface API

the software for the stationary, digital electric screwdriver MINIMAT-EDS

Activation key
185130

The Quick start application enables the screwdriving system to be commissioned and tested quickly and easily. By accessing the Application Programming Interface (API) of the PLC module, selected functions can be used without programming knowledge. This supports initial commissioning, diagnostics during servicing and product presentations.



Software Solutions for ADAPTIVE DFS DEPRAG FASTENING SYSTEM

Possible combinations with ADAPTIVE DFS, the DEPRAG FASTENING SYSTEM

Which software is suitable for the screwdriving system?

| Software | Part no. | ADAPTIVE DFS Generation 5 |
|--|----------|------------------------------|
| DEPRAG Graph Viewer activation key | 128901 | ✓ |
| ADFS Threaded Fastener activation key | 111914 | ✓ |
| ADFS Calibration, annual license, activation key | 135894 | ✓ |
| DEPRAG Data eXchange activation key | 132680 | ✓ |
| ADAPTIVE DFS Two Step Penetration activation key | 138918 | ✓ |
| ADAPTIVE DFS MQTT activation key | 138445 | ✓ |
| ADAPTIVE DFS Synoptic activation key | 185355 | ✓ |
| ADAPTIVE DFS Adaptive Tightening activation key | 185356 | ✓ |
| ADAPTIVE DFS Clamp Force Control activation key | 185129 | ✓ |
| ADAPTIVE DFS OS BASIC activation key | 160639 | ✓ |
| DEPRAG GraphViewer Cloud activation key | 193198 | ✓ |

DEPRAG Graph Viewer for evaluation of screwdriving curves

the software for screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers ASTxx and ADAPTIVE DFS

Activation key
128901

See page 10 for details.

ADFS Threaded Fastener

the software for ADAPTIVE DFS

Activation key
111914

Process software for flow forming screws.

Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

ADFS Calibration

the software for ADAPTIVE DFS

Annual license
Activation key
135894

Software for automatic execution of necessary calibration or adjustment procedures.

The advantages of using this software:

- significant cost and time savings
- effective avoidance of errors when transferring data
- intuitive user handling
- automatic generation of calibration certificate

Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

DEPRAG Data eXchange

the software for the screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers ASTxx and ADAPTIVE DFS

Activation key
132680

See page 11 for details.

ADAPTIVE DFS Two Step Penetration

the software for ADAPTIVE DFS

Activation key
138918

This innovative screwdriving procedure provides the user with even more flexibility when it comes to parameterisation of the ADAPTIVE DFS.

After activation, the relevant parameters are displayed in the processing step "Penetration". This enables independent adjustment of the drive speed and/or feed rate.

The start and end of the ramp for the speed and/or feed rate is configured over two set positions.

Due to the unique drive concept of the ADAPTIVE DFS, the precise time that the position will be reached can be calculated in advance. Thus, ensuring that the essential parameters relating to speed and feed rate have been applied.

The new screwdriving procedure can be used in conjunction with:

- Die-cast aluminium, to optimise flow in combination with the shortest possible cycle time
- High tensile steel, to optimise the energy transfer of fasteners in the material

Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

ADAPTIVE DFS MQTT

the software for ADAPTIVE DFS

Activation key
138445

This modern industry 4.0 interface allows continuous processing parameters to be received on demand.

All process-relevant results are transmitted to an MQTT broker. Alongside the classic parameters of torque, angle and processing time, these also include a wide variety of other outputs, such as screwdriving curves.

Initial commissioning is fast and cost-effective due to the simple protocol and high reliability.

Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

ADAPTIVE DFS Synoptic

the software for ADAPTIVE DFS

Activation key
185355

The complete ADAPTIVE DFS system can be schematically displayed using the Synoptic visualisation software. When notifications relating to components appear, they can be allocated and displayed. Just click on the highlighted component for the message detail, a description of the possible causes and a suggested solution. This fast diagnosis is a significant time saver.

Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

ADAPTIVE DFS Adaptive Tightening

the software for ADAPTIVE DFS

Activation key
185356

In the new screwdriving procedure Adaptive Tightening, the shut-off torque for each assembly is individually calculated according to the threadforming torque recorded. This new procedure is therefore ideally suited to battery pack assemblies and assemblies with or without pilot hole.

Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

ADAPTIVE DFS Clamp Force Control

the software for ADAPTIVE DFS

Activation key
185129

The new screwdriving procedure Clamp Force Control enables detection of the seating point of the fastener with subsequent angle or torque assembly (difference torque). This procedure is therefore suitable for assemblies of battery packs and the installation of covers. Assembly with pilot hole using the ADAPTIVE DFS System is a prerequisite for ADAPTIVE DFS Clamp Force Control.

Activate the activation key and manage licenses effortlessly via the myDEPRAG customer portal (my.deprag.com).

ADAPTIVE DFS OS BASIC

the software for ADAPTIVE DFS

Activation key
160639

The activation includes the operating system for an ADAPTIVE DFS (DEPRAG Fastening System).

In terms of hardware, a DPUi is required. In order to operate the system, a process activation, such as these below, is additionally required:

- ADFS Threaded Fastener 111914
- ADFS Adaptive Tightening 185356
- ADFS Clamp Force Control 185129

The software download is available from the myDEPRAG customer portal (my.deprag.com). Registered users can activate the activation code and manage licences on myDEPRAG customer portal.

DEPRAG GraphViewer Cloud

the web-based application for the visualisation of screwdriving curves

Activation key 193198
Duration: 12 months

See page 14 for details.

DEPRAG Cockpit Advanced and Professional

The position control stand types with electronics support the connection to the DEPRAG Cockpit. Please find details on the DEPRAG Cockpit on pages 4 to 7.

Scanner, the software for the position control stand

- Sequence selection using a scanned code
- Automatic matching of processing data with the scanned code

The software is already pre-installed on your hardware (e.g. sequence controller, position control stand).

Registered users can activate the activation code and manage licences on myDEPRAG customer portal.

Update PKS, the software for the position control stand

You receive the latest security updates, extended functions and drivers. By keeping your software version up-to-date, you can ensure that your device is optimally prepared and protected for all the innovations relating to Industry 4.0.

The software download is available from the myDEPRAG customer portal (my.deprag.com).

Registered users can activate the activation code and manage licences on myDEPRAG customer portal.

PKS Simulation, the software for the position control stand

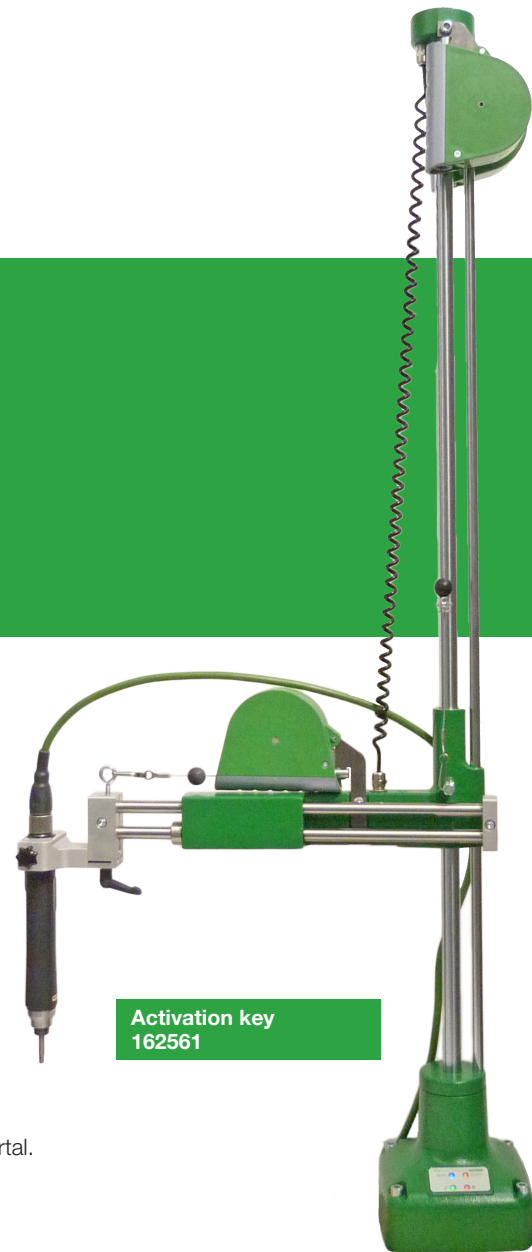
The PKS simulation software enables operation, configuration and set-up without a hardware component. This means that it is possible to create and test sequences and simulate functions in the development and process planning stages.

The PKS simulation software is available for Windows operating systems from Windows 10 and requires activation. The software download is available from the myDEPRAG customer portal (my.deprag.com). Registered users can activate the activation code and manage licences on myDEPRAG customer portal.

Allen-Bradley Link

the software for the screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers AST12, AST(i)40 and for the position control stand

See page 12 for details.



Activation key
162561

Activation key
162557

Activation key
167387

Activation key
190928

Software Solutions for Position Control Stand PKS

TIA Link

the software for the screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers AST12, AST40 and for the position control stand

See page 11 for details.

Activation key
135839

TwinCAT Link

the software for the screwdriving system DEPRAG Plus as well as EC- and EC-Servo screwdriving systems in combination with the sequence controllers AST12, AST40 and for the position control stand

See page 11 for details.

Activation key
140996

Extended Process Control, the software for the position control stand

- Documentation of screwdriving results and position in the PKS final value data set (screwdriving system DEPRAG Plus)
 - Digital operator guidance with questions and instructions
 - The use of several component images per sequence
- The software download is available from the myDEPRAG customer portal (my.deprag.com).

Activation key
162562

Industry 4.0 Interfaces, the software for the position control stand

REST: interface for communication (M2M) | MQTT: Protocol for active efficient data exchange (M2M)
FTP: Process documentation | WebSocket: interface for communication (M2M)

The software is already pre-installed on your hardware (e.g. sequence controller, position control stand). Registered users can activate the activation code and manage licences on myDEPRAG customer portal.

Activation key
162558

Safety & Change Tracking, the software for the position control stand

Process reliability and traceability – Ensure your process is secure! With this software, you can track who has changed what and when. Any unauthorised changes to the processing parameters can quickly be traced.

The software is already pre-installed on your hardware (e.g. sequence controller, position control stand). Registered users can activate the activation code and manage licences on myDEPRAG customer portal.

Activation key
162560

Software Solutions for Screwdriver Function Module with electronic stroke (E-SFM)

E-SFM Manager

the parameterisation software for screwdriver function module with electronic stroke

Activation key
192336

The E-SFM Manager is used for parameter adjustment of movement steps (sequences), as well as to save these on the E-Control.

The software download is available from the myDEPRAG customer portal (my.deprag.com).

DEPRAG E-SFM MANAGER

File Tools Info

Current position: 0.00 mm

COM1 / Connection status

Load all sequences from controller Save all sequences to controller

Teaching Status

| PARAMETER NAME | VALUE | UNIT |
|---------------------|-------|------|
| Current position | 0.00 | mm |
| Speed | 0.00 | mm/s |
| Thrust | 0.00 | |
| Target position | 0.00 | mm |
| Current step number | 0.00 | |

Sequence 1 Sequence 2 Sequence 3 Sequence 4 Sequence 5 Sequence 6

0 Return-Stroke 1 Target Position: 5.00 mm, Speed: 381.00 mm/s

1 Return-Stroke 2 Target Position: 19.28 mm, Speed: 197.00 mm/s

2 Drive-Stroke 1 Target Position: 22.49 mm, Speed: 159.00 mm/s, Pushing force: 0 N

Target position Speed Pushing force

22.49 mm 159 mm/s 0 N Show additional parameters

Teaching

Current position: 0.00 mm

Referencing run

Forward Backward

Target position

10.00 mm

Speed 15

5.00 mm/s 30.00 mm/s

Move forward Move backward

Stop

+ Load single sequence Save single sequence

DEPRAG SCHULTZ GMBH u. CO. 1.1-TP (DEMO)

Software Solutions for DEPRAG Feeding Technology



PFC100 Manager

the parameterisation software for PFC100 controllers

Activation key
122000

Read, save and transfer parameters

The PFC100 Manager facilitates the reading and saving of parameters as text files for every PFC100 controller. Saved parameters can be transferred to any PFC100 controller quickly and simply using the PFC100 Manager.

The connection cable 385520B required to connect the PC and PFC100 must be ordered separately.

The software download is available from the myDEPRAG customer portal (my.deprag.com).

Available languages: German and English

The screenshot shows the PFC100 Manager software interface. At the top, it displays 'Serial no.: 1234567'. Below this, there are several tabs: 'General Settings', 'Device-specific Settings', 'Test Settings', and 'User Times'. The 'General Settings' tab is active, showing fields for Serial number, Language (Deutsch), Backlight (on), Waveform (1), Screw presence (none), Fill level control (no), PKS (no), Software version (1.8), Password (0000), Display settings (Standard), Galvanic isolation (no), Load control (no), Value for load regulation (0), and DFM delay (0.0 s). The 'Device-specific Settings' tab shows fields for Amplitude (100), Range amplitude minimum (0), Range amplitude maximum (1000), Pulse length (rail blow-back) (0.0 s), Pause length (rail blow-back) (0.0 s), Frequency (2050), Range frequency minimum (1050), Range frequency maximum (2500), Rise time soft start (0.0 s), and EP delay timer (0.0 s). The 'Test Settings' tab shows fields for Amount of screws (0), Test mode (Rail 1 only), Pause between screws (0.0 s), and Pause after amount of screws (0.0 s). The 'User Times' tab shows fields for User (1), Minimum driver run-time (0.3 s), Load cycle start delay (0.0 s), Separator forward duration (0.1 s), Air blast extension (0.0 s), ST Max Einschaltzeit, Air-push duration (0.1 s), Air-push delay (0.0 s), Vibratory bowl run duration (0.4 s), and ST Nachlaufzeit. There are buttons for 'Upload PFC100 settings', 'Upload user settings', 'Save', and 'Close'.

Feeding systems eacy feed guarantee optimal assembly conditions with ergonomic and comfortable operation.

The controller PFC100 enables customised settings without mechanical alterations.

- clear and easy operation via controller
- option of frequency and amplitude regulation via controller
- works to the individual working rhythm of the operator, with storage of up to 10 separate data sets



Software Solutions for DEPRAG Automation

Software packages for DCOS processing and system controllers

| Intelligent software packages | | | | | | | | | |
|-------------------------------|----------|---------|----------|---------|----------|---------|----------|----------------------------------|--------------------|
| DFUN | | DVIP | | DPRO | | DAST | | DSPEC | DCON |
| | Part no. | | Part no. | | Part no. | | Part no. | | |
| DFUN10 | 815454 | | | DPRO10 | 815632 | | | Part no. based upon order. | Part no. 136244 |
| DFUN100 | 815456 | DVIP100 | 815630 | DPRO100 | 815634 | DAST100 | 815641 | | |
| DFUN200 | 815457 | DVIP200 | 815631 | DPRO200 | 815635 | DAST200 | 815642 | | |

Software packages for DCOS processing and system controllers

Intelligent software packages combined with standardised hardware based on an industrial PC allow for individual solutions customised to your application.

Perfectly coordinated interfaces between standard components and intuitive user handling guarantee superior user comfort. Our technical advisors are happy to help with configuration.

Further information can be found in the product catalogs D3390 and D3350.

DFUN – DEPRAG **FUN**ction – combines and controls all standard functions on the manual work station.

DPRO – DEPRAG **PRO**cess – process control and data processing (BDE, MDE, MES, Industry 4.0).

DVIP – DEPRAG **VI**sion and **P**osition – position control and visualisation of assembly tasks.

DAST – DEPRAG **A**blauf**ST**euering – central operation of all EC screwdriver controllers via a DCOS operating panel.

DSPEC – DEPRAG customer **SPEC**ification – the software solution customised to your application.

DCON – DEPRAG **CON**nect – Simple, fast connection of DEPRAG devices in the Beckhoff TwinCAT programming.

Supported by your DEPRAG consultant, select the modules most suitable for your purposes from our standard software packages.

Software Updates

for the screwdriving system DEPRAG Plus

| UPDATE for | | screwdriving system DEPRAG Plus |
|----------------|----------|---------------------------------|
| One-time | Part no. | 142966 |
| Annual license | Part no. | 142965 |

for AST sequence controllers

| UPDATE | for | controller | AST5-S | AST40 | ASTi40 |
|--------------------------------|-----|------------|--------|--------|--------|
| | | Part no. | 117217 | 114254 | 114261 |
| Firmware update one-time | | Part no. | - | 148168 | 166165 |
| Firmware update annual license | | Part no. | - | 148167 | 166163 |

for AST sequence controllers (no longer in the current sales program)

| UPDATE | for | controller | AST10 | AST5 | AST6 | ASTi6 | AST11 | AST30-31 |
|--------|-----|------------|--------|--------|--------|--------|--------|----------|
| | | Part no. | 117340 | 114268 | 114269 | 114270 | 114271 | 117343 |

for EC screwdriver, EC-Servo screwdriver, electric screwdriver

| UPDATE for Screwdriver | | MINIMAT-EC cordless screwdriver | NANOMAT-EC, MICROMAT-EC, MINIMAT-EC | MINIMAT-ED digital electric screwdriver | MINIMAT-ED digital electric screwdriver | MINIMAT-E | MINIMAT-EC- Servo |
|------------------------|----------|---------------------------------------|---|---|---|--------------------------|-------------------------|
| | | 318Axx-.. handheld | 320E-.. stationary | 330E36-.. stationary | 330EG36-.. handheld | 342Ex36-.. stationary | 311Exx-.. stationary |
| | Part no. | 117263 | 117238 | 117267 | 117270 | 117272 | 117273 |
| Update for handle | Part no. | - | - | - | - | - | 137484 |

for the ADAPTIVE DFS

| UPDATE for | | ADAPTIVE DFS |
|------------|----------|--------------|
| | Part no. | 160640 |

for part feeder control and position control stand

| UPDATE | for | SZG Controller 6 | PFC100 | PFCi100 | Position control stand |
|--------|----------|------------------|--------|---------|------------------------|
| | Part no. | 137482 | 117288 | 117290 | 119657 |

for measurement devices

| UPDATE for | | BME | ME1000DMS | ME1000PE | ME5000 | ME5400 | ME5500 | ME5600 | ME6000 | ME6000F | ME6100 |
|------------|----------|--------|-----------|----------|--------|--------|--------|--------|--------|---------|--------|
| | Part no. | 137354 | 137355 | 137500 | 117294 | 117295 | 117253 | 117296 | 117297 | 137362 | 137361 |

for battery, charger and programming kit

| UPDATE | for | Battery Li-Ion 36V 54Wh | Charger | Programming kit ComCenter PC |
|--------|----------|-------------------------|---------|------------------------------|
| | Part no. | 117285 | 117284 | 117287 |

for function control, ComCenter and Interface 330E

| UPDATE | for | fc10 | fc11 | fc20 | ComCenter ED | ComCenter ED-S | ComCenter 10 | ComCenter PC | Interface 330E |
|--------|----------|--------|--------|--------|--------------|----------------|--------------|--------------|----------------|
| | Part no. | 137480 | 117280 | 117283 | 117234 | 117252 | 117232 | 117287 | 117246 |



Software Updates

We recommend updating your software regularly so that you always have the most up-to-date drivers, enhanced features and security updates.

Protect your device from any possible threats or security issues by installing the most up-to-date software versions.

For optimal use and a full scope of features we recommend installing the most up-to-date version of the controller.

Process description for a software update

1. If your controller is connected to the internet, you will receive a message via the controller's website that there is an update available.

Click on this message for more detailed information regarding the update.
The next step is to place the order for the update.

2. If your controller is not connected to the internet, you can also check the availability of updates here:

<http://software.deprag.com>

3. Of course, you can also contact us directly if you have any questions concerning the availability of updates or about the update itself. The contact details are found below.

Process:

We will send you the download link for the update along with the invoice. The update can then simply be installed on your controller. This process is very quick, and your controller is ready for operation after just a few minutes.

Your contact for questions about our software products:

Sales department E-Mail: verkauf@deprag.de

Export department E-Mail: export@deprag.de

Further contact details can be found on our website at www.deprag.com.

Part number index

| Part no. | Cat- egory | Designation | Description |
|----------|---------------|--|---|
| 103196A | | ComCenter ED | with software OS BASIC |
| 103196B | | ComCenter ED | with software OS ADVANCED |
| 106744B | - | Interface 330E with OS BASIC | |
| 106744C | - | Interface 330E with OS ADVANCED | |
| 109108 | SFS | DEPRAG Clamp Force Control | Single license, activation key |
| 111914 | SFS | Activation key ADFS Threaded Fastener | Process software for flow forming screws |
| 114254 | SDL | Update | Sequence controller AST40 |
| 114261 | SDL | Update | Sequence controller ASTi40 |
| 114268 | SDL | Update | Sequence controller AST5 |
| 114269 | SDL | Update | Sequence controller AST6 |
| 114270 | SDL | Update | Sequence controller ASTi6 |
| 114271 | SDL | Update | Sequence controller AST11 |
| 115460 | SAT | Connection PFCi-DPU050/100 | Driver and visualisation for DPU |
| 115461 | SAT | Connection PFCi-DPU200 | Driver and visualisation for DPU |
| 117217 | SDL | Update | Sequence controller AST5-S |
| 117232 | SDL | Update | Base station ComCenter 10 |
| 117234 | SDL | Update | ComCenter ED |
| 117238 | SIN | Update | EC Screwdriver 320E-.. |
| 117244 | SFS | Upgrade / activation key | upgrade from software 330 OS BASIC to software 330 OS ADVANCED |
| 117246 | SDL | Update | Interface 330E |
| 117252 | SDL | Update | ComCenter ED-S |
| 117253 | SDL | Update | Measurement device ME5500 |
| 117259 | SIN | Update | AST30-31 |
| 117263 | SIN | Update | MINIMAT-EC Cordless screwdriver, 318Axx-.. |
| 117267 | SIN | Update | MINIMAT-ED stationary, 330E36-.. |
| 117270 | SIN | Update | MINIMAT-ED handheld, 330E36-.. |
| 117272 | SIN | Update | MINIMAT-E stationary, 342Ex36-.. |
| 117273 | SIN | Update | MINIMAT-EC-Servo stationary, 311Exx-.. |
| 117280 | SIN | Update | Function control fc11 |
| 117283 | SIN | Update | Function control fc20 |
| 117284 | SIN | Update | Charger 833881 (MINIMAT-EC cordless screwdriver) |
| 117285 | SIN | Update | Battery Li-Ion 367V 54Wh 833880 (MINIMAT-EC cordless screwdriver) |
| 117287 | SDL | Update | Programming kit ComCenter PC (MINIMAT-EC cordless screwdriver) |
| 117288 | SIN | Update | Controller PFC100 |
| 117290 | SIN | Update | Controller PFCi100 |
| 117294 | SIN | Update | Measurement device ME5000 |
| 117295 | SDL | Update | Measurement device ME5400 |
| 117296 | SIN | Update | Measurement device ME5600 |
| 117297 | SDL | Update | Measurement device ME6000 |
| 117340 | SDL | Update | AST10 |
| 117343 | SDL | Update | AST30-31 |
| 118742 | SFS | Activation key | for Interface Graph Loader 385834A |
| 119657 | SDL | Update | Position control stand |
| 122000 | SFS | PFC100 Manager | Activation key |
| 125134 | SDL | DEPRAG Datalogger | |
| 125135 | SDL | Update for ASTxx Serial Remote | |
| 128901 | SFS | Single license Graph Viewer activation key | For sequence controller AST (software requires activation) |
| 132680 | SFS | DEPRAG Data eXchange activation key | Software requires activation |
| 135839 | SFS | TIA Link activation key | |
| 135894 | SFS | ADFS Calibration, annual license | Activation key |
| 136244 | SFS | DEPRAG Connect | Activation key |
| 137354 | SIN | Update | Measurement device BME |
| 137355 | SIN | Update | Measurement device ME1000DMS |
| 137361 | SDL | Update | Measurement device ME6100 |
| 137362 | SDL | Update | Measurement device ME6000F |
| 137480 | SIN | Update | Function control fc10 |
| 137482 | SIN | Update | SZG Controller 6 |
| 137484 | SIN | Update for handle | 311Exx screwdriver |
| 137500 | SIN | Update | Measurement device ME1000PE |
| 138445 | SFS | ADAPTIVE DFS MQTT | Activation key |
| 138918 | SFS | ADAPTIVE DFS Two Step Penetration | Activation key |
| 139522 | SFS | Upgrade of an existing license | to the current version (DEPRAG Graph Viewer) |
| 140996 | SFS | TwinCAT Link activation key | |
| 142959 | SFS | DEPRAG Friction value process | Single license, activation key (for AST12) |
| 142961 | SFS | DEPRAG Clamp Force Control | Single license, activation key (for AST12) |

Part number index

| Part no. | Cat-egory | Designation | Description |
|----------|-----------|------------------------------------|--|
| 142962 | SFS | AST12 Industry 4.0 Interfaces | Activation key |
| 142965 | SFS | Update annual license | AST12 |
| 142966 | SFS | Update one-time | AST12 |
| 142967 | SCO | DEPRAG Cockpit Professional5 | Activation key |
| 142968 | SCO | DEPRAG Cockpit Professional10 | Activation key |
| 142978 | SCO | DEPRAG Cockpit Professional20 | Activation key |
| 142979 | SCO | DEPRAG Cockpit Professional50 | Activation key |
| 144248 | SFS | Visualisation of the Process | AST12, activation key |
| 144251 | SFS | Safety & Change tracking | AST12, activation key |
| 145440 | SCO | DEPRAG Cockpit Professional1 | Activation key |
| 145458B | | DEPRAG iSERVE 250 Slots | |
| 145458C | | DEPRAG iSERVE 500 Slots | |
| 145458E | | DEPRAG iSERVE 50 Slots | |
| 145458F | | DEPRAG iSERVE 100 Slots | |
| 145795 | SCO | DEPRAG Cockpit Advanced1 | Activation key |
| 145796 | SCO | DEPRAG Cockpit Advanced5 | Activation key |
| 145797 | SCO | DEPRAG Cockpit Advanced10 | Activation key |
| 145798 | SCO | DEPRAG Cockpit Advanced20 | Activation key |
| 145799 | SCO | DEPRAG Cockpit Advanced50 | Activation key |
| 145806 | SCO | DEPRAG Cockpit Basic | Activation key |
| 146536 | SFS | DEPRAG Operator Guidance | Single license, activation key |
| 148167 | SFS | Update annual license AST40 | Activation key |
| 148168 | SFS | Update one-time AST40 | Activation key |
| 160491 | SFS | Upgrade ComCenter ED | Activation key |
| 160639 | SFS | ADAPTIVE DFS OS BASIC | Activation key |
| 160640 | SFS | ADAPTIVE DFS Update | Activation key |
| 162557 | SFS | Update PKS | Activation key |
| 162558 | SFS | Industry 4.0 Interfaces (PKS) | Activation key |
| 162560 | SFS | Safety & Change tracking (PKS) | Activation key |
| 162561 | SFS | Scanner | Activation key |
| 162562 | SFS | Extended Process Control | Activation key |
| 164785 | SFS | 30 days demo version | DEPRAG Cockpit Professional, activation key |
| 164982 | SFS | DEPRAG Universal Robots Link | Activation key |
| 166163 | SFS | Update annual license ASTi40 | Activation key |
| 166165 | SFS | Update one-time ASTi40 | Activation key |
| 166217 | SDL | Cockpit Programming Samples | |
| 167387 | SFS | PKS Simulation | Activation key |
| 171939 | SFS | 5 licenses | for the activation of the software Clamp Force Control 109108 |
| 171941 | SFS | 10 licenses | for the activation of the software Clamp Force Control 109108 |
| 171961 | SFS | 20 licenses | for the activation of the software Clamp Force Control 109108 |
| 171964 | SFS | 50 licenses | for the activation of the software Clamp Force Control 109108 |
| 171966 | SFS | 5 licenses | for the activation of the software Clamp Force Control 142961 (AST12) |
| 172017 | SFS | 10 licenses | for the activation of the software Clamp Force Control 142961 (AST12) |
| 172019 | SFS | 20 licenses | for the activation of the software Clamp Force Control 142961 (AST12) |
| 172022 | SFS | 50 licenses | for the activation of the software Clamp Force Control 142961 (AST12) |
| 172193 | SFS | 5 licenses | for the activation of the software Friction value process 201820 |
| 172194 | SFS | 10 licenses | for the activation of the software Friction value process 201820 |
| 172209 | SFS | 20 licenses | for the activation of the software Friction value process 201820 |
| 172229 | SFS | 50 licenses | for the activation of the software Friction value process 201820 |
| 172231 | SFS | 5 licenses | for the activation of the software Friction value process 142959 (AST12) |
| 172257 | SFS | 10 licenses | for the activation of the software Friction value process 142959 (AST12) |
| 172276 | SFS | 20 licenses | for the activation of the software Friction value process 142959 (AST12) |
| 172286 | SFS | 50 licenses | for the activation of the software Friction value process 142959 (AST12) |
| 172649 | SFS | 5 licenses | for the activation of the software DEPRAG Graph Viewer |
| 172650 | SFS | 10 licenses | for the activation of the software DEPRAG Graph Viewer |
| 172689 | SFS | 20 licenses | for the activation of the software DEPRAG Graph Viewer |
| 172713 | SFS | 50 licenses | for the activation of the software DEPRAG Graph Viewer |
| 172733 | SFS | 5 licenses | for the activation of the software DEPRAG Operator Guidance |
| 172734 | SFS | 10 licenses | for the activation of the software DEPRAG Operator Guidance |
| 172735 | SFS | 20 licenses | for the activation of the software DEPRAG Operator Guidance |
| 172736 | SFS | 50 licenses | for the activation of the software DEPRAG Operator Guidance |
| 178341 | SFS | Open Protocol | Activation key |
| 179966 | SFS | Process Control | Activation key |
| 179972 | SFS | Process Control (duration 30 days) | Activation key |
| 185129 | SFS | ADAPTIVE DFS Clamp Force Control | Activation key |

Part number index

| Part no. | Cat-egory | Designation | Description |
|----------|-----------|--|--|
| 185130 | SFS | 330EDS Application Programming Interface API | Activation key |
| 185355 | SFS | ADAPTIVE DFS Synoptic | Activation key |
| 185356 | SFS | ADAPTIVE DFS Adaptive Tightening | Activation key |
| 190789 | SFS | DEPRAG Smart | Activation key |
| 190828 | SFS | DEPRAG Smart demo mode | Activation key |
| 190928 | SFS | Allen-Bradley Link | Activation key |
| 192336 | SFS | E-SFM Manager | Activation key |
| 193198 | SFC | DEPRAG GraphViewer Cloud | Activation key |
| 201820 | SFS | DEPRAG Friction value process | Single license, activation key |
| 202699 | SFS | Datalogger | Activation key |
| 206081 | SFS | Statistics | Activation key |
| 206565 | SFS | ASTxx Serial Remote | Activation key |
| 385834A | | Interface Graph Loader | (Hardware and software) |
| 815454 | SAT | Software packages DFUN | The basic software package regulates the functions of your system components. The functionality matches the performance capability of the relevant system control. |
| 815455 | SAT | | |
| 815456 | SAT | | |
| 815457 | SAT | | |
| 815629 | SAT | Software packages DVIP | The software package for visualisation and positioning. Operator guidance on the positioning control necessitates processing and sequencing visualisation. The functionality matches the performance capability of the relevant system control. |
| 815630 | SAT | | |
| 815631 | SAT | | |
| 815632 | SAT | Software packages DPRO | This software package supports the process control through BDE, MDE and MES connections. The functionality matches the performance capability of the relevant system control. |
| 815633 | SAT | | |
| 815634 | SAT | | |
| 815635 | SAT | | |
| 815641 | SAT | Software packages DAST | The software panel for EC and EC-Servo systems. DAST is used to supervise the operation and visualisation of the screwdriver sequence controller (AST series) through the system control. The functionality matches the performance capability of the relevant system control. |
| 815642 | SAT | | |

Categories of our software products

| Category | What do we need from our customer? | What do we deliver? |
|----------|--|--|
| SDL | Purchase order / PO | Download link (printed on the invoice) |
| SAT | Purchase order / PO only for in-house projects (special machines): Part no. is captured internally in the customers order | Installed by DEPRAG |
| SIN | Purchase order / PO, installation only possible at DEPRAG - the hardware must be sent to Amberg | Return of the hardware with installed software |
| SDT | Purchase order / PO | Delivery on data medium (e.g. CD) |
| SCO/SFS | Independent of a special machines project: Purchase order / PO and request file | Activation key (via my deprag) |
| | As part of a special machines project: Purchase order / PO | Activation already done by DEPRAG |
| SFC | Purchase order / PO | Email containing licence information. The software can be accessed via an internet link. |

Activation of software products via the myDEPRAG customer portal

Category SCO / SFS – Activation (e.g. DEPRAG Cockpit Advanced version / Update AST12 annual licence)

- Navigate the menu guide for the software which requires activation to reach the request file procedure.
- Save the request file on your end device.
- Log in to the myDEPRAG customer portal under my.deprag.com.
- Search for the order number of the required software activation and place an order.
- Under **My account > Order processing**, you can view the status of your order.
- As soon as the order confirmation shows under the order number, the ordered licence appears in software management under **My account > DEPRAG Apps**.
- Select the licence number of the purchased software product.
- Activate the licence by selecting the saved request file and executing the activation.
- Download the activation file from the customer portal and save this on your end device.
- Activate the software product by uploading the activation file via the appropriate dialog in the software product.

Category SCO / SFS – Deactivate activation

- To reach the deactivation file procedure navigate the menu guide for the software product for which activation should be deactivated.
- Deactivate the software product and save the deactivation file on your end device.
- Log in to the myDEPRAG customer portal under my.deprag.com.
- Licence management is found under **My account > DEPRAG Apps**.
- Select the licence number of the originally purchased software product.
- Deactivate the licence by selecting the saved deactivation file and executing deactivation.
- The licence is now available to activate on another device.

Category SDL (e.g. Update package ComCenter ED with part number 117234)

- Log in to the myDEPRAG customer portal under my.deprag.com.
- Search for the required software product and place an order.
- You will find the link to download the software product on the invoice you receive for this order.
- Follow the instructions for installation in the device software and installation dialog.

Category SIN (e.g. Update package for PFC100 Controller with part number 117288)

In this instance ordering via the customer portal is not an option. Installation is only carried out in house at DEPRAG. The hardware must be sent to Amberg.

Activation of software products via the back office

For activation we require:

- the request key
found to the right of the corresponding extension
under System -> Extensions for sequence controller AST5-S
under Extras -> Extensions for sequence controller AST40
- the serial number of the sequence controller (found on the underside)
- your order number for the purchase of the extension
- a contact person with email address and telephone number in case of any queries

Send us these details via email to export@deprag.de. The key can either be directly copied and pasted into the email or clicked on to save in a file. In this case, attach the file to the email. In return you will receive a licence file with the corresponding activation key via email.

Activate the software product, by uploading the activation file via the appropriate software product dialog.

We recommend activation via the myDEPRAG customer portal. There is a service charge for activations which are handled via the office.

DEPRAG

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CERTIFIED AS PER DIN EN ISO 9001
