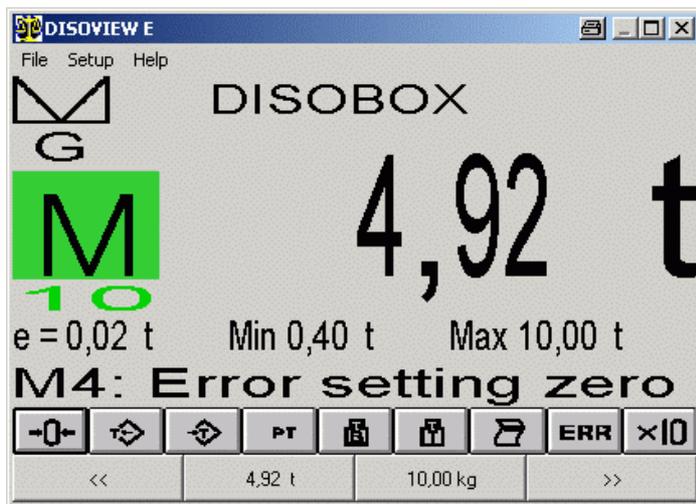


DISOVIEW E - The Legal-for-trade Scale Window for Windows PCs



- Legal-for-trade weight display on standard Windows PCs
- Twin-unit functionality
- Legal-for-trade printout
- Convenient print pattern definition
- Network capability
- Intelligent parameter storage concept
- Application interface
- Optional integration of DISOSAVE legal-for-trade memory

Application

Today, numerous weighing applications ask for a convenient and standardised operator environment and/or access to big memory areas, often distributed in network.

Standard PCs normally operating under Windows are the solution of choice.

Weight displays on such systems are normally designed as non-legal-for-trade secondary displays, so that the main display of a legal-for-trade weighing electronics should be in operator's view.

DISOVIEW E enables the legal-for-trade weight display function to be integrated into a standard PC with no need for a visible secondary display.

Function

DISOVIEW E is designed to realise a legal-for-trade weight display on a standard Windows PC. The indicated weight can stem from a connected weighing electronics of the DISOMAT type (display function).

In this case, DISOVIEW E can compute and represent the total of various single weights (twin-unit scale function).

Alternatively, DISOVIEW E can receive the measuring signal from local A/D converter modules of the DISOBOX[®] type, and process them to form legal-for-trade weight values.

Up to 16 scales (operating in single or group mode) can be managed and represented.

DISOVIEW E lets your control the displayed scale (Acquire/Clear Tare, Zero Set), and print the weight legal-for-trade.

Combined with DISOBOX[®] units, DISOVIEW E offers convenient support upon parameterisation and calibration:

- individual parameterisation of single measuring channels (of every load cell)
- electronic corner adjustment
- dead load calibration
- range calibration

Integral diagnostic functions enable single load cell signals to be analysed during operation, so that errors and defects can be detected and localised early.

An application interface allows DISOVIEW E to be integrated in complex EDP systems.

Optionally, the legal-for-trade data can be stored in the DISOSAVE legal-for-trade memory and called up at any time for check and/or evaluation.

Weight Window (Fig. 1)

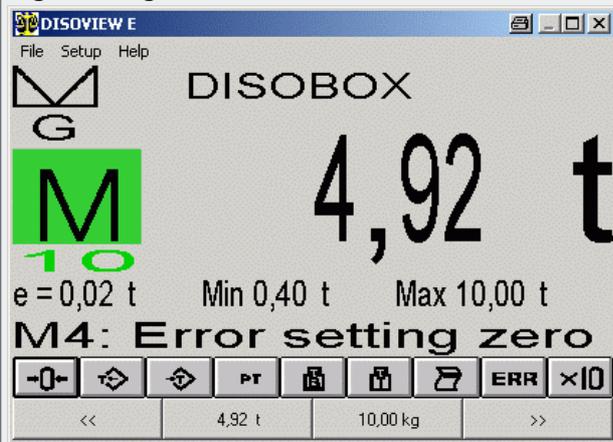
The DISOVIEW E main window represents the weight of the displayed scale complete with further information, e.g. taring status.

The button bar below the weight serves for control of displayed scale.

The lower part of the window lets you see the weights of the residual scales not represented on display. Just click on a weight, and the main display shows the selected scale.

The size of the weight window can be varied to a wide extent. However, it cannot be shifted out of visible screen area nor overlapped by other applications.

Fig. 1: Weight Window



Configuration Window

For each of the 16 eligible scales, the configuration dialog (Fig. 2) lets you determine the device to be used for display and/or computation of weights, as well as the device type.

At present, the following scale types are available:

- DISOMAT® B plus / DISOMAT® OPUS
- Twin-unit scale with two platforms
- Combined scale with three platforms
- DISOBOX® local A/D converter unit

The type-specific detail images (Fig. 3) let you enter the residual data.

Fig. 2: Configuration Window

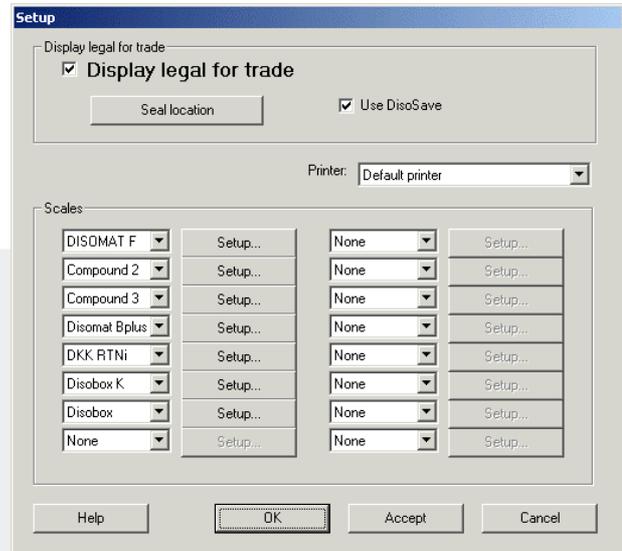
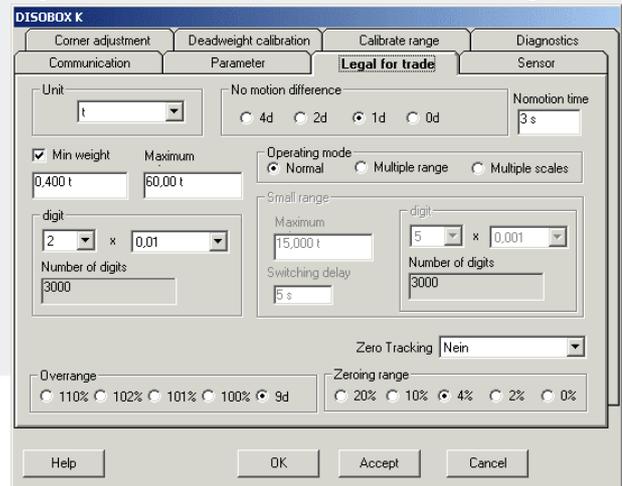
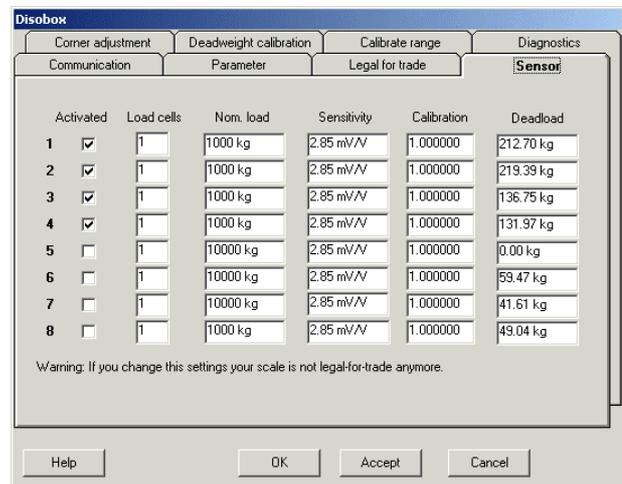


Fig. 3: Calibration Parameters Detail Image



Special Configurations for DISOBOX® (Fig. 4-6)

Fig. 4: Configuration of Load Cell on a DISOBOX® Scale



Since every measuring channel is configured individually, basic combinations of various load cells can be formed.

One DISOBOX® allows multiple scales to be operated provided that all scale load cells are connected to the same DISOBOX® unit.

Fig. 5: Corner Adjustment and Diagnostic Screen for a Scale of DISOBOX®

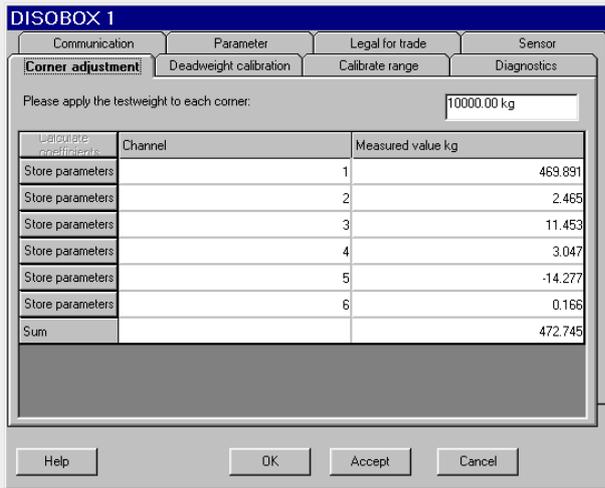
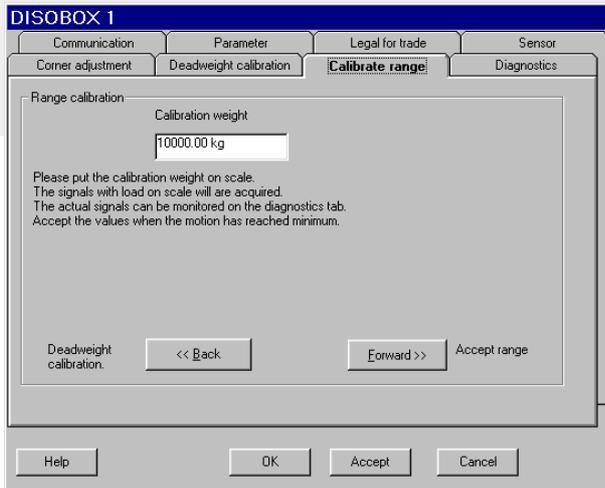


Fig. 6: Range Calibration of a Scale of DISOBOX®

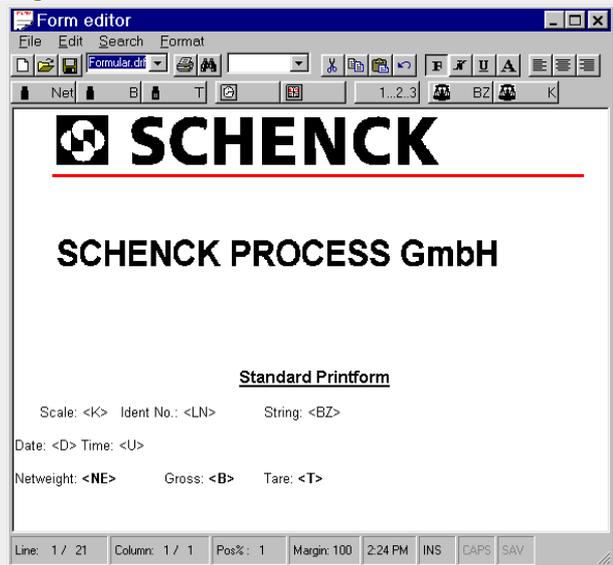


Form Editor (Fig. 7)

The form editor lets you design the print pattern for every scale in accordance with your requirements.

Wildcards for different print variables (weight, date, attribute, ...) can be graphically combined to form a print pattern (company logo). The latter is subsequently completed with current values and printed.

Fig. 7: Form Editor



Data Saving Concept

All DISOVIEW E parameters are stored in PC in a protected file.

This parameter record also includes types and serial numbers of connected devices.

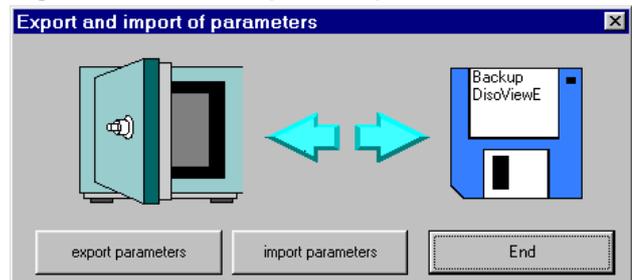
Upon start-up, program checks data record and connected devices. If no error is detected, DISOVIEW E goes to legal-for-trade mode. If data record is faulty or connected devices are not found, program goes to non-legal-for-trade mode. Legal-for-trade weighing and printing is not possible any longer.

This data saving concept enables the complete parameter record to be exported (backup)

(Fig. 8). If required, data record can be imported into another PC using DISOVIEW E.

Simply connect the proper devices, and legal-for-trade weighing is possible. Thanks to this concept, your PC can be exchanged easily, e.g. in case of defect.

Fig. 8: Parameter Export / Import



Network Mode

A special mechanism for communication between DISOVIEW E and connected scales lets you transport the weigh data through local networks, i.e. the PC the scales are connected to via serial interface needs not be the one DISOVIEW E uses to represent the data legal-for-trade. (Legal-for-trade regulations, e.g. scale display in operator's view, still have to be respected.)

Variants

V015516.B01	DISOVIEW E programm package: Installation CD for Windows XP/NT/2000 Manual in German language.
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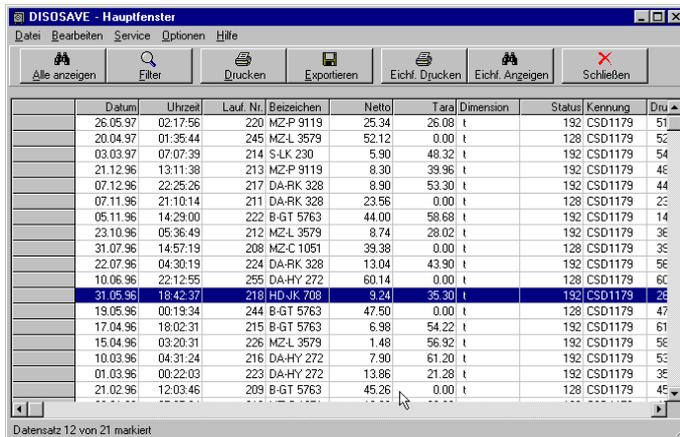
Special Configurations

Special configurations of DISOVIEW E are possible, for instance:

- simultaneous representation of weight on multiple PCs, or
- interfacing of scale via Ethernet.

Please ask us for an individual solution, we will gladly provide you with a suggestion.

DISOSAVE Legal-For-Trade Memory



Datum	Uhrzeit	Lauf. Nr.	Bezeichnung	Netto	Tara	Dimension	Status	Kennung	Dru
26.05.97	02:17:56	220	MZ-P 9119	25.34	26.08	t	192	CSD1179	51
20.04.97	01:35:44	245	MZ-L 3579	52.12	0.00	t	128	CSD1179	52
03.03.97	07:07:39	214	S-LK 230	5.90	48.32	t	192	CSD1179	54
21.12.96	13:11:38	213	MZ-P 9119	8.30	39.96	t	192	CSD1179	46
07.12.96	22:25:26	217	DA-RK 328	8.90	53.30	t	192	CSD1179	44
07.11.96	21:10:14	211	DA-RK 328	23.56	0.00	t	128	CSD1179	22
05.11.96	14:29:00	222	B-GT 5763	44.00	58.68	t	192	CSD1179	14
23.10.96	05:36:49	212	MZ-L 3579	8.74	28.02	t	192	CSD1179	36
31.07.96	14:57:19	208	MZ-C 1051	39.38	0.00	t	128	CSD1179	35
22.07.96	04:30:19	224	DA-RK 328	13.04	43.90	t	192	CSD1179	56
10.06.96	22:12:55	255	DA-HY 272	60.14	0.00	t	128	CSD1179	60
31.05.96	18:42:37	219	HD-JK 706	9.24	65.30	t	192	CSD1179	63
19.05.96	00:19:34	244	B-GT 5763	47.50	0.00	t	128	CSD1179	47
17.04.96	18:02:31	215	B-GT 5763	6.98	54.22	t	192	CSD1179	61
15.04.96	03:20:31	226	MZ-L 3579	1.48	56.92	t	192	CSD1179	58
10.03.96	04:31:24	216	DA-HY 272	7.90	61.20	t	192	CSD1179	53
01.03.96	00:22:03	223	DA-HY 272	13.86	21.28	t	192	CSD1179	38
21.02.96	12:03:46	209	B-GT 5763	45.26	0.00	t	128	CSD1179	45

- Legal-for-trade data storage on standard PC
- Replacement of redundant printer
- Convenient evaluation of data stored

Application

The DISOSAVE legal-for-trade memory program offers the user the following functions:

- Legal-for-trade storage of weigh data on PC hard disk
- Legal-for-trade display and printout of values stored.

No special measures have to be taken on PC.

DISOSAVE has the EU approval for legal-for-trade data storage. This type of storage provides a high degree of safety where loss or falsification of data is concerned. The combination of standard PC + DISOSAVE establishes the legal-for-trade data memory on the user PC.

Construction

PC program for WINDOWS NT/XP/2000 designed for legal-for-trade storage of weighing results. Supplied in the form of a CD for installation of the program on a normal PC, complete with WINDOWS help documentation and copying protection.

Function

Legal-for-trade storage of weighing results with DISOSAVE

From the user's view, the storage of weighing results with DISOSAVE does not differ in any respect from the legal-for-trade printout on paper.

The legal-for-trade memory performs the function of the redundant printer (however, it is totally free from maintenance; no paper or ribbon to be changed; no paper jam).

Data storage can be triggered either via an application program on the PC, using Active-X Control VPC 20002, or on the DISOMAT by simple operation of the Print key. DISOMAT can be configured for paper printout or legal-for-trade storage with DISOSAVE.

You can also operate the two output media in parallel.

Display / Evaluation of Values Stored

In addition to safe and convenient storage of weighing results, DISOSAVE offers additional functions for display and evaluation of stored data.

The following functions are available:

- Display complete legal-for-trade memory

Screen shows total number of inputs sorted by date/time of storage. Every data record comprises date, time, consecutive number, scale identification, attributes, net and tare values, and formatted print string.

- Display selected inputs

Using the filter function, you can visualize selected inputs stored, e.g. :

- Date
- Time
- Consecutive number
- Strings included in attributes
- Strings included in print string

On the right you can see a sample screen showing all 1996 inputs filtered by Darmstadt vehicles (-DA attribute).

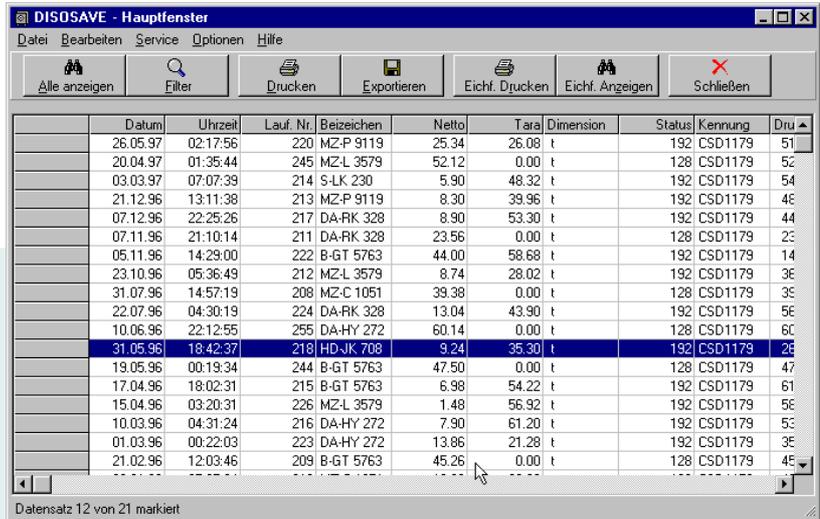
The values represented on screen (possibly pre-selected via filter function) can be printed on a printer connected to PC. You can also mark a data block by mouse operation and print this partial record. In the same way, you can export data into other applications in form of an ASCII file.

DISOSAVE can be parametrized such that older data records stored are automatically deleted upon program start or after user's acknowledgement. Storage time can be set at will. However, the 3-month minimum period required in accordance with weights and measures regulations is ensured in all cases.

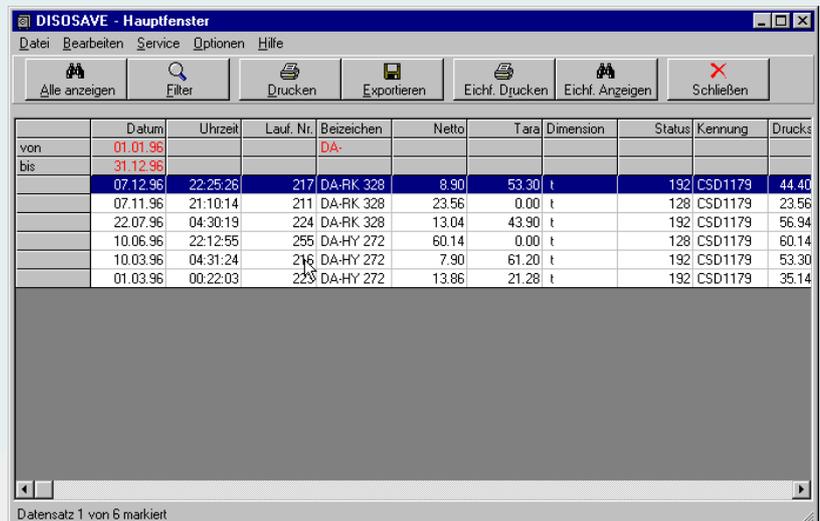
Report

The Report function allows the data stored legal-for-trade to be recorded daily in form of an ASCII file for non-legal-for-trade evaluation and further processing with the use of other programs.

A new file is generated daily and includes all data acquired this very day.



Datum	Uhrzeit	Lauf. Nr.	Beizeichen	Netto	Tara	Dimension	Status	Kennung	Dru
26.05.97	02:17:56	220	MZ-P 9119	25.34	26.08	t	192	CSD1179	51
20.04.97	01:35:44	245	MZ-L 3579	52.12	0.00	t	128	CSD1179	52
03.03.97	07:07:39	214	S-LK 230	5.90	48.32	t	192	CSD1179	54
21.12.96	13:11:38	213	MZ-P 9119	8.30	39.96	t	128	CSD1179	46
07.12.96	22:25:26	217	DA-RK 328	8.90	53.30	t	192	CSD1179	44
07.11.96	21:10:14	211	DA-RK 328	23.56	0.00	t	128	CSD1179	23
05.11.96	14:29:00	222	B-GT 5763	44.00	58.68	t	192	CSD1179	14
23.10.96	05:36:49	212	MZ-L 3579	8.74	28.02	t	192	CSD1179	36
31.07.96	14:57:19	208	MZ-C 1051	39.38	0.00	t	192	CSD1179	35
22.07.96	04:30:19	224	DA-RK 328	13.04	43.90	t	192	CSD1179	56
10.06.96	22:12:55	255	DA-HY 272	60.14	0.00	t	128	CSD1179	60
31.05.96	18:42:37	218	HD-JK 708	9.24	35.30	t	192	CSD1179	26
19.05.96	00:19:34	244	B-GT 5763	47.50	0.00	t	128	CSD1179	47
17.04.96	18:02:31	215	B-GT 5763	6.98	54.22	t	192	CSD1179	61
15.04.96	03:20:31	226	MZ-L 3579	1.48	56.92	t	192	CSD1179	58
10.03.96	04:31:24	216	DA-HY 272	7.90	61.20	t	192	CSD1179	53
01.03.96	00:22:03	223	DA-HY 272	13.86	21.28	t	192	CSD1179	35
21.02.96	12:03:46	209	B-GT 5763	45.26	0.00	t	128	CSD1179	45

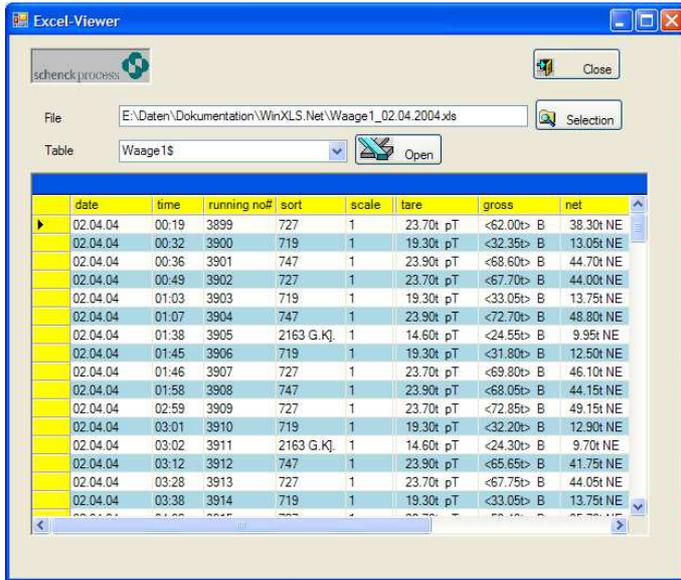


Datum	Uhrzeit	Lauf. Nr.	Beizeichen	Netto	Tara	Dimension	Status	Kennung	Drucks
von	01.01.96		DA-						
bis	31.12.96								
07.12.96	22:25:26	217	DA-RK 328	8.90	53.30	t	192	CSD1179	44.40
07.11.96	21:10:14	211	DA-RK 328	23.56	0.00	t	128	CSD1179	23.56
22.07.96	04:30:19	224	DA-RK 328	13.04	43.90	t	192	CSD1179	56.94
10.06.96	22:12:55	255	DA-HY 272	60.14	0.00	t	128	CSD1179	60.14
10.03.96	04:31:24	216	DA-HY 272	7.90	61.20	t	192	CSD1179	53.30
01.03.96	00:22:03	223	DA-HY 272	13.86	21.28	t	192	CSD1179	35.14

Variant	Ordering No.
DISOSAVE PC Program Package VPC 2006 replacing the redundant printer required in accordance with the weights and measures regulations, and designed for: <ul style="list-style-type: none"> ▪ Legal-for-trade storage of DISOMAT weighing electronic of results or legal-for-trade viewing, evaluation and printing of results on PC scales-programm DISOVIEW E, VPC20100. Operable under WINDOWS NT/XP/2000. Comprising: <ul style="list-style-type: none"> ▪ CD for installation of DISOSAVE on PC ▪ Active-X communication driver VPC 20002 ▪ Multilingual WINDOWS Help file ▪ Program copying protection (LPT dongle) 	D 707 340.02

All information is given without obligation. All specifications are subject to change.

PC-Software Module WinXLS.Net



date	time	running no#	sort	scale	tare	gross	net
02.04.04	00:19	3899	727	1	23.70t pT	<62.00t> B	38.30t NE
02.04.04	00:32	3900	719	1	19.30t pT	<32.35t> B	13.05t NE
02.04.04	00:36	3901	747	1	23.90t pT	<68.60t> B	44.70t NE
02.04.04	00:49	3902	727	1	23.70t pT	<67.70t> B	44.00t NE
02.04.04	01:03	3903	719	1	19.30t pT	<33.05t> B	13.75t NE
02.04.04	01:07	3904	747	1	23.90t pT	<72.70t> B	48.80t NE
02.04.04	01:38	3905	2163 G.Kj	1	14.60t pT	<24.55t> B	9.95t NE
02.04.04	01:45	3906	719	1	19.30t pT	<31.80t> B	12.50t NE
02.04.04	01:46	3907	727	1	23.70t pT	<69.80t> B	46.10t NE
02.04.04	01:58	3908	747	1	23.90t pT	<68.05t> B	44.15t NE
02.04.04	02:59	3909	727	1	23.70t pT	<72.85t> B	49.15t NE
02.04.04	03:01	3910	719	1	19.30t pT	<32.20t> B	12.90t NE
02.04.04	03:02	3911	2163 G.Kj	1	14.60t pT	<24.30t> B	9.70t NE
02.04.04	03:12	3912	747	1	23.90t pT	<65.65t> B	41.75t NE
02.04.04	03:28	3913	727	1	23.70t pT	<67.75t> B	44.05t NE
02.04.04	03:38	3914	719	1	19.30t pT	<33.05t> B	13.75t NE

- **Windows – Service / Application for storage of weighing data (Online, Batchmode) in Excel, Access, CSV-file**
- **Request of scale device errors, save errors in a log-file, sending to different receivers via Email (through SMTP-Server) with error text**
- **Functionality of data concentration**

Application

The WinXLS.Net program is designed as an link between weighing electronics and PC.

Operation always starts from the weighing terminal. Passive in the background, a PC is used as data memory either online or in batch mode, depending on the main purpose of the weighing program. The WinXLS.Net program stores the results in an Excel data sheet, an Access file (mdb) or an ASCII file in CSV format.

The program runs under Windows 2000/ XP, Windows2003 Server as a service or application. The data can be stored in the Excel format if no Excel program is installed on PC.

Equipment

On protocol level, the WinXLS.Net Program uses the CSDCOMX program, and supports the SCHENCK EDP protocols

DDP8 672, DDP8 785, 3964R.

Further protocols can be configured.

For interfacing with the connected weighing systems, the program can handle any serial interface that can be addressed using the Windows operating system.

Various weighing systems configured with different protocols can be connected to the available interfaces.

Function

The WinXLS.Net program receives various messages from the connected weighing systems. The individual fields within the message are separated by an identifier (e.g. #).

The program uses an Excel (Access) model in which the names of the different database fields can be inserted.

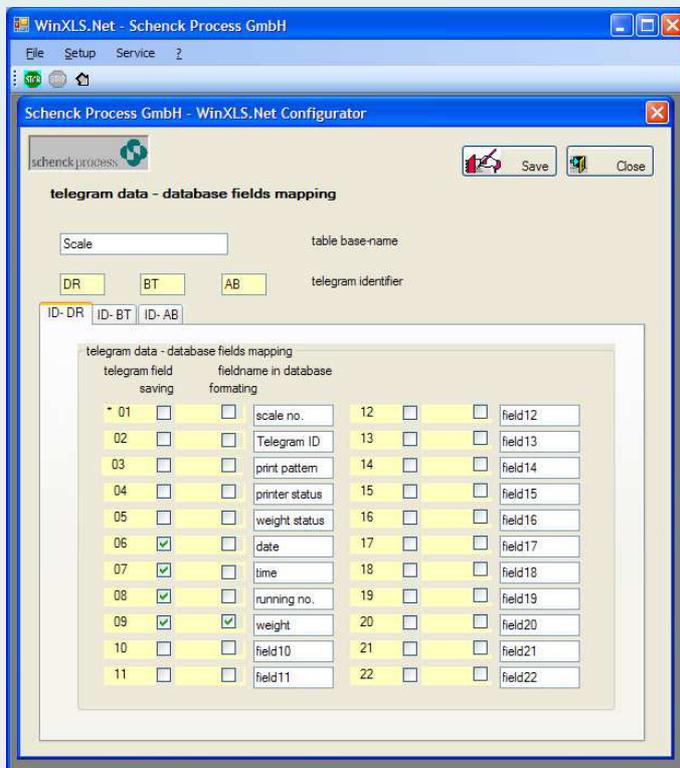
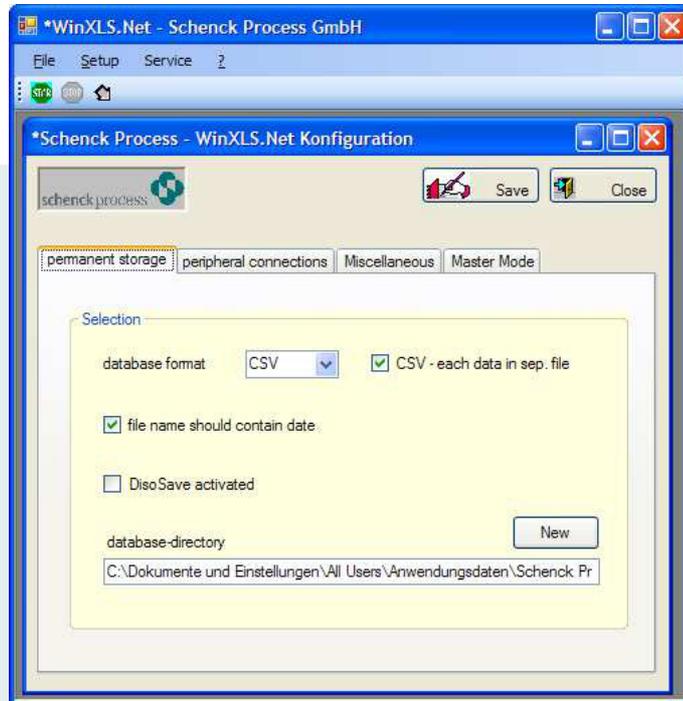
Upon storage this model is aquired to store the telegram data.

new: scale device errors can be requested and emailed to different receivers.

Configuration dialogs in WinXLS

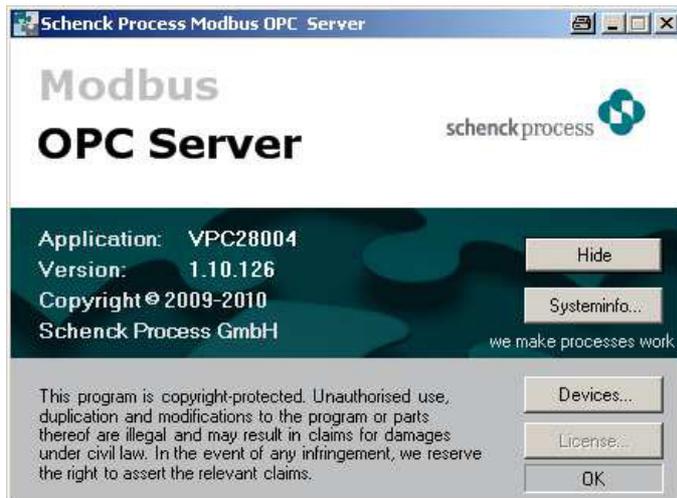
Possible Configurations:

- Number of connected interfaces
- Directory and name of file used for data storage
- Kind of database Excel, Access, CSV-format



- Telegram ids and selection of fields, which are to be stored in the database
- Operation mode active, passive; device error request; interval email receivers; SMTP-server address

Modbus OPC Server VPC 28004



- OPC Server for weighing terminals
- Fast and simple access to process data of the terminals
- Write and read access
- Connection to the terminal through Ethernet or through serial interface

Application

In the automation segment, OPC (= *OLE for Process Control*) has established itself as the standard. OPC enables the cross-manufacturer communication between devices without the expansive and error-prone implementation of protocols and without exact knowledge of the memory places.

The Schenck Process Modbus OPC Server implements this idea consistently. It permits access to the process data of the DISOMAT / DISOBOX / DISOCONT / INTECONT equipment of each OPC-capable application (OPC client). Access is achieved through logical names and independent of the selected physical transmission method (Ethernet or serial).

Structure

The Modbus OPC Server will be installed on the PC, which also runs the application software and which wants to access the data.

Other OPC client computers can also use this Modbus OPC Server, because OPC is configurable for remote access.

The server realizes a proxy (=substitute) of the scale(s). The application treats this as if the scale would be part of the PC.

The physical connection of the terminals is provided serial (through a COM port of the computer) or through Ethernet (network access).

Function

The Modbus OPC Server permits read access for the most important process variable of the connected devices. This is possible through a single query and also through cyclical access (e.g. for weight and status values).

The setting of values is also possible (e.g. tare weights or print texts).

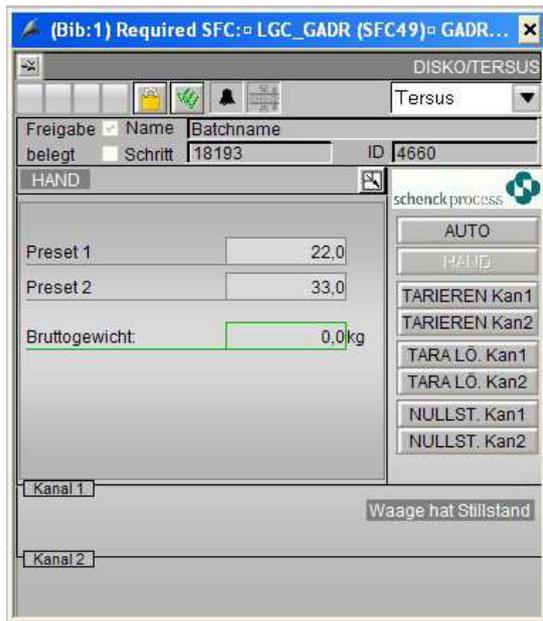
Technical Data

Operating Systems	Windows 2000 SP4 Windows XP SP 3 Windows 7
Other system requirements	NET Framework 2.0 SP1
OPC Specifications	Data Access specifications V1.0a, V2.05 and V3.0
Communication protocols	Ethernet (MODBUS/TCP) Serial (MODBUS RTU)
Documentation	Online help

Order numbers

Type	Description	Material Number
VPC 28004	Modbus OPC Server for Schenck Process weighing terminals DISOMAT Tersus DISOMAT Opus DISOMAT Satus DISOBOX Plus (INTECONT Opus) (INTECONT Satus) (DISOCONT Tersus) Delivery on CD	V095231.B01

Communication Modules for PCS 7, TIA and STEP 7 to SIEMENS Controllers



Faceplate: DISOMAT Tersus

- Simple, rapid connection of the scales to SIMATIC controllers
- Complete communication modules for PCS 7, TIA and STEP 7
- The programmer can parameterize the existing modules at any time
- PCS 7 modules have faceplates to visualize the weighing data
- Compatible with PCS 7 release 8
- The scales is portrayed in the system as a SIEMENS component (in Hardware configuration)
- Easy editing of statuses and commands for setpoints and measured values
- No complicated programming required for fieldbus communication
- All scales values are directly available as binary or numerical values

Applications

Many of the Schenck Process weighing electronic systems are coupled with SIEMENS controllers from the SIMATIC S7 series. This coupling is often implemented by the customer or on their behalf. PROFIBUS or PROFINET are used as a medium of communication. This often involves significant effort and furthermore the same solution is often re-implemented by different programmers. With the aid of the communication modules the weighing electronics can be integrated into automation systems with little effort.

Structure

The use of PCS 7 modules, the TIA library or the STEP 7 library means that the customer or the supplier of the control system no longer needs to program the PROFIBUS/PROFINET connection to the weighing electronics themselves.

The communication details remain concealed from the PLC programmer. The programmer needs only to specify the data and parameters desired at the moment of configuration. Both the PCS 7 modules and the TIA and STEP 7 libraries support all of the fieldbus-capable Schenck Process weighing electronics.

Function

PCS 7 modules

Each of the PCS 7 modules has a 'Faceplate' that shows the most important weighing data in a PCS 7 graphical display.

Furthermore, the module uses the WinCC detection system integrated into the PCS 7.

A module from the TIA or STEP 7 libraries should be used for implementation in a SCADA solution.