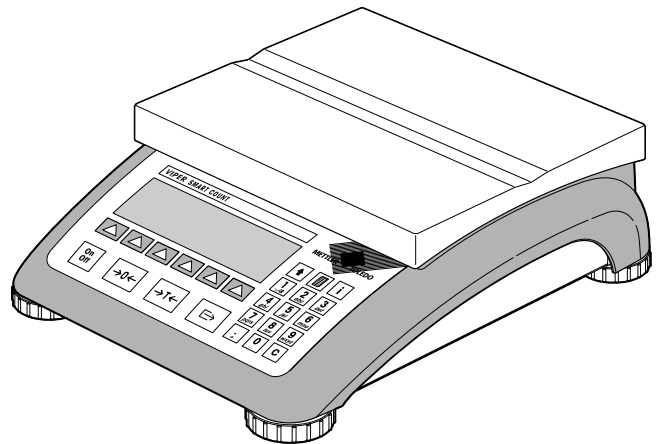
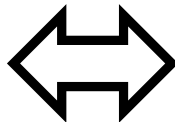
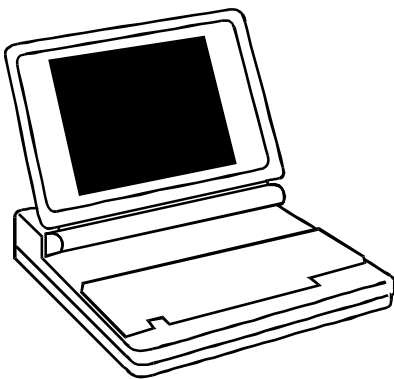




METTLER TOLEDO

Operator manual

**METTLER TOLEDO
SmartManager**



1	General Information	4
1.1	Installation of METTLER TOLEDO SmartManager	4
1.2	Product Activation	4
2	SmartManager Options.....	8
2.1	Communication	8
2.2	Language.....	10
2.3	Change Unit.....	11
2.4	Settings.....	11
3	Article Definition.....	12
3.1	General Information	13
3.2	Piece Weight	14
3.3	Filling/CheckWeighing	15
3.4	Accumulation.....	15
4	Import and Export to CSV	16
5	Backup/Restore/Edit of the article database	17
6	Direct Article Access (Host mode use of SmartManager)	18
7	Backup/Restore/Edit of Vision Setup	19
7.1	Vision Backup.....	20
7.2	Save Vision Menu.....	21
7.3	Open Vision Menu	21

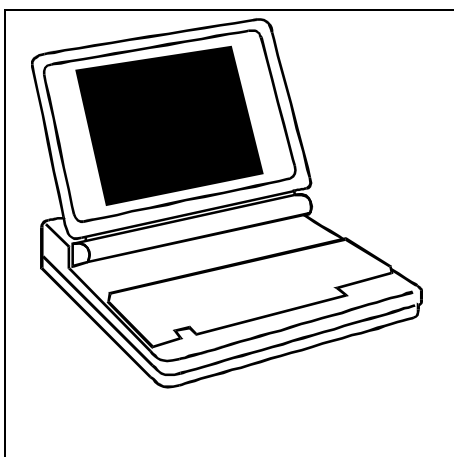
	3
7.4 Vision Settings Restore.....	21
7.5 New Vision Tree	22

1 General Information

The METTLER TOLEDO SmartManager is a computer program, running under Microsoft Windows 2000 or XP, designed to assist in maintaining (backup, edit or restore) the article database and system configuration settings stored in METTLER TOLEDO VIPER Smart Count (SC) scales. In addition, it allows host mode functionality within an Ethernet network and import/export of article data from/to e.g. MS EXCEL compatible files.

Note: It is highly recommended to make regular backup (e.g. daily) copies of your Smart Count database.

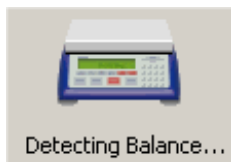
1.1 Installation of METTLER TOLEDO SmartManager



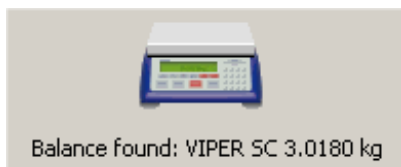
- Start MS Windows (2000 or XP).
- **Make sure that you are logged-in with administrator access rights for the installation.**
- Start 'Setup'.
- Follow the instructions of the installation program.
- Ensure that the scale is connected to a serial interface of the computer by a RS cable.
- Start SmartManager by double-clicking the icon.
- SmartManager now attempts to reserve the COM1 port. If it is not successful, an appropriate message is shown. Should this be the case, select the appropriate port (COM1...COM4) in the 'Options' menu under 'Communication'. The initialization should now proceed without any problems (→ 'Help' / 'About METTLER TOLEDO SmartManager').

Note:

Within the 'About METTLER TOLEDO SmartManager' dialog box, you can double-click the scale icon



to repeat the connection test until successful (after e.g. fixing settings or cabling):



As soon as there is a proper connection, select 'Options/Settings' and press 'Get Settings' to update the newly installed SmartManager with some information about your scale (see also chapter 2.4)

1.2 Product Activation

During the first start of SmartManager, you will see the following screen:



Registered for:

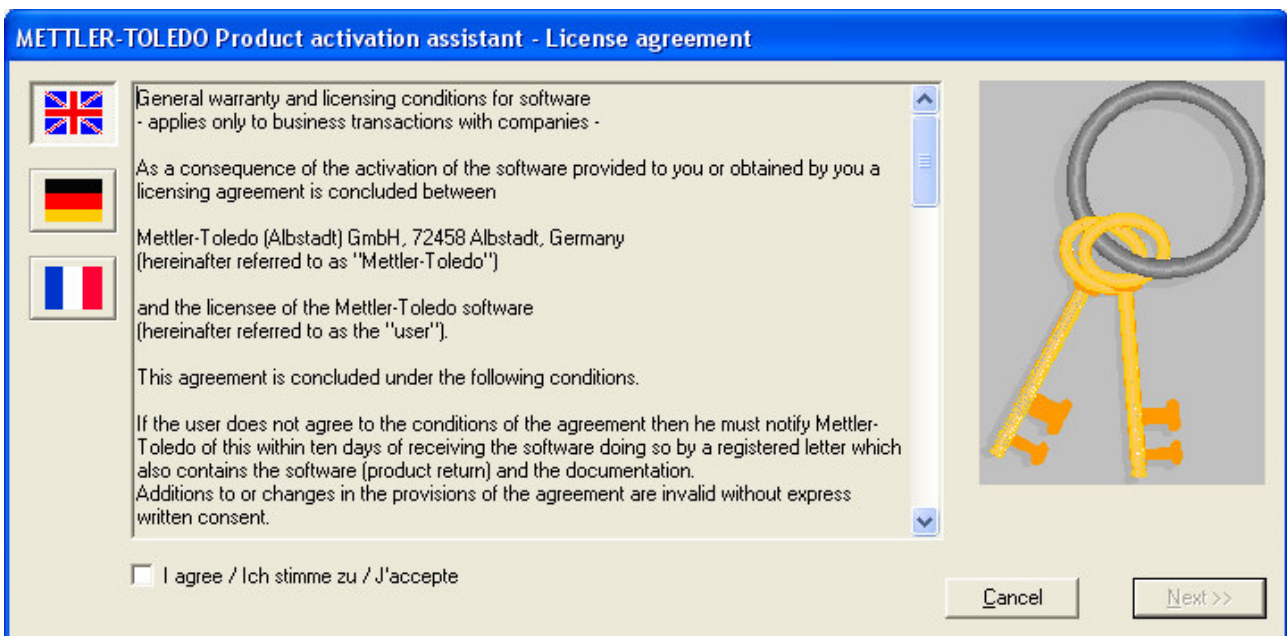
 SMMA Version 2.00
Copyright Mettler-Toledo (Albstadt) GmbH, 2003-11-09
D-72458 Albstadt, Germany

Name:


Company:


Kindly enter the name and company you want to appear as part of the 'About METTLER TOLEDO SmartManager dialog box in the future. Then press OK to start the product activation procedure. On the first screen press the country button that represents the language you want the license agreement to be displayed (English, German or French). Read carefully, check the 'I agree'-checkbox and press 'Next>>'.


Note: For later reference, the license agreement text is included in the SmartManager directory as text file: LICENG.TXT



METTLER-TOLEDO Product activation assistant - License agreement

 General warranty and licensing conditions for software
- applies only to business transactions with companies -

 As a consequence of the activation of the software provided to you or obtained by you a
licensing agreement is concluded between


 Mettler-Toledo (Albstadt) GmbH, 72458 Albstadt, Germany
(hereinafter referred to as "Mettler-Toledo")

and the licensee of the Mettler-Toledo software
(hereinafter referred to as the "user").

This agreement is concluded under the following conditions.

If the user does not agree to the conditions of the agreement then he must notify Mettler-Toledo of this within ten days of receiving the software doing so by a registered letter which also contains the software (product return) and the documentation.
Additions to or changes in the provisions of the agreement are invalid without express written consent.

I agree / Ich stimme zu / J'accepte



Enter the TAN number that came with your SmartManager shipment and press 'Next>>':

METTLER-TOLEDO Product activation assistant - Step 1

 Welcome !
Please enter your authorization code. This should be the PIN or TAN you have received from METTLER TOLEDO for activating this software. To continue, click <Next>.

 Willkommen !
Bitte geben Sie den Berechtigungscode ein. Dies sollte die PIN oder TAN sein, die Sie von METTLER TOLEDO zur Aktivierung dieser Software erhalten haben. Auf <Next> klicken um fortzufahren.

 Bienvenue !
Veuillez introduire votre code d'autorisation. Il s'agit du PIN ou TAN que vous avez reçu de METTLER TOLEDO pour activer ce logiciel. Cliquer sur <Next> pour continuer.





Code:


The activation dialog now shows an individual code that was calculated automatically based on your soft- and hardware setup. Keep this code ready, dial the German phone number and follow the instructions as indicated below:


Note: Your telephone must be capable of touchtone dialing.

METTLER-TOLEDO Product activation assistant - Step 2

 Please now call by phone the activation number (++49 7431 14 470). Follow the instructions to hand over the accompanying requirement code. After input press <Next>.

 Bitte wählen Sie nun telefonisch die Aktivierungsstelle (++49 7431 14 470) an. Folgen Sie dann den Anweisungen zur Eingabe des nebenstehenden Anforderungscodes. Nach der Eingabe fortsetzen mit <Next>.

 Veuillez maintenant appeler par téléphone le numéro d'activation (++49 7431 14 470). Suivez alors les instructions d'introduction du code requis ci-joint. Poursuivez avec <Next> après l'introduction.



Code:

Enter the code, that you got via phone procedure, now:

METTLER-TOLEDO Product activation assistant - Step 3

 After successful processing you will get the registration code. Enter this code and press <Next>.

 Nach erfolgreicher Bearbeitung erhalten Sie den Aktivierungscode. Geben Sie diesen ein und drücken Sie <Next>.

 Après traitement réussi, vous obtiendrez le code d'enregistrement. Introduisez ce code et appuyez sur <Next>.



Code:

Press 'Next>>' to end the activation. Please keep the codes that are displayed in a safe place. Copy, paste and save them using any text processing document (e.g. Notepad).

2 SmartManager Options

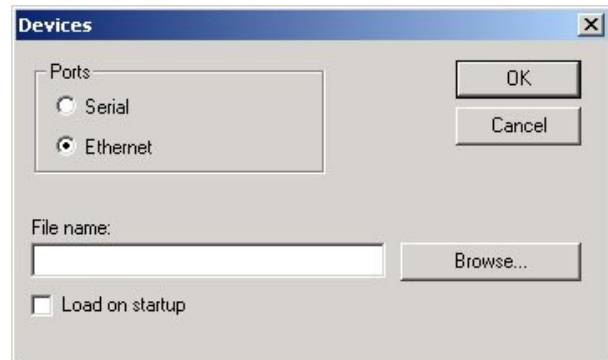
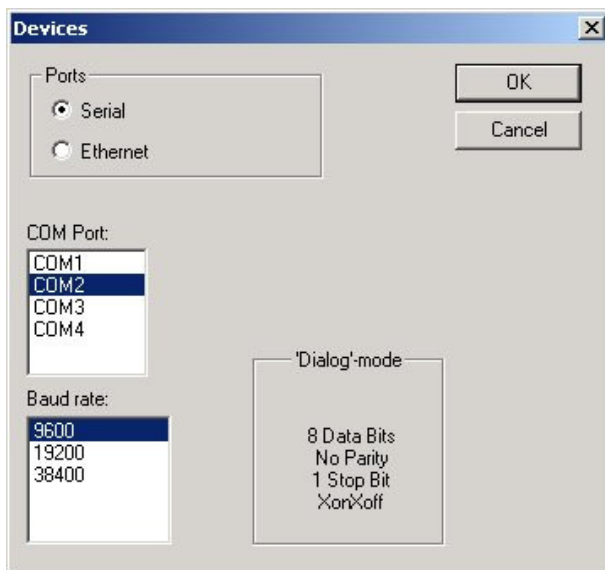
SmartManager has several configurable options to suit your particular requirements:



2.1 Communication

SmartManager has 2 options for communicating with a VIPER SC scale. It can be either through a serial connection, which uses common RS232 cable, or with properly equipped scales, through Ethernet communication.

Note: The Ethernet connection can only be used for host mode. Backup/Restore of the article database and/or 'Vision Setup'-settings **must** be done via RS232.



Make sure that the Vision Menu/COMMUNICATION setup suits the device settings of your SmartManager:

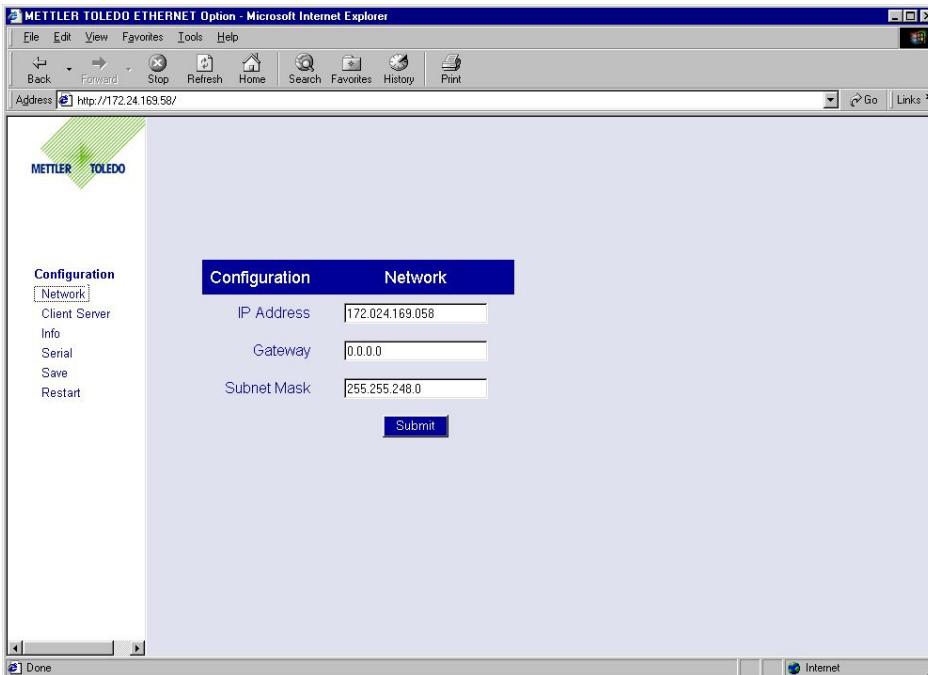
- For 'Serial' interface, the connected scale port has to be in 'Dialog'-mode, with '8-none', activated XonXoff handshake and baud rate as set in SmartManager (recommended and default: 9600).
- For 'ETHERNET', the settings of scale COM2 port of Vision Menu/COMMUNICATION **must** be 'Dialog'-mode with '8-none', activated XonXoff handshake and the baud rate on 9600.

If the communication between SmartManager and Viper Smart Count is through an Ethernet connection, you can specify within the "Devices" dialog box the BRC file that will be used for host mode. Put a checkmark in the "Load on startup" checkbox to automatically load this BRC file every time SmartManager is started.

IP Address (only if VIPER SC scale is equipped with the Ethernet option)

It is important to note that the Host IP Address and the Client IP address should belong to the same Subnet. SmartManager uses the IP Address defined in Windows/Control Panel/Network settings. For detailed explanation on your network settings, please consult your network administrator.

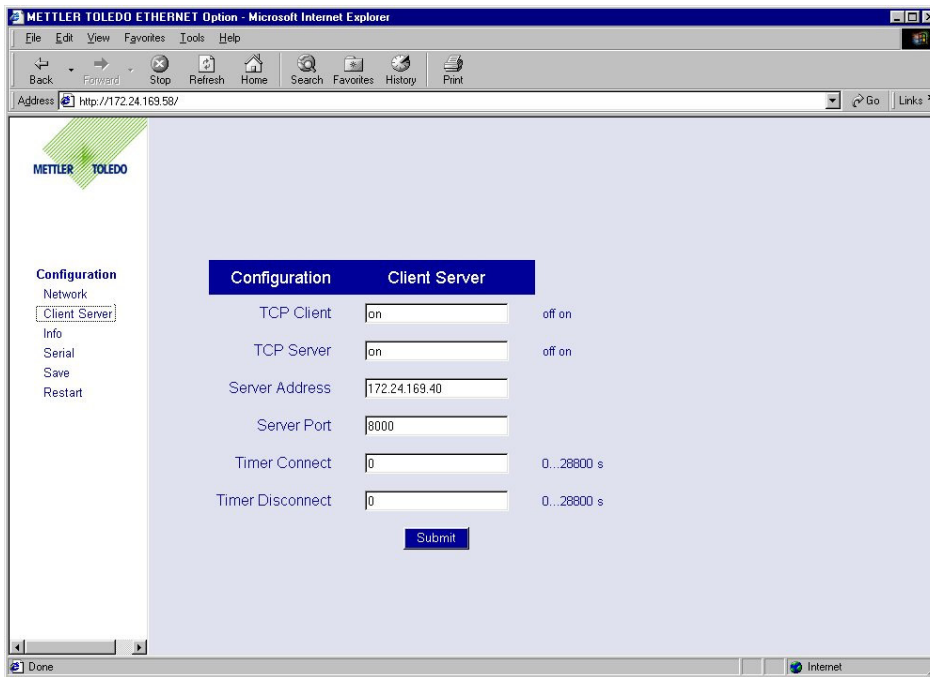
With an Internet browser (e.g. Windows Internet Explorer), you simply configure the parameters as shown in the sample images below. Please consult the 'Operator manual - METTLER TOLEDO Viper Smart Count' (Chapter 5.9.6. 'Option Settings (COMMUNICATIONS → Option) - ETHERNET OPTION') for more information.



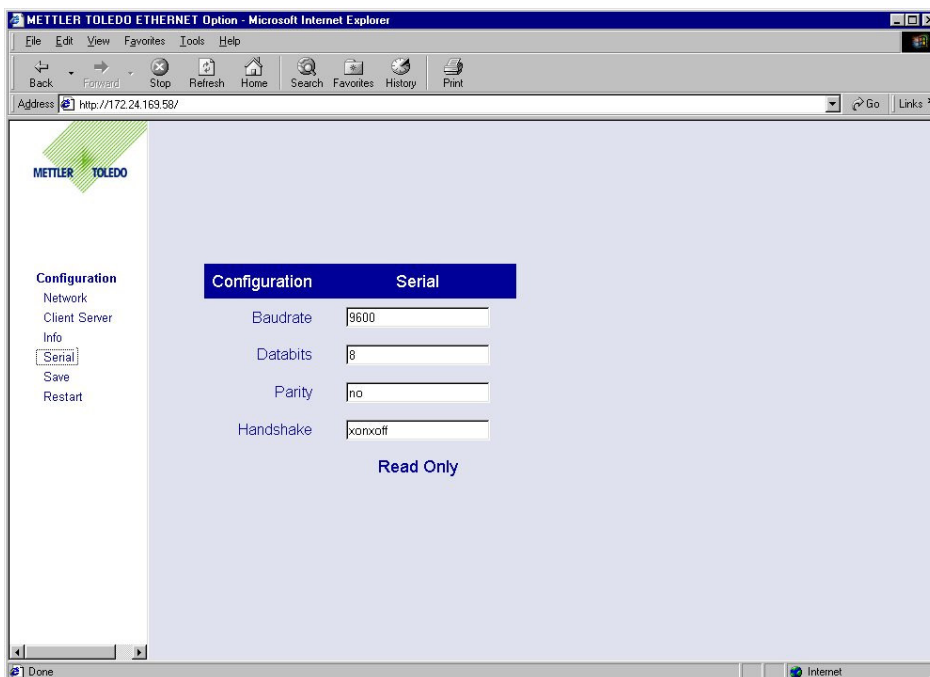
The Client IP Address can also be configured in VIPER SC scale. To do this, follow these steps:

1. Navigate within the "Vision Setup" - menu to reach the "Communication"-menu.
2. In the "Communication"-menu, choose "Option"-menu.
3. Within the "Option"-menu, choose ETHERNET and press «>>» to enter the ETHERNET option settings.
4. Choose "IP Address" and press «Edit» to enter the assigned IP Address of the Viper Smart Count scale (e.g. 172.24.169.58). This number could be given by your network administrator.
5. End and save settings.

TCP Client	To enable communication, this option must be ON.
TCP Server	To enable communication, this option must be ON.
Server Address	Having set the Client IP Address, the Server Address must also be configured. In IE, change the Server Address to reflect the Host IP Address. See sample image below.
Server Port	SmartManager only supports Port 8000. Change Server Port to reflect the same.
Timer Connect	This option sets the time in seconds for the Viper Smart Count scale to automatically establish a connection to SmartManager. This option is critical only in ETHERNET mode.
Timer Disconnect	This option sets the time in seconds for the Viper Smart Count scale to automatically disconnect from SmartManager. This option is critical only in ETHERNET mode.



In order to have the Ethernet option working properly, Baudrate, Databits, Parity, and Handshake in the Vision System Setup of Viper Smart Count scale (COMMUNICATION/COM2 – 'Dialog'-mode) must be the same as in the settings below.



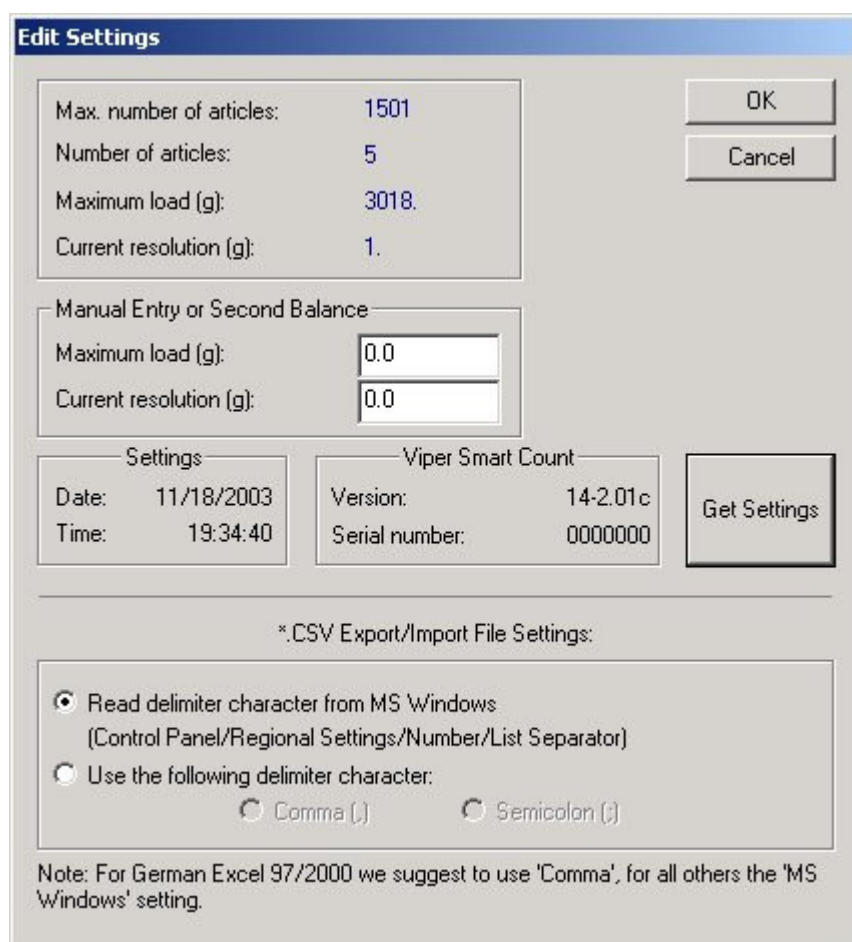
2.2 Language

SmartManager supports 6 languages: UK English, US English, German, French, Spanish and Italian. If you change the selected language, SmartManager has to be restarted for the change to take effect.

2.3 Change Unit

SmartManager supports 4 weighing units: g, kg, lb and oz. The selected unit becomes the unit used in the article database definition. It is highly recommended to use here the same unit as unit 1 of VIPER SC scale.

2.4 Settings



The Edit Settings dialog box is where you can view the current configuration of SmartManager and the settings of the Viper Smart Count scale to which SmartManager is connected.

The button "Get Settings" sends a request to the Viper Smart Count scale to send information about its settings. It is important that the settings of the scale are taken because data backup and restore may fail if the settings of the scale and SmartManager are not compatible.

Max. number of articles	Maximum number of articles that can be defined.
Number of articles	The number of articles currently defined.
Maximum load	The maximum weight that can be placed on the balance.
Current resolution	The weight display resolution.

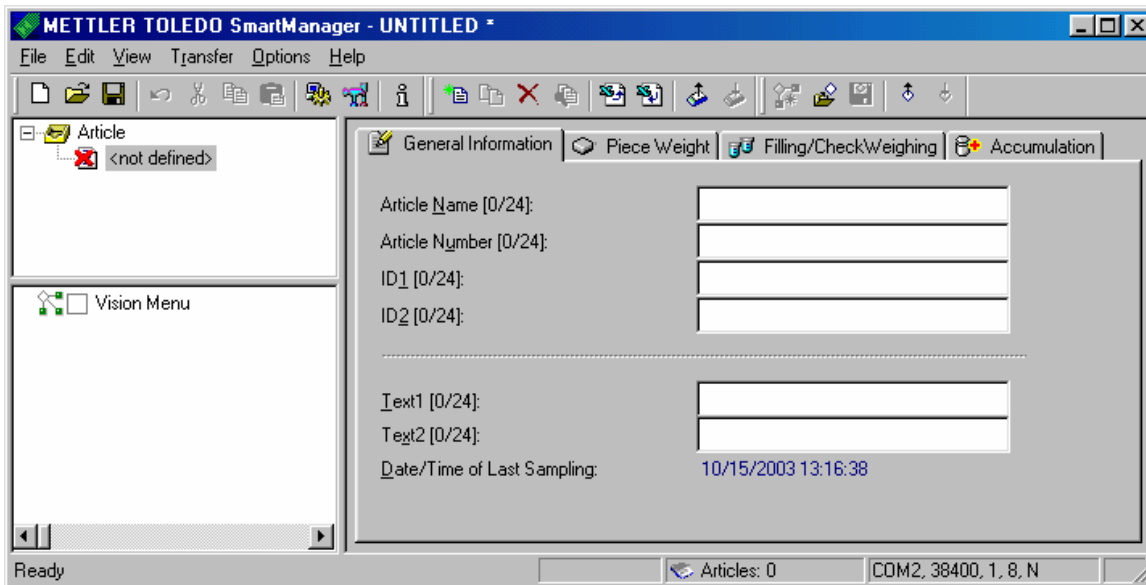
It is possible to manually enter the Maximum load and Current resolution in case there is no scale, or a scale with hooked up second scale, is connected to SmartManager.

The *.CSV Export/Import File Settings are discussed in chapter 4.

3 Article Definition

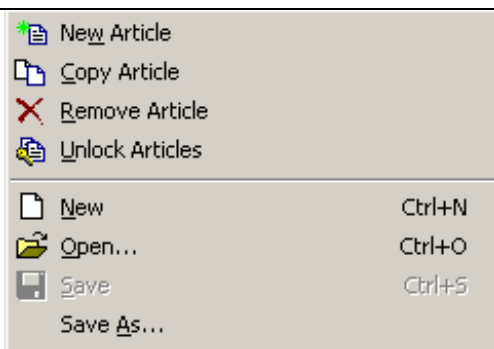
SmartManager eases the process of editing the VIPER SC article database parameters by providing a familiar Windows-based means of entering data.

To create a new article, select File / New Article from the main menu. Alternatively, you may click on the "Add New Article" button on the toolbar. This will create a new, undefined article which you will see as a "<not defined>" entry in the list on the upper left pane of the SmartManager window. On the right pane of the window, you will find the article parameters that can be edited to define this article.

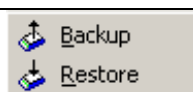


Use the toolbar or the pull-down menus to start one of the article database menu tasks:

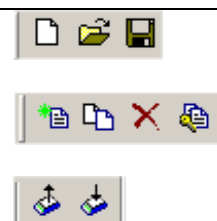
'File' Menu:



'Transfer' Menu:



Toolbar:



The article parameters are divided into four groups to make editing them even easier. To switch between the groups, click on the appropriate tab. For the description of the individual article parameters, please consult the 'Operator manual - METTLER TOLEDO Viper Smart Count' (Chapter 3.2.2 "Defining an article").

3.1 General Information



In the group "General Information", the following parameters can be defined:

- Article Name
- Article Number
- ID1
- ID2
- Text1
- Text2
- Date/Time of Last Sampling

Article Name [22/24]:	Aproz Kohlensäure 1048
Article Number [4/24]:	1048
ID1 [3/24]:	Q48
ID2 [3/24]:	R48

Text1 [24/24]:	====METTLER-TOLEDO====
Text2 [24/24]:	=====
Date/Time of Last Sampling:	01/01/2003 00:00:00
<input type="checkbox"/> Lock this article	

At the lower part of the "General Information" tab, there is a checkbox "Lock this article". This flag has only a meaning while in host mode. If this checkbox is checked, then this article cannot be accessed by any Viper Smart Count scale (see also chapter 6).

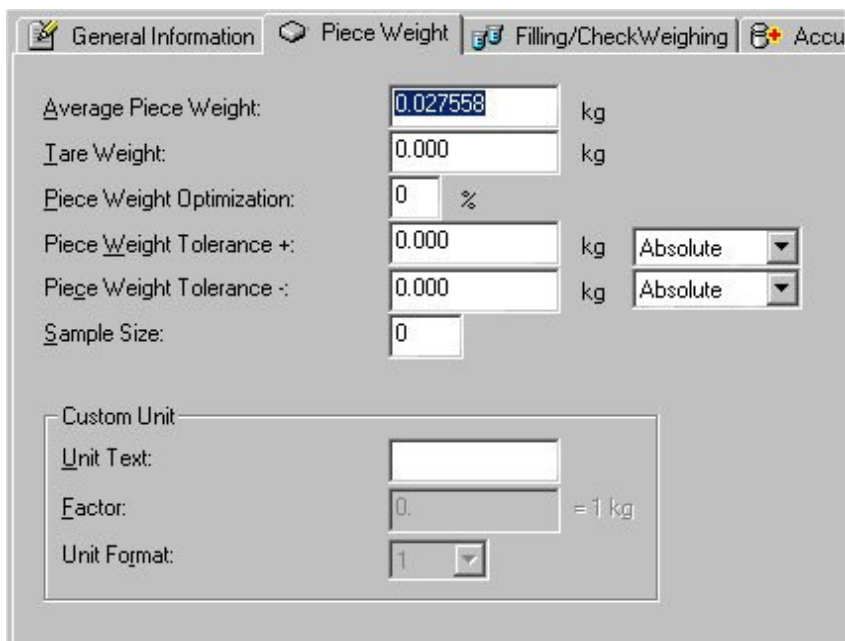
3.2 Piece Weight

In the group "Piece Weight", the following parameters can be defined:

- Average Piece Weight
- Tare Weight
- Piece Weight Optimization
- Piece Weight Tolerance+
- Piece Weight Tolerance-

In this group, there is the "Custom Unit" subgroup:

- Unit Text
- Factor
- Unit Format



Parameter	Value	Unit	Mode
Average Piece Weight:	0.027558	kg	
Tare Weight:	0.000	kg	
Piece Weight Optimization:	0	%	
Piece Weight Tolerance +:	0.000	kg	Absolute
Piece Weight Tolerance -:	0.000	kg	Absolute
Sample Size:	0		

Custom Unit	
Unit Text:	
Factor:	0. = 1 kg
Unit Format:	1

3.3 Filling/CheckWeighing

In the group "Filling/CheckWeighing", the following parameters can be defined:

Nominal Weight

Tolerance +

Tolerance -

PCS Mode (**Note:** If parameters are set in PCS Mode, values will only be restored if APW was set.)

General Information | Piece Weight | **Filling/CheckWeighing** | Accumulation

Nominal Weight: kg

Tolerance +: kg Absolute ▼

Tolerance -: kg Absolute ▼

PCS Mode

3.4 Accumulation

In the group "Accumulation", the following parameters can be defined:

Total Net

Total Gross

Total Pieces

Total Lot

Transaction Of Total Pieces

Transaction Of total Lots

General Information | Piece Weight | Filling/CheckWeighing | **Accumulation**

Total Net: kg

Total Gross: kg

Total Pieces: PCS

Total Lot:

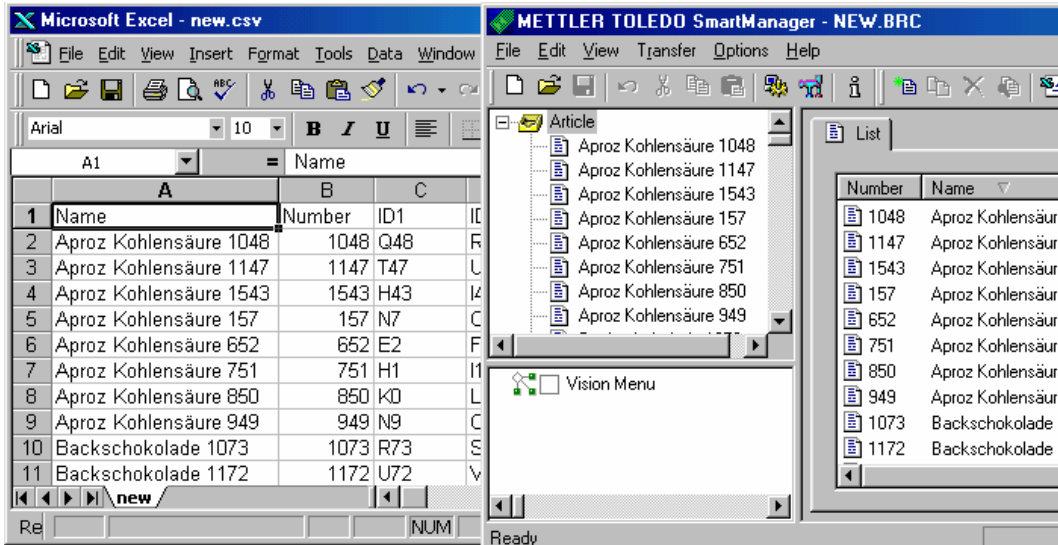
Transaction Total Of Pieces: PCS

Transaction Total Of Lots:

To delete an article from the database, select "File / Remove Article" from the main menu. To make a copy of the current article, select "File/Copy Article". The whole database can then be saved to a BRC file.

4 Import and Export to CSV

SmartManager has a feature for importing and exporting data to CSV files (comma-separated values) so that data in the article database can be made available to other applications that also support CSV files such as Microsoft Excel.

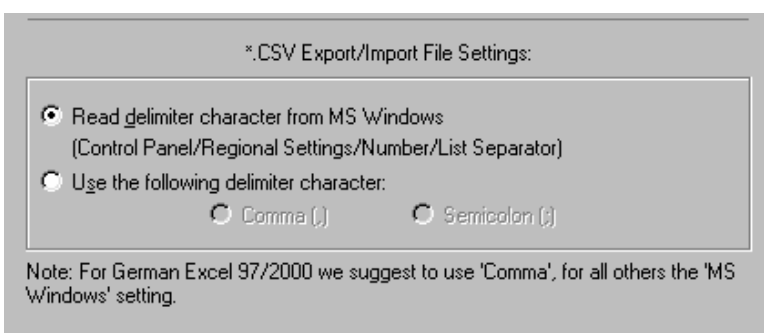


Importing and Exporting of CSV files can also be configured to your particular system to make the process even easier. Within the "Options / Settings" dialog box, you can specify whether you want to use a comma or semi-colon to separate the values in the CSV file. You may also choose to use the default delimiter for your Windows system as defined in the Control Panel Settings.

Within the CSV file, the individual article parameters are arranged into columns in the following order:

Name, Number, ID1, ID2, Text1, Text2, Date, Time, APW, Tare, PW Optimization, PW Tol+, (PW Tol+) Mode, PW Tol-, (PW Tol-) Mode, Sample Size, Dosing Nominal Weight, Dosing Tol+, (Dosing Tol+) Mode, (Dosing) Tol-, (Dosing Tol-) Mode, Pieces/Weight, Total Net, Total Gross, Total Pieces, Total Lot, Custom Unit Text, Custom Unit Factor, Custom Unit Format, Custom Unit Factor Format, Custom Unit Symbol, Unit

Please note that Excel can behave differently depending on version and language. E.g. the German Excel97 or 2000 ignores the separator character of Windows' Control panel and expects always ',' as delimiter.

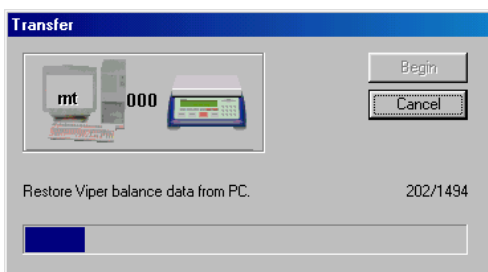


5 Backup/Restore/Edit of the article database

It is possible to save the article database that is already stored in the Viper Smart Count scale (backup) on the PC. Furthermore, new articles can be created, edited, saved in files and restored to the scale. Thus, creating a database with a large number of articles and restoring them into the Viper Smart Count can be done with minimal effort.

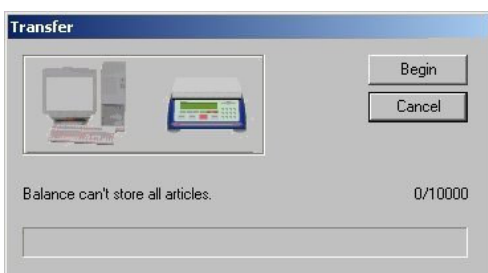
Make sure the Viper Smart Count scale is properly connected to your PC with a serial cable. On the scale, make sure that the cable is connected to a COM port that is set to "Dialog" mode with the following parameters: 8-data bits, no parity, 1-stop bit, XonXoff handshaking. SmartManager supports up to 38400 bps. However, make sure that the baud rate selected on the scale is the same as the one selected in SmartManager.

Select "Transfer / Backup" or "Transfer / Restore" from the main menu to open the "Transfer" dialog box. SmartManager will try to communicate with the scale and will display an error message if the scale is not ready for either backup or restore. If the scale is ready for backup or restore, press "Begin" to commence with the desired operation.



Take note that during a "Restore" operation, the speed of the process will vary, depending on the number of articles already stored in the Viper Smart Count scale. This is due to the fact that Viper Smart Count does a comparison check on incoming articles to those already stored in the scale to see if the articles are indeed uniquely named.

Even though it is possible to define up to 10'000 articles (useful for host mode, see chapter 6), it is not possible to restore that many into the Viper Smart Count scale. But, depending on the memory of the scale, there is a fixed number of articles that Viper Smart Count will accept. On such an instance, SmartManager will restore only the first number of articles (alphabetically shown in the Article Tree) that will fit into the Viper Smart Count scale memory.




Note: If the Article Database password" is active in the Viper Smart Count scale, then the user is required to enter the same password when prompted by SmartManager in order to do Backup/Restore operations.



6 Direct Article Access (Host mode use of SmartManager)

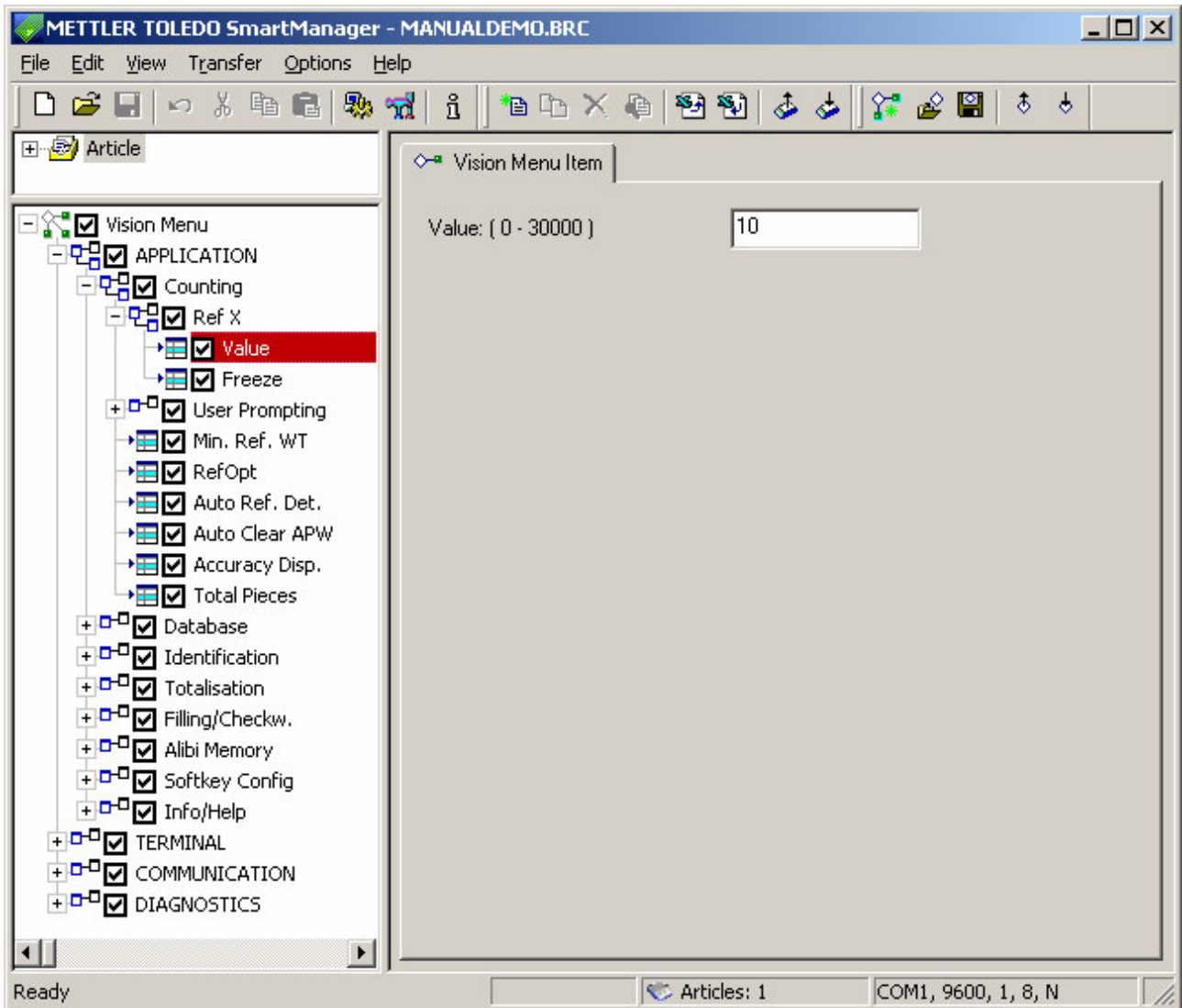
With Direct Article Access, it is possible for a Viper Smart Count scale to make use of an article that has been defined and exists only in SmartManager. In other words, the article is not stored in the scale. To use Direct Article Access, in Viper Smart Count set "Vision Menu / Application / Database / Access" to External.

If this is set and communication between the scale and SmartManager has been established, when you press «» to access the database, you will be prompted to enter an Article Name. Once the Article Name has been entered, Viper Smart Count will request for this article from SmartManager.

Note: it is recommended to use a Barcode reader for calling the articles. The entered article name has to be 100% equal to the name that is stored in the database.

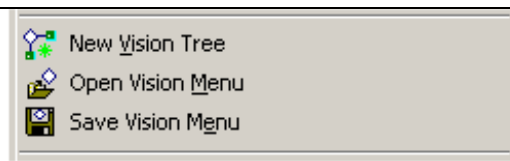
7 Backup/Restore/Edit of Vision Setup

METTLER TOLEDO SmartManager has a feature for backing-up and restoring the Vision Settings of the Viper Smart Count scale. Same as with backup and restore of the article database, this feature aims to help the user simplify the process of configuring the scale. The backed-up Vision Settings can be edited and saved, and then restored from SmartManager. On the lower left pane of the SmartManager window, you will see the Vision tree and on the right pane, the current values of each setting:



20

Use the toolbar or the pull-down menus to start one of the Vision menu tasks:

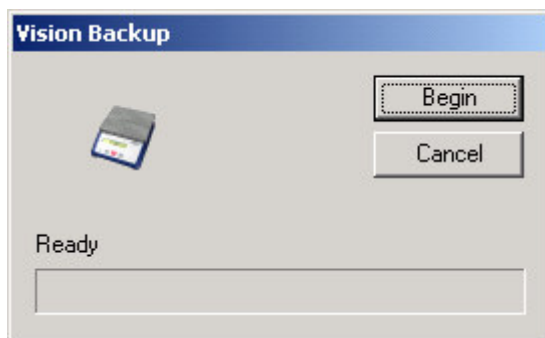
'File' Menu:**'Transfer' Menu:****Toolbar:**

Note: If the Vision Settings Supervisor password" is active in the Viper Smart Count scale, then the user is required to enter the same Supervisor password when prompted by SmartManager in order to do Backup/Restore operations.



7.1 Vision Backup

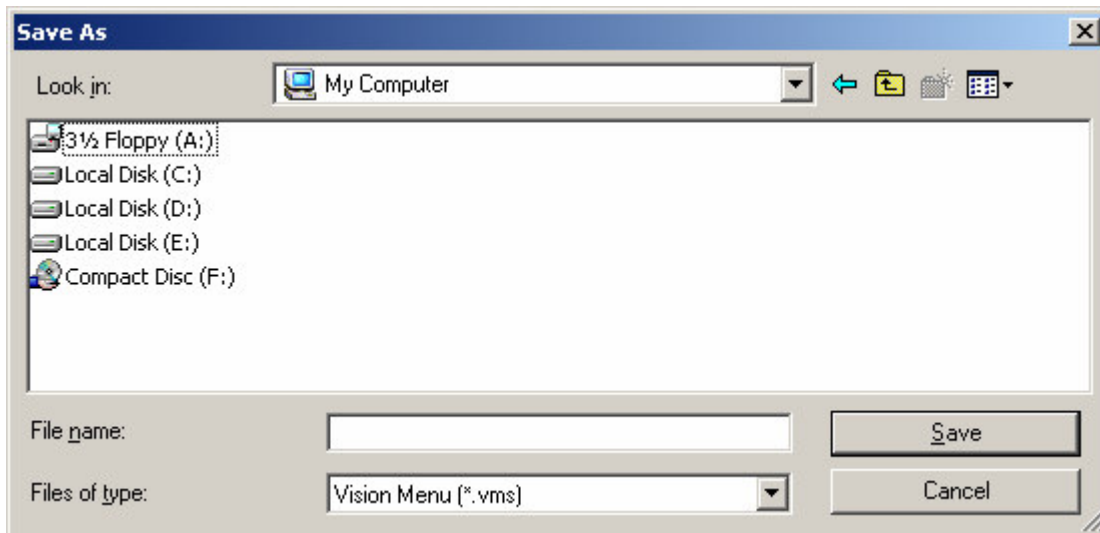
Select 'Vision Backup' (pull down menu or toolbar) and press 'Begin' to start the backup of all Vision Menu Settings. If there is no tree structure loaded yet, then the backup process will last longer, because all the text of the menu and parameter items have to be loaded first.



Note: Not all Vision menu items would be downloaded upon backup.

7.2 Save Vision Menu

After making a backup and optional editing of values, you can save the settings in a file of type *.vms ('.vms' is added automatically). Select 'Save Vision Menu' (pull down menu or toolbar), choose a directory, enter a name and press 'Save'.



Please observe the 'Please wait' **Please wait...** notification in the status bar and wait till **Ready** appears. During the waiting time, the toolbar will not be shown.

7.3 Open Vision Menu

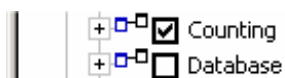
Select 'Open Vision Menu' (pull down menu or toolbar), to load VMS file (see chapter 7.2) into the SmartManager.

Note: All currently active Vision Menu Settings within SmartManager will be overwritten. During the loading time, the toolbar will not be shown.

7.4 Vision Settings Restore

As a mechanism to safeguard against overwriting critical settings, the settings that are to be synchronized in the scale have to be verified by putting a checkmark on the checkbox to the left of the desired Vision menu setting.

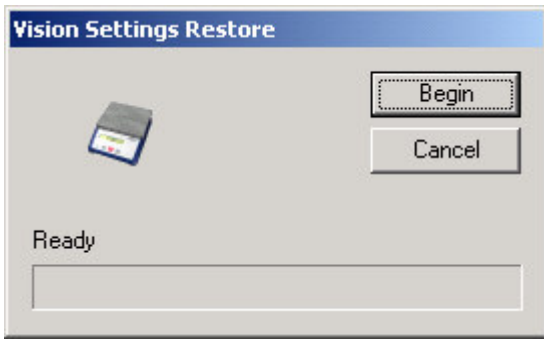
Example:



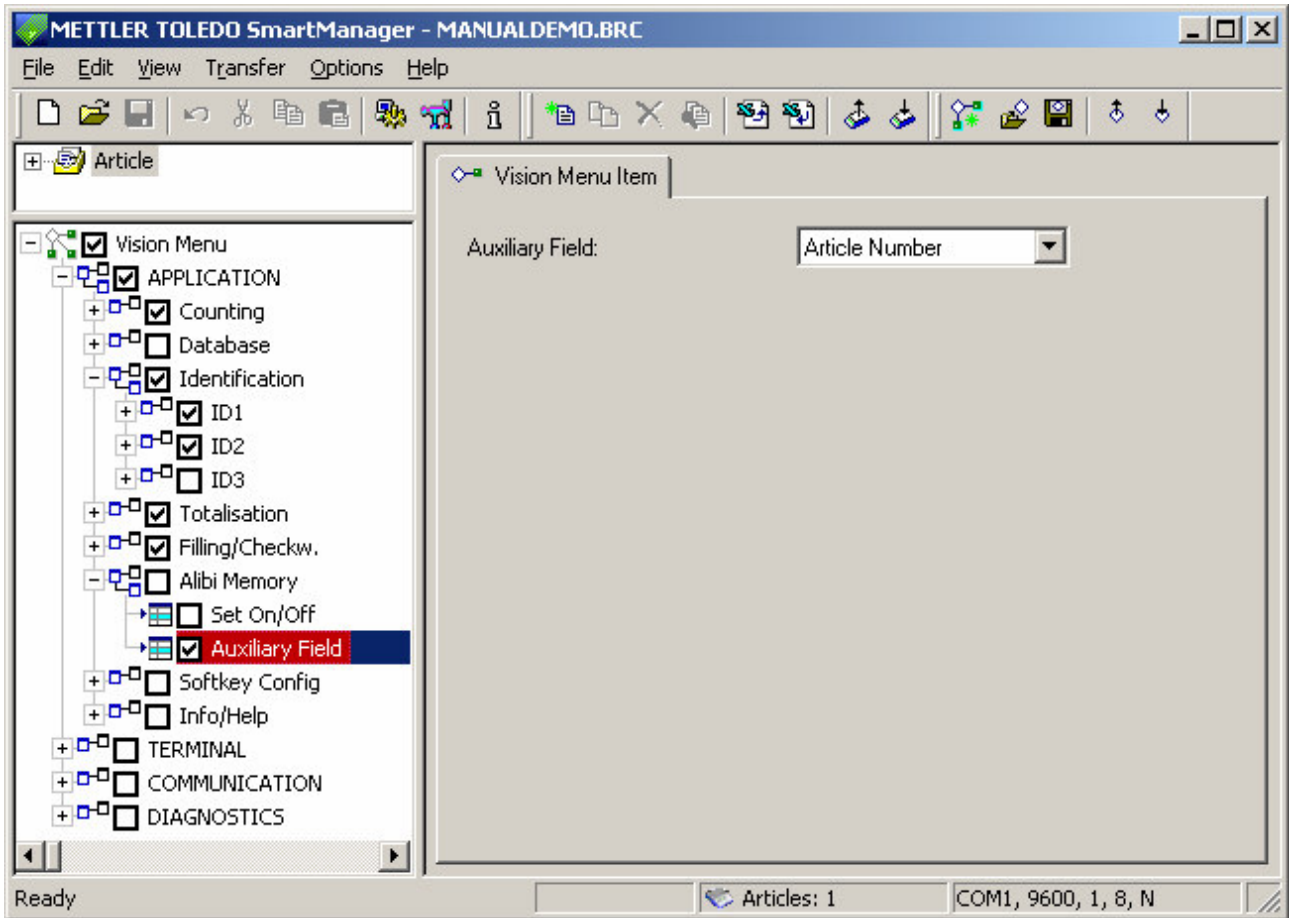
All parameters of the 'Counting' menu will be restored from the SmartManager to the scale. But those of 'Database' will not.

Select 'Vision Settings Restore' (pull down menu or toolbar) and press 'Begin' to start the restore of the marked Vision Menu Settings only.

22



Example of reduced parameter set to restore:



7.5 New Vision Tree

Select 'New Vision Tree' (pull down menu or toolbar) to erase all currently loaded Vision Menu Settings within SmartManager. The empty Vision Menu tree is reflected as shown below:



Index**A**

Article, Accumulation	15
Article, Copy	15
Article, Delete	15
Article, Filling/Checkweighing	15
Article, General Information	13
Article, Lock	13
Article, New	12
Article, Piece Weight	14

B

Balance connection	4
--------------------------	---

C

CSV File, format	16
CSV File, import-export	16

D

Database, Backup	17
Database, Password	17
Database, Restore	17
Direct Article Access	18

G

Get Settings	11
--------------------	----

I

Installation	4
IP Address	9

O

Options, Change Unit	11
Options, Communication	8
Options, Language	10
Options, Settings	11

P

Port, Ethernet	8
Port, Serial	8
Product Activation	4
Product Registration	5

S

Server Address	9
Server Port	9

T

TAN number	5
TCP Client	9
TCP Server	9
Timer Connect	9
Timer Disconnect	9
Transfer settings	17

V

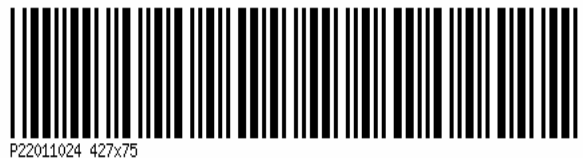
Vision Menu, Backup	20
Vision Menu, New	22

Vision Menu, Open	21
Vision Menu, Password	20
Vision Menu, Restore	21
Vision Menu, Save	21

W

Weighing units	11
----------------------	----

For the future benefit of your METTLER TOLEDO product, and to preserve its value, METTLER TOLEDO service assures you of its quality and measuring accuracy for years to come. Please request full details of our attractive terms of service. Thank you.



Subject to technical changes.