





**Operating Manual** 

KMG-Vision software for evaluation and logging of impact force measurements on doors, gates and barriers

KMG-Vision - Software for evaluation and logging of impact force measurements

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## **Brief Description**

The KMG-Vision software ensures convenient transmission, evaluation and documentation of measurements, performed with the clamping force measuring devices of the KMG series. The Windows-based software KMG-Vision visualizes, logs and archives the measurement data. It complies according to the applicable standards and technical directives. Via an interface, the measurement results can be transferred to a PC or notebook at the click of a mouse.

With KMG-Vision it is possible to create projects. On the one hand, a project contains all project-specific information such as test basis, test location, test object and operator. On the other hand, there are stored all measurement results, curves included, the evaluation as well as associated protocols and forms. In addition, the mandatory measurement locations specified in the standards can be defined in advance in an assignment table. The measurement results are transferred from the KMG device to the PC or notebook.

KMG-Vision then can display the exact curve progression of each individual measurement, can visualize measurement results graphically and have an evaluation performed. The software creates a measurement report according to the current standards, which is generated as a Word document. Forms of ASR regulations can also be created in accordance with the ASRA 1.7 technical regulations for workplaces. If required, the user can design individual templates for the measurement reports.

Creating projects in KMG-Vision makes preparation, measurement and evaluation much easier. The entire process, from preparing the measurement and carrying it out to importing the data and evaluating it, can be divided into several steps. If necessary, these can be carried out by different people and at different locations (e.g., in the office and in the field).

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## 1 About This Manual

This manual describes operation of the software KMG-Vision for evaluation and logging of impact force measurements with a KMG series force tester.

Carefully and thoroughly read this document to become familiar with the product before using it. To prevent injury and damage to the product, pay particular attention to the safety notes in this document. Pass the documentation along to later users of the product.

## 1.1 Explanation of Symbols

To ensure maximum comprehension, this manual uses a consistent structure. The following symbols are used.

### Action objectives

Action objectives describe the result to be achieved by the subsequent action instructions. Action objectives are shown in **bold**.

Symbol	Explanation		
	Precedes an instruction		
1 2 3	Step-by-step instructions. The instructions are numbered in the order of the respective steps.		
	Results of steps		
٠	List with no specific order		

## Notes used

This manual uses the following note type:

(	
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## **Tips and recommendations**

This type of note provides information that is directly relevant for further operation of the software.

## 1.2 Storing the Manual

Keep this documentation nearby to serve as a reference when needed.

## 2 For Your Safety

The software is used to evaluate the impact force measurements recorded by the KMG devices. Operating instructions are available for each KMG measuring device and must be read by the operator.

The operator is the person who operates the measuring system for commercial, economic or research purposes or who makes it available to a third party for use/application and who bears the legal product responsibility for the protection of personnel or third parties during operation.

The measurement system is intended for use in commercial or public areas. The operator is therefore subject to the legal obligations for occupational safety and safety in the public sector.

In addition to the safety instructions in this manual and to the operating manual of the KMG device, the regulations for safety, occupational health and safety as well as for environmental protection, applicable at the place of use of the measurement system, must be observed.

## **3** Scope of Delivery

KMG-Vision is offered as an accessory to the KMG series of impact force testers.

## 4 Hardware Requirements

- KMG with accessories
- USB cable (USB | Mini-USB)
- PC or Laptop

## 5 System Requirements

- Pentium 4M (or equivalent)
- Windows 10
- 1 GB RAM
- 1 GB free memory
- USB port
- MS Word is required for the protocol data sheets, at least version 2010.

## 6 Licensing

The software is available for a system for impact force measurements operated with one of our KMG measuring devices. For further measuring systems or individual devices, additional software must be purchased. The software can be used on three different computers, but not simultaneously.

Any updates due to product improvements are usually free of charge. Adjustments due to normative changes may be subject to a charge in individual cases.

If you are starting the KMG-Vision software for the first time, you have to choose between a demo version and a full version.

## 6.1 Demo Version

You can test the software with full functionality in a demo version. This can be used free of charge for 14 days. To activate the demo version, you only need to provide a valid e-mail address and an Internet connection. The demo version can only be activated online.

## 6.2 Full Version

Activation is possible both online and offline. The license key is assigned with the software purchase.

Please visit our activation homepage at https://offlinelizenzierung.gte.de.

### **Online Activation:**

If you decide to activate KMG-Vision online, please fill in the activation form with your personal information and follow all prompts. It is mandatory to enter your valid e-mail address and the license key.

## **Offline Activation:**

If you choose offline activation, the "Software Licensing" window will ask for both the license key and activation key. You must generate the activation key individually for your computer. To do this, visit our activation homepage https://offlinelizenzierung.gte.de and follow all prompts.

## Generate activation key

- 1 Go to our activation home page.
- 2 Click on "Activate a license".
- 3 Enter your license key and your computer ID.
- 4 Press the "Activate" button.
- ⇒ The activation key will be generated and displayed.

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# How to find your computer ID and the Internet address for the activation home page $% \left( {{\mathbf{D}_{\mathrm{s}}}} \right)$

- 1 Press the "License Information" button under "Options".
- ⇒ The "Software Licensing" window opens.

There you will find the Internet address for the activation homepage and your PC ID.

## 7 Installation

## Install KMG-Vision

- 1 Download the KMG Vision installer from the download section of our website.
- 2 Unzip the zip file to a temporary folder.
- 3 Run the EXE file.

## 8 Updates

KMG-Vision is continuously updated. We advise you to update regularly so that you can always carry out your measurements and evaluations according to the latest status. Let the software automatically check for updates at every start or run the update manually.

## Set up automatic update

- 1 Open the "Options" menu item on the start screen.
- 2 In the "General" section, place a check mark next to "Check for updates at start".
- **3** Save the setting via the "Save" button.

## Perform manual update

- **1** Open the "Options" menu item on the start screen.
- $\Rightarrow$  The "Settings of your KMG-Vision software" window opens.
- 2 In the "General" area, click the "Search now" button.
- $\Rightarrow$  A window opens that displays the versions.
- **3** Click the "Update" button there.



## **Tips and recommendations**

Using the "Download" button you can also download the installer to manually install the software on your PC after unpacking it.

## 9 Test principles, standards, directives

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KMG-Vision complies with the following standards and directives

Standards and directives	Title
EN 12453:2017 DIN EN 12453:2017-02	Industrial, commercial and garage doors and gates - Safe- ty in use of power operated doors - Requirements and test methods
EN 16005:2012 DIN EN 16005:2013-01	Power operated pedestrian doorsets - Safety in use - Requi- rements and test methods
EN 16361:2013 +A1:2016	Power operated pedestrian doors - Product standard, per- formance characteristics - Pedestrian doorsets, other than swing type, initially designed for installation with power ope- ration
EN 17352:2022	Power operated pedestrian entrance control equipment - Sa- fety in use - Requirements and test methods
ASR A1.7 kraftbetätigte Türen	Technische Regeln für Arbeitsstätten ASR A1.7: kraftbetätigte Türen (in German)
ASR A1.7 Rolltore & Rollgitter	Technische Regeln für Arbeitsstätten ASR A1.7: Rolltore & Rollgitter (in German)

## 10 Connecting KMG device with KMG-Vison

The KMG is connected to the PC or notebook via a USB cable.

## Connect measurement device

- 1 Connect the KMG.
- 2 Switch on the KMG.
- $\, \Rightarrow \,$  The KMG is ready for operation and measurements can be transferred to the KMG-Vision software.

## 11 Starting KMG-Vision



### Start the software:

Click the "KMG-Vision" icon on your desktop. Alternatively, you can reach KMG-Vision via the Windows start menu.

 $\Rightarrow$  The start screen opens.

## 12 General Operating Instructions

Windows menu         You can minimize the windows, display them in full screen r           close them via the window operating menu. You will be asked ges should be saved when closing the project window.			
Buttons         Clicking the "Cancel" or "Save" buttons closes the window w saving the changes (Cancel) or with saving the changes (Save).			
Keyboard input	Entries can also be changed via the keyboard: • <ctrl>+<z> undo • <ctrl>+<y> restore</y></ctrl></z></ctrl>		
Drag & Drop	You can copy measurements from one project to another with the mouse using drag & drop if you have opened the respective project windows. If you want to move data, you must explicitly delete the original data after copying. The data is copied and stored again in another place.		

The following icons are available for operating the KMG-Vision software:				
Symbol	Keyword Description			
	Open file         Opens an existing file:           • The Windows folder with the files opens to choor enter path of file.         • Select a file, confirm with ok.			
	New project	Opens the window for creating a new project.		
	КМĞ	Starts data import from KMG to KMG-Vision.		
۲ <sup>۰</sup>	Options	Opens the "Options" window to carry out settings in the KMG Vision software.		
?	Instruction	Opens a PDF with the current manual for the KMG-Vi- sion software.		

	Save project	The project with all stored data and measurements is saved.
	Save as	The project with all stored data and measurements is saved in a location of your choice.
	Undo / restore	<ul><li>Arrow to the left: undo last action</li><li>Arrow to the right: restore</li></ul>
	Protocol	Creates a protocol according to specified standard or technical directive (ASR)
	Select date	Calendar for simplified selection and entry of dates
Q	Open databases (magnifying glass)	<ul> <li>The magnifying glass opens a database based on the context:</li> <li>Contact data of inspectors</li> <li>Contact data of customers</li> <li>Floor information</li> </ul>

## 13 Start Screen

KMG-Vision	KMG-Vision	v
Open file	Last used E: Projekt_8 E: Projekt_6 E: Projekt_5 E: Projekt_9	• • T
्रि १००४ Options		j€ C e
? Instruction	KMG-2022-07-06-2a	

Via the start screen you can:

- open a file or a new project
- create a new project
- import measurement data to a file
- choose options and settings
- read this manual as in PDF

The "Last used" drop-down list contains projects that have already been opened.

Open a measurement by clicking on the list entry.

There are different ways how and where the files are stored with KMG-Vision:

Symbol/ Icon	Definition	Directory   FileName.Suffix
<u> </u>	A measurement data file contains only the measurement data and measurement curves of one or more measure- ments from the KMG.	Main directory KMGfmg
E	Main directory Project. kmg	

The main directory is "C:\Users\Public\Documents\GTE\KMG-Vision", unless otherwise specified.

## 13.1 Opening a File

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Organisieren 👻 Neue	er Ordne	er				== -
OneDrive - Person	Na	me Projekt_2022.03.14(recover)			Änderungsdatu 05.07.2022 08:54	Typ Dateiordner
Dieser PC		Projekt_2022.06.29			05.07.2022 11:54	Dateiordner
3D-Objekte		Protocoltemplate			25.07.2022 09:32	Dateiordner
Bilder	C	KMG_2022.06.29.fmd			29.06.2022 15:48	FMD-Datei
Desktop	C	KMG-22-07-06-a.fmd			06.07.2022 08:36	FMD-Datei
	C	KMG-2022-07-06-2a.fmd			06.07.2022 15:58	FMD-Datei
🖆 Dokumente	C	KMG-2022-07-06-3.fmd			06.07.2022 16:02	FMD-Datei
Downloads	•	Measurement-2022-08-22.kmg			22.08.2022 16:01	KMG-Datei
👌 Musik		Measurement-2022-08-23-a.kmg			23.08.2022 12:24	KMG-Datei
Videos	•	Measurement-2022-08-23-b.kmg			23.08.2022 13:46	KMG-Datei
🏪 Lokaler Datenträg	•	Projekt.kmg			04.07.2022 16:43	KMG-Datei
- *	<					
Date	iname:	Measurement-2022-08-22.kmg		`	kmg Data (*.kn	ng;*.fmd)
					ОК	Canc

## Open a file

- 1 Click on "Open file". Alternatively, you can click directly on the desired project in the "Last used" list.
- ⇒ The Windows-Window "Specify file path" opens.
- 2 Select a file and press "OK".
- ⇒ The measurement data file or the project file opens.



## Tips and recommendations

The subdirectories with the respective project name contain further data such as inspection protocols or ASR forms of German Technical Regulations for Workplaces.

## 13.2 Creating a New Project

New Project	×
Project data	
Create a new project based onan existing empty project.	g project (with all inputs), or create a new
You can also transfer measurements from	n the KMG to a file
	KMG Empty Template

#### Create a new project ►

- Click on "New project". 1
- ⇔ The Windows window "New Project" opens.

You have three options to create a new project:

### 13.2.1 Transferring new measurements directly from the KMG

Download your new data from the KMG gauge. 



- 1 Click on the "KMG" button.
- ⇒ The "KMG measurement" window opens.

Load the measurement data from the KMG device as described in chapter 13.3 "KMG".



#### **Tips and recommendations**

This is the fastest method, provided that you have already performed your measurements with the KMG device and,

- · if you want to store your measurement results quickly on your PC or notebook,
- · if you want to process the measurement results later,
- · if another person, e.g. in the office, enters and evaluates the measurement results in a project.

## 13.2.2 Creating an empty new project

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- Create an empty new project. Click on the "Empty" button.
- The Windows window "Select path" opens. The file name "Measurement.kmg" is automatically suggested.

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organisieren 🔻 Neuer	Ordner				8== -	?
OneDrive - Person	Name Projekt_5	^		Änderungsdatu 06.07.2022 16:08	Typ Dateiordner	
💻 Dieser PC	Projekt_9			13.07.2022 14:11	Dateiordner	
3D-Objekte	Projekt_2022.0	3.14		29.06.2022 15:30	Dateiordner	
E Bilder	Projekt_2022.0	3.14(recover)		05.07.2022 08:54	Dateiordner	
Desktop	Projekt_2022.0	6.29		05.07.2022 11:54	Dateiordner	
Dokumente	Protocoltemp	late		25.07.2022 09:32	Dateiordner	
	Measurement	-2022-08-22.kmg		22.08.2022 16:01	KMG-Datei	
Downloads	<ul> <li>Measurement</li> </ul>	-2022-08-23-a.kmg		23.08.2022 12:24	KMG-Datei	
👌 Musik	<ul> <li>Measurement</li> </ul>	-2022-08-23-b.kmg		23.08.2022 13:46	KMG-Datei	
Videos	Projekt.kmg			04.07.2022 16:43	KMG-Datei	
Lokaler Datenträg	Projekt_1.kmg	l.		06.07.2022 15:47	KMG-Datei	
×	<					>
Dateina	me: Measurement	kmg	~	KMG project fi	le (*.kmg)	~
				Next	Cancel	

- 2 If desired, overwrite the automatically generated file name with your individual file name and confirm with "Next".
- $\Rightarrow$  The project opens.

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## **Tips and recommendations**

This method is recommended when a project is to be planned and prepared. It is possible for an employee or yourself to create the project in advance in the office and even specify the items and measurement points already. The person performing the test then works along the specified points quickly step by step in the field. The measurement data can later be transferred from the KMG to the existing project by you or by an employee, again in the office; see Chapter 13.2.3 "Using an existing project as a template".

## 13.2.3 Using an existing project as a template



Choose an existing project as a template.

Click on the "Template" button.

The Windows window "Select a protocol as a template" opens. All project files are displayed.

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Organisieren 🔻 Neuer	Ordner					?
OneDrive - Person ^	Name Projekt_2022.03.14(recover)			Änderungsdatu 05.07.2022 08:54	Typ Dateiordner	
🖳 Dieser PC	Projekt_2022.06.29			05.07.2022 11:54	Dateiordner	
> 🧊 3D-Objekte > 📰 Bilder	<ul> <li>Protocoltemplate</li> <li>Measurement.kmg</li> </ul>			25.07.2022 09:32 25.08.2022 10:06	Dateiordner KMG-Datei	
> Desktop	<ul> <li>Measurement-2022-08-22.kmg</li> <li>Measurement-2022-08-23-a.kmg</li> </ul>			22.08.2022 16:01 23.08.2022 12:24	KMG-Datei KMG-Datei	
> 🔮 Dokumente	Measurement-2022-08-23-b.kmg			23.08.2022 13:46 04.07.2022 16:43	KMG-Datei KMG-Datei	
> 👌 Musik	<ul> <li>Projekt.kmg</li> <li>Projekt_1.kmg</li> </ul>			06.07.2022 16:43	KMG-Datei	
Videos Lokaler Datenträg	<ul> <li>Projekt_2.kmg</li> <li>Projekt_3.kmg</li> </ul>			12.07.2022 09:19 11.07.2022 15:19	KMG-Datei KMG-Datei	
	<					>
Datein	ame:		`	protocol file (*.	.kmg)	~
				Select	Cancel	

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#### **Tips and recommendations**

Choosing an existing project as a template is recommended, for example,

- if you have already carried out a similar project and can take over a large part of the data, for example for a similar already existing door or gate object or for the same client or inspector.
- if you have already planned and predefined a project in the office, see Chap. 13.2.2 "Creating an empty project".

## Select the project file that you want to use as a template.

- 1 Click the file you want as a template in the Windows menu
- 2 Press the "Select" button.
- ⇒ The Windows window "Select save path" opens.
- ⇒ "Measurement.kmg" is suggested as the file name.
- **3** Accept this preset name "Measurement.kmg" or overwrite the clicked file name with your individual file name.
- 4 Confirm with "Next".
- ⇒ The project opens.

This new project is virtually a copy of the project that was selected as a template. However, the measurement results are deleted in it.

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## **Overwrite warning**

If you have selected or entered the file name of an existing project, an "Overwrite" window opens. It warns: "File already exists, should it be overwritten?".

You can answer this as follows:

Yes	The existing project opens and is overwritten. Note that this will
	cause you to lose the data that previously existed in this project.

- No The view returns to the Windows "Select Storage Path" menu. You can then continue with step (4) as described above.
- Cancel KMG-Vision returns to the very beginning to the start screen.

## 13.3 KMG

## 13.3.1 Transferring measurement data from the KMG

You can transfer your measurement data from the KMG to the PC or notebook via the "KMG" button on the start screen.

## Start the data import

- 1 Check if the KMG device is connected via the USB line.
- **2** Turn on the device.
- **3** Press the "KMG" button on the start screen. If no measurement is stored in the project yet, you can also click on the desired cell in the "Last used" window view.
- ⇒ The "KMG measurement" window with the second line of the same name "KMG measurement" is displayed

## Select your connected device (1)

- 1 Left-click on the KMG device in the image on the left.
- $\Rightarrow$  A context menu with image selection of the KMG devices opens.
- 2 Select your connected KMG.
- $\Rightarrow$  The frame around the selected KMG model turns blue.

KMG measurement	— 🗆 X
KMG measurement	
Select your connected KMG and then the corresponding interface.	
1	2
	erface 🖕 🔊

## Select the interface (2)

- 1 Under "Interface" you will find a context menu.
- 2 Select your interface or the automatic search.
- ⇒ After a KMG has been detected at the selected interface, the display changes.



#### **Tips and recommendations**

When you transfer the data from the project, information about the type of import and the selected contact point is displayed in the second line in the "KMG measurement" window. See also chapter "15.2.3 Import from KMG with preview" and "15.2.4 Direct import from KMG with assignment".

KMG measurement										-	-		Х
KMG measurement													
Change device Measurements in KMG 1 2 3 4	1- 0,8- 0,6- 0,4- ≥ 0,2- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0- 0-												
	-0,4 - -0,6 - -0,8 - -1 -												
	-1 -0,9	-0,8 -0,7 -0,	6 -0,5 -0,	4 -0,3 -0,2		Ó ( ïme [s]	0,1 0,2	0,3 0,4	0,5	0,6 0,7	0,8	0,9	1
	Measurement Date:	DD.MM.YYYY	iii				Standard:			]			
	Temperature:	23 °C	5	ingle measure	ment	Fd	Td	$\overline{F_s}$	Fe				
	Humidity:	40 %		0		0,0 N	0 ms	0,0 N	0,0 N				
	Device:	KMG 2000-G		0		0,0 N	0 ms	0,0 N	0,0 N				
v	KMG S/N:			0		0,0 N	0 ms	0,0 N	0,0 N				
Save as	Calibration Date:				2	220,0 N	1535 ms	24,0 N	0,0 N				

⇒ All measurements stored in the KMG device are listed on the left side.



## **Tips and recommendations**

To view individual measurements in advance, you can click directly on the number next to the checkbox.

- **3** Set a checkmark by clicking the respective checkbox for all measurements you want to save.
- 4 Press the "Save as" button.
- ⇒ The Windows window "Select path" opens.
- 5 Give your file a name and click on "Next".
- $\Rightarrow$  KMG-Vision creates an fmd file.
- ⇒ The measurements are imported. Your curve progression is displayed, according to the view in chapter "13.3.2. Measurement Data Display".

As long as no test principles and standards have been selected in the project under "Test principles & standards" (see Chapter "14. Project") or in the options (see Chapter "19. Options"), the "Standards" field on the display remains empty.

### 13.3.2 Measurement Data Display

The software displays the force-time history of the measurement when importing. KMG-Vision automatically recognizes or inserts:

- the current date as the measurement date
- the measuring device
- the serial number of the measuring device
- the ambient temperature
- the latest calibration date

· the humidity

The information on the measurement date, temperature and humidity can be overwritten manually if required.



Each measurement consists of three individual measurements, from which an average is determined for:

- + the maximum dynamic force  ${\rm F_d}$  + the time period  ${\rm T_d}$  during which the measured force exceeds 150 N
- the averaged static force  $\bar{\mathsf{F}}_{s}$  (averaged over the time period and only, if a KMG-2000 was used
- the final force F



#### **Tips and recommendations**

You can also export the data of a measurement:

- to a clipboard
- to an Excel file
- · as a simplified image

The context menu for this opens when you move the mouse over the trace and press the right mouse button.



#### **Tips and recommendations**

From here you can also use the buttons in the upper bar to save the measurement data file, create a new project, open an existing project and set the options. In these cases the project window opens as a second window, see chapter "14. Project".

## 14 Project

Projekt-2022-07 —		×
Save Save as Undo Restore New Open Protocol	٥pti	کړ ion
Test basis Testing laboratory Client Measurement		
Project		
Contract number:		
Test date: DD.MM.YYYY		
Next test date: DD.MM.YYYY 📛		
Test principles & standards		
EN 12453:2017 EN 16005:2012 EN 16361:2013 EN 17352:2022		
DIN EN 12453:2017-02 DIN EN 16005:2013-01 ASR 1.7 Rolltore & -gitter ASR 1.7 kraftb. Türen		
Additional standards:		
v		
Evaluation of force measurements		
Comment:		
Status: Unknown		

All necessary details about the measurements on an object are stored in the project.

The upper menu bar contains the essential functions of the KMG-Vision software. You can trigger various actions from there using these options, as shown in chapter "12. General operating notes":

- "Save" to the last used location.
- "Save as" a new location to be selected
- Undo or redo actions
- · Create a new project with "NEW"
- · Open an existing project with "Open"
- Create a measurement "Protocol"
- · Under "Options" adjust the default settings

In the bar below there are several areas where all data and features of a project are stored. You can select these in the bar under the top menu bar:

- · Project data
- Test center

- ASR (forms)
- Additional standards
- Plant operator and test object
- Measurement

## Tips and recommendations

The "Measurement" and "ASR" fields are displayed depending on the preselected standards and directives.

## 14.1 Test Basis

#### First enter the characteristic data under "Project".

- 1 Fill in the "Contract number" field.
- 2 Enter the test date.
- 2 Enter the next test date.

As soon as the test date is entered, the next test date appears automatically. This is exactly one year later according to the manufacturer's specifications. Deviations from this must be entered manually if required.

### Tips and recommendations

The contract number is the identification number (ID) for the project.



Use the calendar icon to simplify the selection and entry of dates.



Use the magnifying glass to simplify the selection of address information already stored in the database.

#### Specify the test principles and standards. ►

- 1 Activate the checkbox to the left of the desired standard. It is possible to select multiple options.
- 2 If necessary, enter additional bases.

### Tips and recommendations

If standards have already been preset under "Options", they are automatically activated. The standards to which the KMG-Vision software conforms are listed in Chapter 9. The subsequent evaluation is performed according to the selected standards.

#### Make an evaluation of the force measurements.

- 1 In the "Comment" field, you can comment on your measurement results.
- 2 For evaluation, you can select the state of the test object in the "Status" selection field via the drop-down list.

Three states are possible as the evaluation status: • unknown

- OK
- not OK



## Tips and recommendations

An evaluation in the "Evaluation of Force Measurements" section is usually completed only after all measurements have been completed.

## 14.2 Testing Laboratory

Projekt	_3									-	×
Save	Save as		) ndo	C	E New	Open	Protocol	ASR - Gates	ASR - Doors		र््े Options
Test basis	Testing laborator	Client	Measurement	ASR: Roll	ing gates & grilles	ASR: pow	v.op. Doors				
Test cen	ter										
Company	GT	E Marketing		(	0						
					-						
Street:	He	Imholtzstr. 21									
Postcode	/ Town:	41747	Viersen								
Salutation	n: Mr										
Name:		asdfasdfn									
Name:	sat	asorasorn									
First Nam	e: jtzr	j nmhrtzj									
Addition:	mt	zui									
Email:	tet										
Email:	tett	nzt									
Telephon	e number: 017	7777777									
	Def	ault checker f	or new projects								

## Enter the data of the test center.

1 Fill in the fields "Company", "Street", "Postcode" and ""City".

## Enter the data about the tester

- 1 Fill in the following fields: "Salutation", "Last Name", "First Name", "Additional", "E-mail", "Phone number".
- 2 If necessary, set the person as the default tester.



## Tips and recommendations

With the magnifying glass button you can open the respective database.



**Tips and recommendations** Save your project regularly.

Projekt_3					-	
	e as Undo	C E Restore New	Open Protocol	ASR - Gates	ASR - Doors	र््े Options
Test basis Testing labo	ratory Client Measuremer	it ASR: Rolling gates & grilles	ASR: kraftb. Doors			
Plant operator					~	
Company:	eirc nw ev	Contact person:	difw		Q	
Street:	werfv m 12	Phone number:	06789 3456			
Postcode / City:	cvsadf	Email:	were@ewirfj.de			
Customer number:						
Test object						
rest object						
Manufacturer:		Year of manufact	ure:		Q	
Country / Code / City:		Operating mode:				
Street:		Control:		-		
Serial Number:		Height:	0 mm			
Туре:		▼ Width:	0 mm			
Remark:					1	
				^		
				~		

## 14.3 Client: Plant Operator and Test Object

### Enter the data of the plant operator.

Fill in the following fields:

"Company", "Street", "Postcode / City", "Contact person", "Phone number", "E-mail". "Customer number".

## Enter the data of the test object.

Fill in the following fields:

"Manufacturer", "Country / Code / City", "Street", "Serial number", "Type",

"Year of manufacture", "Operating mode", "Control", "Height" and "Width" of the test object and possibly make a "Remark".



#### Tips and recommendations

A drop-down list is available for the "Control" field:

- Control with automatic reset
- · Automatic drive

## Tips and recommendations

A drop-down list is available for the "Type" field. The selectable options depend on which test bases or standards are preset.

## 15 Measurement

## 15.1 Creating the assignment table

Measureme	nt-2022-08-24-							-		×
Bave	Save as	5 Undo	Cl Restore	New	Open	Protocol				र््ट्रे Options
Test basis	Testing laborator	y Client	Measure	ement						
Create an assignment table to assign measurements to a measurement point (main closing edge, secondary closing edge and position) on the test object. Choose from the normanically provided templates or create a user-defined table. The selection of available templates is based on the selection of test objects. Erst after you have created a new assignment table, you can add measurements to the project.										
	Create new assignment	table								
	Custom table	-	•							
	3 X Create	3								

Under "Measurement", the window for creating a measuring point matrix, the assignment table, opens. There you can assign your measurements to a specific measuring point e.g., at the main or secondary closing edge and at other locations, each measured horizontally or vertically at a specific distance or height. These locations are specified in the standards and regulations for each type of test object.

## 15.1.1 Creating according to the standards and directives

#### Create a new assignment table according to the standards

- Open the drop-down list by clicking the arrow under "Create new assignment table". Depending on which test standard or directive you have previously selected in the "Test object" area (see chapter 14.3), the context menu offers the corresponding selection options.
- 2 Select the appropriate test object.
- 3 Press the "Create" button.
- ⇒ KMG-Vision creates the assignment table according to the standard.



**Tips and recommendations** Save your project regularly in between.

-						
Measurement-2022-08-24-					-	
Save Save as	5 Undo	C E	Open	Protocol		्रि Options
Test basis Testing laboratory	Client	Measurement				
		Opening width				
	Help <u>?</u>	HK-GK HK-GK 200v.l. center	HK-GK 200v.r.	]		
HK: main closing edge	2500					
GK: counter closing edge TF: gate wing UM: surrounding	1500					
w.f.t.: most protruding part f.E.: from the end	50					
f.l.: from the left v.r.: from the right v.a.: from above	+					

➡ KMG-Vision suggests the horizontal and vertical locations in the assignment table according to the standard. It labels the axes if a standard has been defined beforehand.



### Tips and recommendations

The assignment table is created in conformity with the preset standard and according to the selected test object. The table can be supplemented, shortened or modified as required. See below.

### Create user-defined

- 1 Under "Create new assignment table", first select "Custom table".
- 2 Enter the desired number of horizontal and vertical measuring points.
- **3** Press the "Create" button.
- ⇒ KMG-Vision creates the assignment table in the form of the matrix you specified. The axes are not yet labeled.

You can now create and label the assignment table.



## **Tips and recommendations**

In this view, the number of characters of the caption is limited, but a longer phrase can still be entered. If the caption is longer, an arrow appears in the display field at the bottom right and a field opens with the complete caption display.



#### Define your test locations yourself

Label the axes with the coordinates for the inspection locations.

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#### Help function and legend

By means of the help function you can define the cells correctly and enter the measurement results later. The legend offers abbreviations for entering a concise but clear definition of the locations.



#### Tips and recommendations

When you move the mouse pointer over a data field, it turns blue and is activated for editing.

## 15.1.2 Modifying or editing

You can create the assignment table individually delete or add rows and columns and delete individual cells at any place.



## Add a column or row

Press the plus button (+) for each additional row or column.

## Delete a column

Move the mouse pointer over the respective column at the top of the axis label field and right-click to use the "Delete column" function.

## Delete a row

Move the mouse pointer to the left of the respective row and right-click to use the "Delete row" function.

## Delete a single cell

- 1 Move the mouse cursor to the corresponding cell.
- $\Rightarrow$  The field turns blue.
- 2 Click the right mouse button
- $\Rightarrow$  The context menu for the assignment table opens.
- 3 Select "Remove measurement point".



### Context menu

The delete functions are also possible via the context menu within the assignment table. You reach the context menu by clicking the right mouse button when the mouse pointer is placed within the data fields.

## 15.2 Assigning Measurement Results

Import your measurement results in different ways using the context menu and assign them to the individual places or fields in the table.



## 15.2.1 Importing measurement results into the assignment table

# ▶ In the assignment table, first activate the desired cell for data transfer by clicking on the cell.

- 1 Move the mouse pointer to the desired field.
- $\Rightarrow$  The frame around the field turns blue. The field is activated for import.
- 2 Click the right mouse button.
- $\Rightarrow$  The context menu opens.
- **3** Select how you want to import the data:
  - Import from file
  - Import from KMG with preview
  - Direct import from KMG with assignment



## Tips and recommendations

A necessary prerequisite for both "Import from file" or "Import from KMG with preview" is that you must have activated the exact field in the assignment table into which you want to import the measurement.

## 15.2.2 Import from file

- Import your measurement from a file.
- 1 Click on "Import from file" in the context menu. .
- ⇒ The Windows "Choose or Enter Path of File" menu opens.
- 2 Select the desired measurement file (extension .fmd).
- 3 Click on OK.
- $\Rightarrow$  The measurement data file opens with the measured value display.

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### Drag and drop measurements

Using drag & drop, you can move and drop measurements within the assignment table.

You can also drag them from other projects or measurement files directly into the desired fields. In this case, it is then a copy from the file source and nothing is deleted at the original source.



- 4 Select the desired measurement by clicking on the number of the measurement on the left.
- 5 Press the "Import" button.

Projekt	t_3								-	×
💾 Save	Save as		5 Undo	C Restore		Open	Protocol	ASR - Gates	ASR - Doors	र्दुः Options
Test basis	Testing laboratory	Client	Measurement	ASR: Rollin	g gates & grilles	ASR: pow	.op. Doors			
NK: si GK: cc TF: gc UM: s w.f.t.: f.E.: fi f.L: fn v.r.: fi	nain closing edge econdary closing edge ounter closing edge ate wing umounding mathematic or mathe end or the left or mathe right from above	Height	Help ? 50 mm 200 mm 1200 mm	Opening wid	tth Gł		1			

 $\, \Rightarrow \,$  The desired measurement is stored in the assignment table at the blue activated field highlighted in blue.



## Confirm measurements

A question mark initially appears behind the number of the measurement because the correctness still has to be confirmed, see chapter "15.2.5 Validity and invalidity of an imported measurement".

## 15.2.3 Import from KMG with preview

#### Import your measurement from KMG with preview option

- 1 Click on "Import from KMG with preview" in the context menu. The precondition is that you have activated the desired field in the assignment table.
- ⇒ The "KMG measurement" window opens. The second line shows for your information which type of import and which measuring point from the assignment table is activated: "Import measurement to project - measurement location: ...".

KMG measurement			-	×
Import measurements to project - measurement location: /				
Select your connected KMG and then the corresponding interface.				
1	2			
	Interface COM 3	÷ C		
KMG 2000				

- 2 Select the connected KMG device (1) and the interface (2) as described in chapter "13.3 KMG".
- ⇒ The connection between KMG and PC or notebook is established.
- ⇒ The measurement data file opens with the measurement data display. The left field displays the numbers of the measurements that are present on the KMG.



### **Tips and recommendations**

The "KMG measurement" windows provide information about the type of import and the selected measurement location in the second line.



- 3 Click on the number of the measurement you want to import.
- ⇒ The measurement with the scans will be displayed as a preview for checking.
- 4 Press the "Save as" button.
- ⇒ The data will be imported. The desired measurement is stored in the assignment table at the location previously activated in blue.

Measurement	-2022-08-24-									-	×
) Save	Save as		5 ndo	C <sup>1</sup> Restore	New	Open		Protocol			{ි Options
Test basis	Testing labor	atory	Client	Measu	rement						
GK: counter c TF: gate wing UM: surround	y closing edge losing edge ling rotruding part end left right	Height	Help ? 2500 1500 50	Opening w HK-GK 200v.I.	HK-GK center	HK-GK 200v.r.	Ŧ	]			

⇒ The desired measurement is stored in the assignment table at the blue activated field, highlighted in blue.



#### **Confirm measurements**

A question mark initially appears behind the number of the measurement because the correctness of the assignment still has to be confirmed, see Chapter "15.2.5 Validity and invalidity of an imported measurement".

## 15.2.4 Direct import from KMG with assignment

You can import measurements directly from the KMG and store them at the selected places in the assignment table. This is the fastest way to transfer multiple measurements from the KMG to the KMG-Vision assignment table in a single pass.

## Start the direct import

- 1 Click on "Direct import from KMG with assignment" in the context menu.
- $\, \Rightarrow \,$  All fields are outlined in black and ready for you to enter the number of a measurement to be transferred from the KMG.
- 2 In the desired fields, enter the numbers of the measurement that you want to assign to the respective field.



- ⇒ On the screen or on a context menu (after click on the right mouse button) the selection "Import" and "Cancel" is offered. The "Cancel" option protects against accidental overwriting, for example.
- **3** Select "Import", provided that all numbers at the desired places in the assignment table are correctly stored and everything is correct.
- ⇒ The "KMG measurement" window opens.



- 4 Select the interface as described in chapter "13.3 KMG".
- ⇒ The measurements with the numbers you have selected are imported to the selected location in the assignment table. The fields each contain the number of the measurement.

Projekt-	2022-07-27c								-	
E Save	Save as		5 Undo	C Restore	New	Open	Protocol			्रू Option
est basis	Testing laboratory	Client	Measurement							
NK: see GK: cot TF: g at UM: su w.f.t. : f.E.: fro f.L.: fro v.o.: fro Fb: Wi Fh: Wiu Fh: Wiu Mi: Cei	zin clasing edge condary clasing edge unter clasing edge twing mosunding most protruding part most protruding part most protruding part most protruding most protruding most part most par	Ţ	Help ? 2500 1500 50 G measurement Measurement Proj	Opening v HK-GK 200v.I. 5 5	HK-GK mittig 2 5	HK-GK 2200vr.	]	×		
					C	ancel				

- ⇒ During data transfer, the correctly imported fields will be green. Incorrect imports, e.g. measurement numbers for which no measurements are available, are displayed in red. When saving the project, those fields will not be saved.
- ⇒ As soon as the import of all data is completed, the numbers in the green fields disappear and are only symbolized by three "###". This protects against accidental overwriting of fields to which measured values are already assigned

Measurement	t-2022-08-24-			-	×
Bave	Save as	) Undo	C Den Protocol		र््े Options
Test basis	Testing laborat	ory Client	Measurement		
GK: counter TF: gate win UM: surroun	ny closing edge closing edge g ding protruding part e end left e right	Help ?	Opening width           HX-GK         HK-GK           H2-00v.L         center           1         2         3           4         7         5         6           6         ?         .		

⇒ If all measurements have been transferred correctly, they are stored in the assignment table at the specified location with the measurement number and a question mark. You can now proceed with the confirmation according to chapter "15.2.5 Validity or invalidity of an imported measurement".

## 15.2.5 Validity and invalidity of an imported measurement.

After the data is imported from the KMG, a question mark is displayed behind each number in the field. Now the measurement must be confirmed as correctly transferred.



## Declare a measurement valid or invalid.

- 1 Move the mouse pointer to the field you want to validate.
- 2 The measurement curve of the stored measurement is displayed. You can check the measurement curve. Click the right mouse button.
- $\Rightarrow$  The context menu for the assignment table opens
- **3** Select whether you consider the measurement to be correct or whether the measurement is invalid and must be repeated, accordingly:

Pass: Measurement is correct, a green check mark appears

Fail: Measurement is incorrect, a red exclamation mark appears

⇒ The field gets a green tick if you have rated the measurement as correct ("Pass"). A red exclamation mark ("Fail") signals that the measurement was rated as faulty.



### Drag and drop measurements

You can move and drop measurements within the assignment table by using drag drop.

You can also drag them from other projects and files directly into the desired fields. In this case, they are then a copy of the file source and are not deleted at its original place.

## 16 ASR Forms

If you have selected a technical rule for workplaces according to ASR A1.7 as the test basis in the project data, you have to fill out the corresponding forms. You can access these via the project window in the second line under the top menu bar.

O Measurement	-2022-08-22								-	×
Save	Save as	5 Undo		Cl	New	Open	Protocol	ASR - Gates	ASR - Doors	र्दे Options
Test basis	Testing labor	atory	Client	Measur	ement	ASR: Rolling g	ates & grilles	ASR: kraftb.	Doors	

## Create an ASR form.

- 1 In the bottom menu bar, activate the field "ASR: ... ".
- ⇒ The form opens, depending on the optionally selected rule.
- 2 Fill in the form.

## 17 Documentation

Create measurement protocols or ASR forms depending on the preselected standard or directive to document your results.

## Create a measurement protocol.

Activate the "Measurement log" field in the menu bar.

⇒ KMG-Vision generates the measurement protocol and opens it as a Word document.

### Create a protocol according to ASR A1.7 for gates or doors

Activate the field "ASR - Gates" or "ASR - Doors" in the menu bar.

⇒ KMG-Vision generates the ASR test protocol and opens it as a Word document.



## Tips and recommendations

The measurement and ASR test records contain all data stored in the project: from the test basis to the measurements with the curve progressions and their evaluation.

## Tips and recommendations

The logs are stored in the subdirectory under the respective project name. The subdirectory is defined in the "Options" area under "Storage path" and can be adjusted there if required.

### **Tips and recommendations**

The Word document can be reopened at any time and, for example, printed, shared or forwarded.



**Tips and recommendations** In case of additions, it is possible to generate further test protocols.



## Tips and recommendations

Save a protocol template in a file. You can create several different template files.

## 17.1 Saving Your Data and Projects

## Save your project.

1 Click the "Save" or "Save as" button in the upper menu bar.



⇒ The project is stored with its data in a subdirectory of the directory you specified in the preferences.



 $\, \Rightarrow \,$  The "Select path" window opens. You can now save the project with its data under a name you have entered. .

## **Settings in the Options**

Adjust options



- Adjust your preferences via the "Options" field. You will find the "Options" icon
- on the start screen
- in the menu bar in the project window
- $\Rightarrow$  The options window opens.

## 18 Options

## General

•	Specify storage path	Select the desired storage path for your projects, if it should differ from the default settings.						
	Choose language Set test basis	Choose between German and English.						
	Set lest basis	Select the standards you want to use as a basis for tes- ting by clicking on the box and placing a check mark there. Multiple selections are possible.						
		The standards and rules listed in Chapter 9 "Test princip- les, standards, directives" are available for selection.						
1	The default ments acco	ommendations setting of the test basis is helpful for frequent measure- ling to the same test basis. The test basis is then no longer time a new project is created.						
•	Updates	<ol> <li>Check the box "Check for updates at start" if you want an update automatically at every restart.</li> <li>Initiate an update by clicking the "Search now" button.</li> </ol>						
•	Create a protocol	<ol> <li>Select the desired template for your protocol file in the protocol templates subdirectory.</li> <li>Use the "Customize" and "Reset" buttons to set up the log file individually e.g., with your company logo and your own letterhead.</li> </ol>						
	Feedback	Send your feedback and customer requests to: info@gte.de						

- Instructions Selecting the "Instructions" button will take you to the installed instructions
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   Under "License information" you can find all information about your license.
   See also the chapter "6. Licensing"