DOC-QUAIS

version 1.01

RG-530

USER'S GUIDE

This guide:
- explains the functionalities of the Doc-Quais interactive computer-based tool;
- gives an example of its use.

The Doc-Quais computer-based tool enables you to improve the safety of your loading docks.

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1. Important notice

T he user should note that the computer-based tool, and how it is used, never replace a professional's judgement. The terms of use governing this computer-based tool are the same as those established for the IRSST's Web site and are available at the following address: http://www.irsst.qc.ca/fr/conditions-d-utilisation.html

2. Introduction

T his document is the user's guide for the Doc-Quais application. Its application lets you evaluate the initial safety level of your company's loading docks, as well as the effectiveness of different restraint measures. The computer-based tool can generate a report and a measure implementation audit that allow you to save the information and to follow the proposed changes for improving the safety of your docks. A technical fact sheet (RF-530) and a questionnaire (R-530), available on the IRSST's Web site, make the computer-based tool easier to use.

Doc-Quais requires the installation of Microsoft Excel software. This computer-based tool was optimized for use on a PC with Microsoft Excel 2000.

☼ REMINDER

Employees that load or unload trailers by means of a lift truck are exposed to three risks.
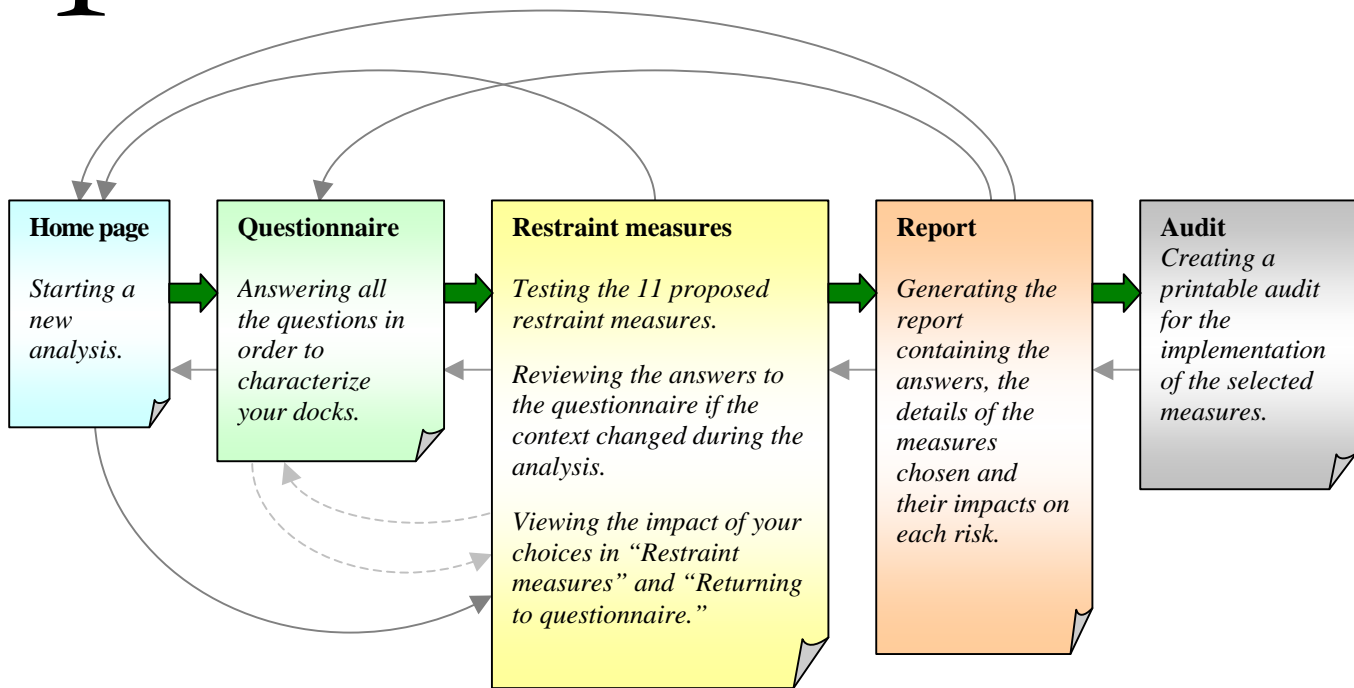

■ **Unscheduled departure:** It occurs when the trailer is removed from the dock before the completion of transshipment activities due to improper signalling, insufficient communication, deficient work organization, etc.

● **Slippage:** This occurs when the lift truck stops suddenly inside the trailer during transhipment activities, which can lead to the dock leveller lip tipping and create a dangerous space between the loading dock and the trailer.

▼ **Tipping:** This occurs when the trailer tips forward or to the side when resting on the two support legs (not hitched to a truck).
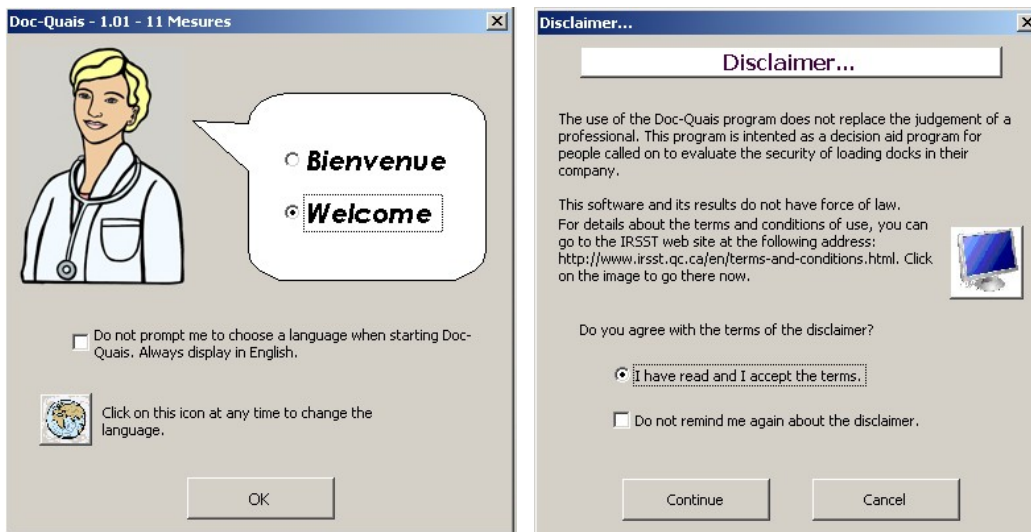
3. Typical procedure for using the computer-based tool

T he following diagram shows a typical procedure for analyzing safety using Doc-Quais.

Home page	**Questionnaire**	**Restraint measures**	**Report**	**Audit**
Starting a new analysis.	*Answering all the questions in order to characterize your docks.*	*Testing the 11 proposed restraint measures.* *Reviewing the answers to the questionnaire if the context changed during the analysis.* *Viewing the impact of your choices in "Restraint measures" and "Returning to questionnaire."*	*Generating the report containing the answers, the details of the measures chosen and their impacts on each risk.*	*Creating a printable audit for the implementation of the selected measures.*

➡ **Normal direction for using Doc-Quais**

→ Possibility of going back or advancing directly into Doc-Quais

--→ Possibility of returning to the questionnaire (indirectly)

4. Doc-Quais: Home page

W hen you start the Doc-Quais computer-based tool, a window asks you to choose the language of use. If you don't want this window to reappear at each start-up, check the box "Do not prompt me to choose language when starting Doc-Quais". To cancel this command, open the "toolbox" icon, go into the parameters and options menu and click on "Change language" to select the language of your choice (see page 10).
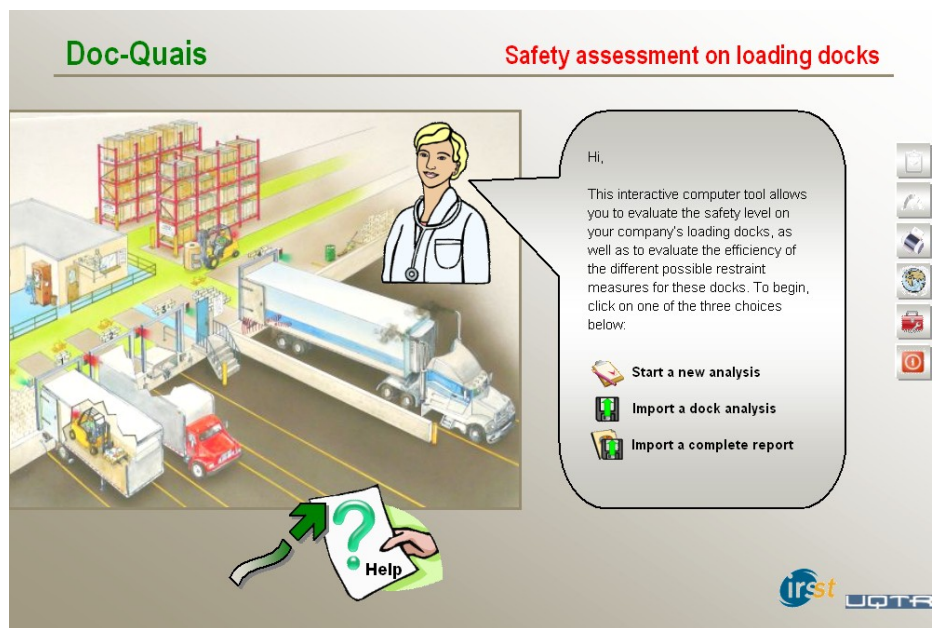
To access the computer-based tool, you must read and accept the terms of the disclaimer .

Acceptance opens the main window. To begin an analysis of your docks, click on "Start a new analysis".

Complete the information requested, in order to personalize the analysis (company, name, description). To access an analysis that has already been created and saved in Doc-Quais, click on the second choice "Import a dock analysis" and then select the one you want. To open a complete report saved in Excel format in a separate file, click on the third choice "Import a complete report" and then open it (see page 10).

Each page contains a question mark. By clicking on it, help balloons appear. To make them disappear, click on the question mark or on a balloon .

The other buttons provide access to the questionnaire and restraint measures (available only if an analysis is already in progress), allow you to print, to change the language, to open the toolbox to change the Doc-Quais parameters, or even to close the computer-based tool.

5. Doc-Quais: Questionnaire page

When you start a new analysis, a window containing the questionnaire appears. You must answer the 30 questions, without exception. A blue check mark indicates that you have already answered the question; a red arrow indicates that you must answer it.

For each question, gradations from ⓪ to ④ are possible, with ④ being the best situation. The details can be seen by clicking on the question mark located to the right of the choice of answers.

When all the answers have been given, a grey arrow asks you to continue to the restraint measures step and their impacts (see page 10).

6. Doc-Quais: Restraint measures page

When you enter the restraint measures page, you immediately see the initial safety level, based on your answers to the questionnaire, displayed on the 3 risk graphs, to the right of the page. These graphs indicate the risks that you have to work on to improve the safety of your docks. The next step therefore allows you to test the impact of 11 restraint measures in relation to the 3 main risks. The restraint measures compatible with your docks are indicated in black (not selected) or in blue (selected); the measures not compatible with your docks or with another measure already

checked are in grey. The question mark located after each measure is used to display its characteristics. The impact of the safety measure is colour coded for the three risks , as explained by the legend.

Some measures may not be compatible due to the answers supplied to the questionnaire… For example, if you answered ◎ to the question about the drivers' respect for procedures, you cannot select the 11th measure about communication procedures.

Returning to the questionnaire is also one way of improving the safety of your docks. In fact, using the previous example as a basis, if the drivers have been made aware of the procedures and take them into account, you can now change the answer to the corresponding question. To do this, select the question in the drop-down menu and choose a new answer. The possibility of changing the answer gives an idea about the feasibility of making this change or not, whether it is from a physical, time or financial standpoint.

The section "Impact on the three risks" shows the initial safety level of your docks, as well as the possible improvement in relation to the selected restraint measures. Each time that you select a measure, you can evaluate whether the overall level is acceptable or whether another measure should be added…

When you have finished, click on "Go to report " to generate it.

7. Doc-Quais: Report page

The report allows all the information to be compiled in the same location, namely the answers to the questionnaire, the list of restraint measures, as well as the initial and improved safety levels. The impacts of each measure on each risk are also detailed. The "initial and improved safety levels" are presented in the form of a summary table.

For each of the measures, the "details of the restraint measures selected and their impacts on safety" give its actual effectiveness in relation to the characteristics of your docks, as well as its actual impact on the three risks: unscheduled departure, slippage and tipping. The total impacts, the initial safety level and the improved safety level are given for each risk.

All this information provides a good understanding of the impact of each chosen measure on each risk .

The report includes the answers to the questionnaire, because they allow the initial safety level to be calculated.

Summary report of restraint measures for loading docks

Company: **IRSST**

Date: **2007-12-11**

Name: **Marina**

Description: **Test1**

IRSST UQTR

Go to the measure audit

Initial and improved safety levels

	Initial safety level	Improved safety level
Unscheduled departure	3,00	5,10
Trailer slippage	2,38	5,68
Trailer tipping	2,25	4,35

Details of selected restraint measures and of their impact on safety

Impact of selected restraint measures	Real efficiency of restraint measures	Unscheduled departure	Trailer slippage	Trailer tipping
1- Rear impact guard anchoring device	60%	0,6	1,8	0,6
2- Wheel restraint system (automatic)	50%	1,5	1,5	0
10- Lift truck weight/Trailer length relationship procedure	50%	0	0	1,5
Total impacts:		2,1	3,3	2,1
Initial safety level:		3,00	2,38	2,25
Improved safety level:		5,10	5,68	4,35

Recall of questionnaire's answers

#	Questions	Rating	Description of the rating
1-	Nature of yard pavement	1	Between (0): The pavement is covered with sand or dirt. And (2): The pavement is made of gravel or is in poor condition.
2-	Condition of pavement near loading dock (ice, snow, sand, debris)	2	The yard is not always clean: ice, snow, sand or debris are not always properly removed. Abrasives may be used in winter, but not systematically.
3-	Condition of yard in winter (snow removal)	2	Snow removed is fast and efficient so that snow accumulation is limited.

8. Doc-Quais: Measure implementation audit page

The audit page allows the implementation of restraint measures in your company to be followed. For each restraint measure, you can write the implementation deadline, the name of the person in charge, as well as the measure execution date and the visa (approval).

Remarks can also be noted. Finally, the last two columns allow you to verify whether someone has confirmed that the selected measure has been properly implemented.

Restraint measure implementation audit

Audit done by: _____ Marina _____ Date: _11-12-2007_ Signature: _____ MK _____

Description: _____ safety mesures _____

#	Measures to put in place	Schedule	Person in charge	Measure implemented		Remarks	Control	
				Date	Visa		Date	Visa
1	Rear impact guard anchoring device (1)					Installed. Must be checked in 2 weeks.		
		24-12-2007	Marina	10-12-2007	MK			
2	Wheel restraint system (automatic) (2)							
		26-01-2008	Marina					
3	Lift truck weight/Trailer length relationship procedure (10)							
		12-03-2008	Laurent					

9. The meaning of the buttons

Go to the Home page

At any time, if you click on this icon, you will return to the start page.

Start a new dock analysis

On the computer-based tool home page, you can begin a new analysis. If you are not on the start page and you want to begin an analysis, click on the "Start page" button and then on "New analysis."

Parameters and options

*At any time, if you click on this icon, you will have access to the computer-based tool's parameters and options, namely: * the version of the computer-based tool and the list of researchers, designers and collaborators who developed this tool; * the personal information for the analyses (company, name, description); * the tool's options (do not ask me the language again at start-up,...); * the documentation (report IRSST associated with this computer-based tool, appendix, technical fact sheet, detailed questionnaire); * help for the computer-based tool, namely this user's guide, but also a demonstration video for the tool.*

Help on the page

At any time, you can access the help on the current page by clicking on this button. To make the help balloons disappear, click again on the button or in the balloons.

Import a dock analysis

If you have previously done a dock analysis and have saved it, you can, by clicking on this button, return to it to complete it, change it, etc.

Save the dock analysis

When you have created a dock analysis and want to save it, click on this button.

Delete dock analyses

Click on this button to delete one, several or all of the analyses. If you delete all of the analyses at the same time, a message asks you to confirm your choice. Attention! The deleted analyses are not recoverable.

Go to the report

This button allows a report to be created on the screen, from the answers to the questionnaire and the restraint measures selected. It provides a summary of your analysis, chosen solutions and their impacts.

Save the report

This button saves the report .

Import a report

This button is used to retrieve a report previously saved in order to be able to read it again, change it, compare it to others, etc.

Return to the report

When you are in the measure implementation audit , this button takes you to the previous page of the report .

Go to questionnaire

This button takes you to the questionnaire page.

Go to restraint measures

This button takes you to the restraint measures page . It is the step that follows the questionnaire.

Change language

At any time, if you click on this icon, you can go from French to English.

Print the page

This button is used to print the current page or several pages, depending on the window you are in. Printing is done by the default printer. This can be changed by pushing on "print" and then on "yes."

Delete

In the restraint measures window, this button deletes all the selected measures. In the measure implementation audit window , this button deletes all the information in the table at the same time. Attention! You cannot go back...

Exit

This button is used to exit the computer-based tool. If an analysis is in progress, a message window asks you whether you want to save the current analysis or not. The analysis is automatically called "save."

▤ Index of the main terms