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FORM

MANUAL No.99MBB435A10
SERIES No. 178

Surftest SJ-210/310/410
USB Communication
Ver. 5.007A (English)
(Complimentary)

Surface Roughness Tester
SJ-210/310/410

User's Manual

Read this Manual thoroughly before operating the instrument.
After reading, retain it close at hand for future reference.

Mitutoyo

About this software

Surftest SJ-210/310/410 USB Communication
Surface Roughness Tester
Quick inspection certificate generation program
Ver. 5.007A (English Edition)
(Complimentary)

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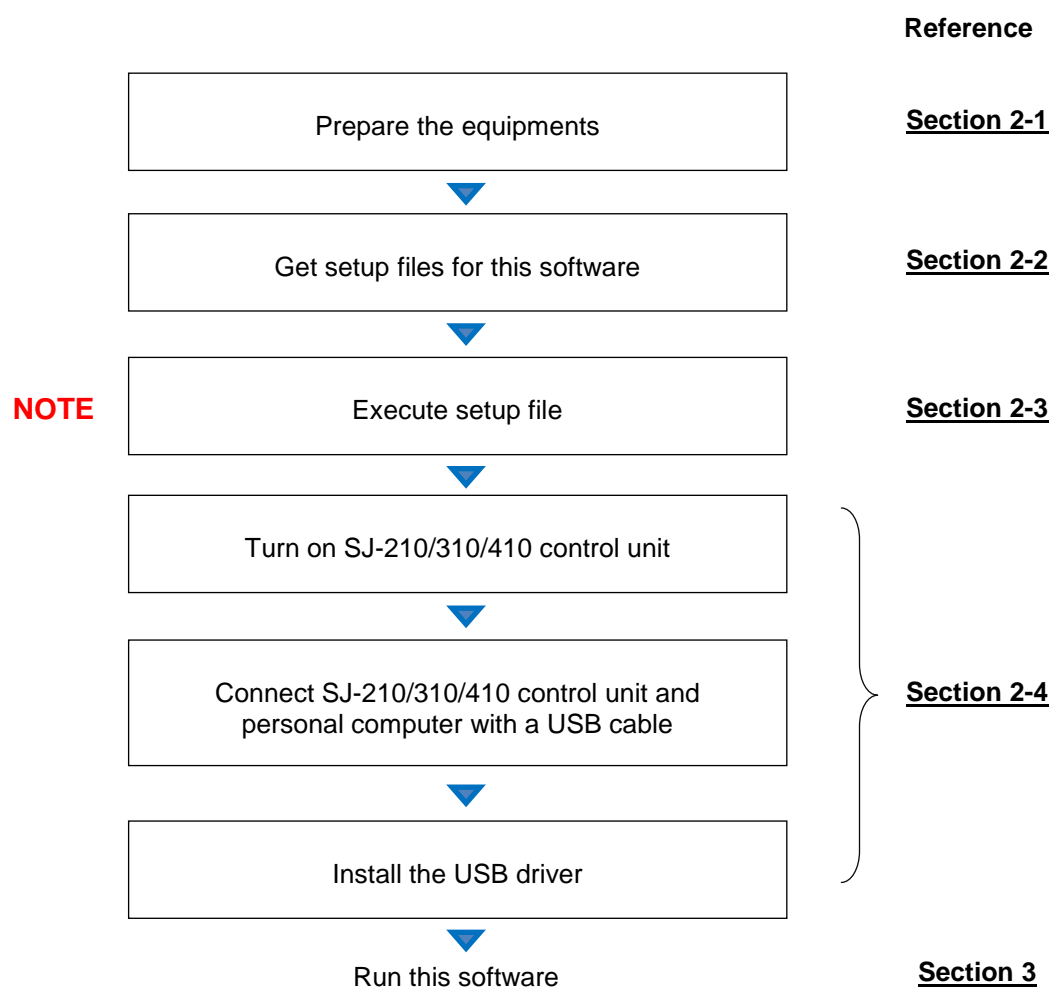
MEMO

1

OVERVIEW PROCEDURE TO START

This section describes an overview procedure for starting this software.

Before starting this software, it is necessary to follow the step below.
In the following pages, we describe the details of each content.



NOTE When different version software (for example V5.006) was already installed, it is necessary to uninstall this different version software.
Please uninstall it , after referring to Section 6.

MEMO

2

DETAIL PROCEDURE TO START

This section describes an detail procedure for starting this software.

Details of the procedure are shown below in order.

2-1. Prepare the equipments

Please prepare the items shown in the table.

No.	Item	Detailed explanation
1	SJ control unit	Please prepare one of the following. •SJ-210/310/410
2	Personal computer	Please prepare a computer with the following installed. NOTE •Microsoft Windows •Microsoft Excel
3	USB cable	Please purchase a USB cable according to the SJ control unit NOTE • <u>SJ-210</u> A-miniB type (Parts No.12AAL068 or commercial product) • <u>SJ-310/410</u> A-B type (Parts No.12AAD510 or commercial product)

NOTE

•Opertion verified environment is as follows.

OS: Windows 7 / 8 / 10 (64 bit)

Excel Excel 2010 / 2013 / 2016 (32 bit)

•Please use Windows as an administrator.

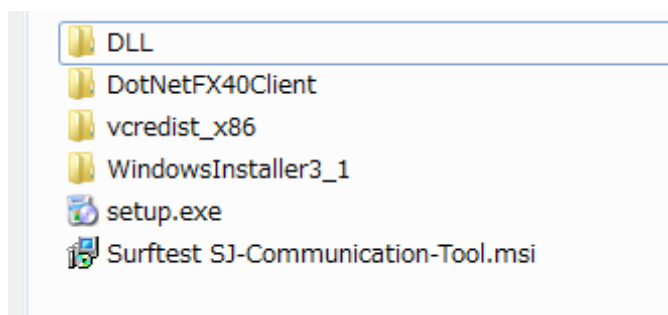
•Please use Excel with the macro function enabled.

NOTE

•The USB cable is not standard accessory for SJ-210/310/410.

2-2. Get setup files

Please get a compressed file containing the files and folders shown below from Mitutoyo website.
Then decompress the compressed file and save it to your Personal Computer. **NOTE**



NOTE

•The following compressed file can be downloaded from the Mitutoyo website.

Please double-click the compressed file to expand it.

 SJ-210_310_410_USB_XXXX.zip

2-3. Execute setup file

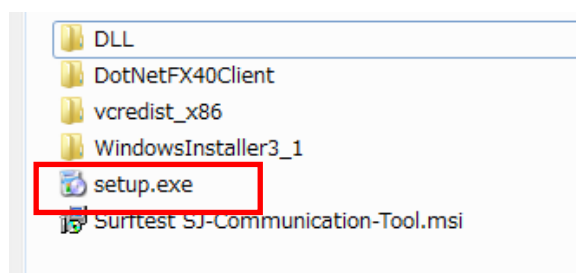
By performing the procedure shown in this section, the contents shown in the table below will be installed on your computer.

No.	Item	Installed contents	Reference
1	Environment required for this software to operate	• Microsoft .NET Framework 4.0 • Microsoft Visual C++ Runtime Libraries	Section 2-3-1
2	This software	• Surftest SJ-Communication-Tool	Section 2-3-2

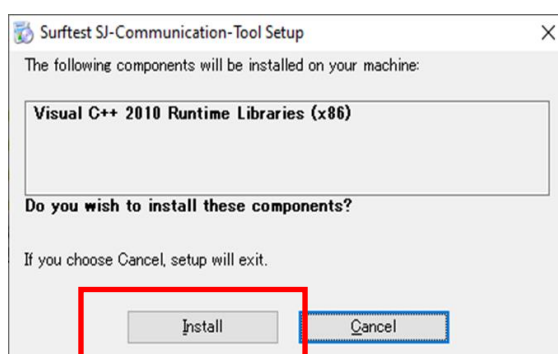
2-3-1. Installation of operating environment

First, install the environment necessary for this software to work.
Please perform the following procedure. (Example: When using Windows 10).

(1) Double-click "setup.exe". **NOTE**

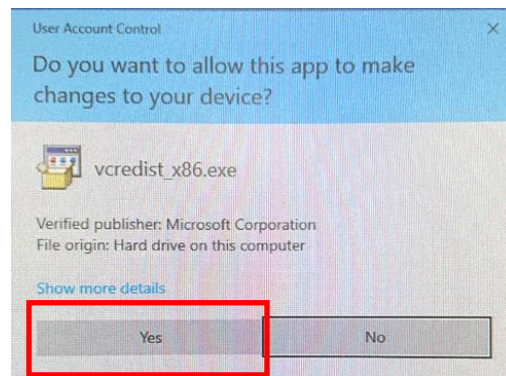


(2) Select "Install".

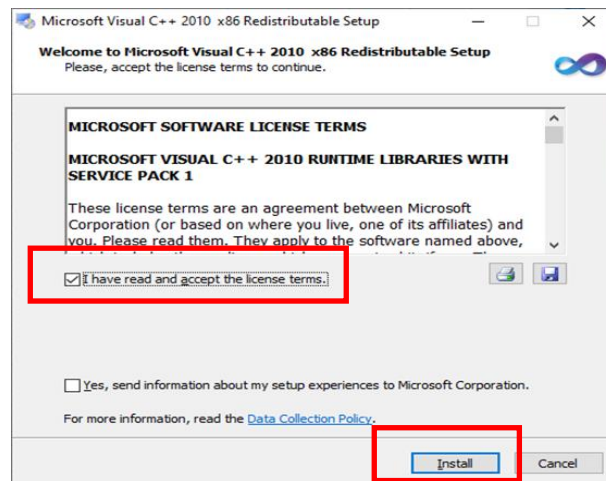


NOTE When different version software (for example V5.006) was already installed, it is necessary to uninstall this different version software.
Please uninstall it , after referring to Section 6.

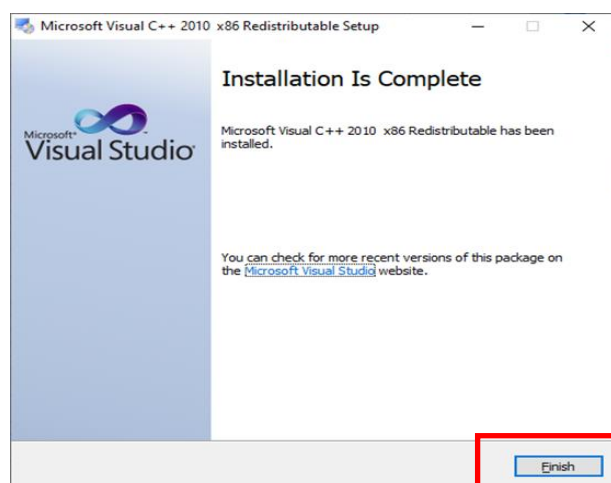
(3) Select "Yes".



(4) Check "I have read and accept the license terms." and select "Install"



(5) Select "Finish".



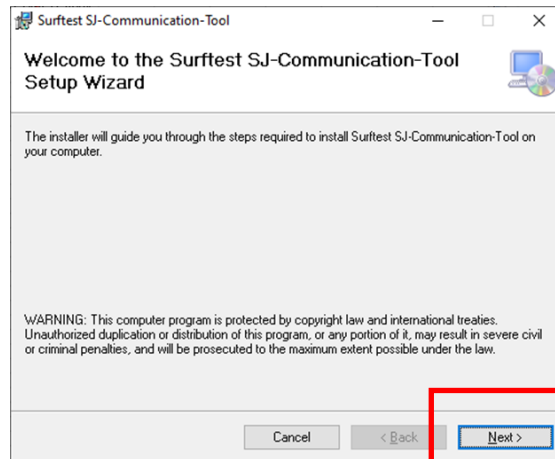
2-3-2. Install software

Next, install this software.

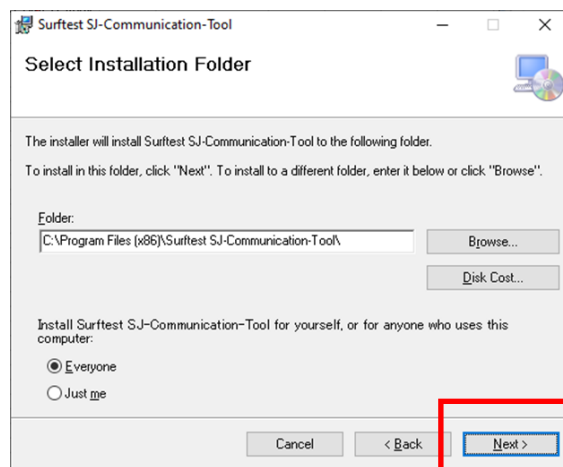
Following (5) on the previous page, a screen for installing this software appears.

Please perform the following procedure. (Example: When using Windows 10)

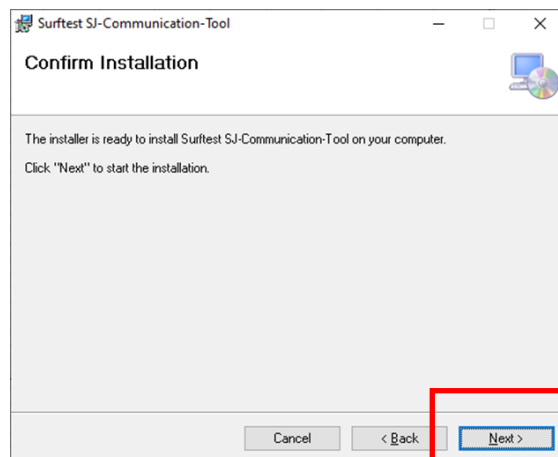
(6) Select "Next".



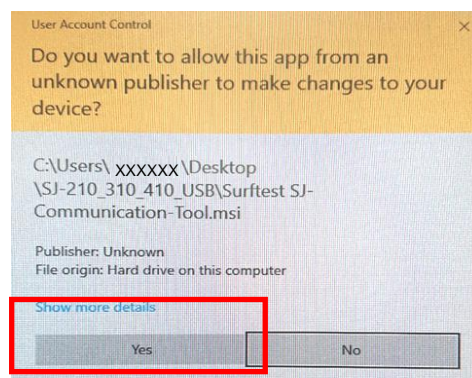
(7) Select "Next".



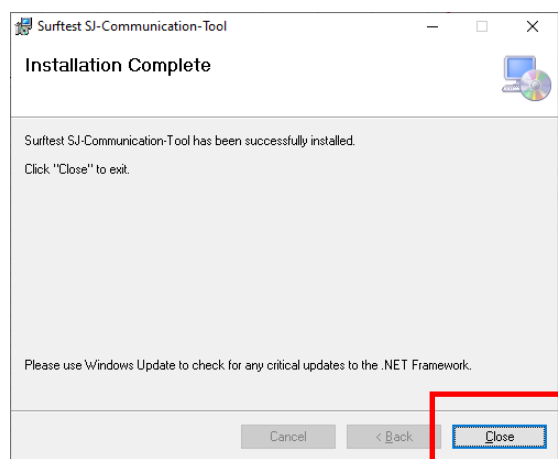
(8) Select "Next".



(9) Select "Yes".



(10) Select "Close".



2-4. Installation of USB driver

When you perform the procedures described in this section, the USB driver for the SJ control unit is installed on your computer.

As a result, the PC can recognize that the SJ control unit is connected to the PC with a USB cable and run this software.

Please perform the following steps: (Example: When using Windows 10) **NOTE**

NOTE

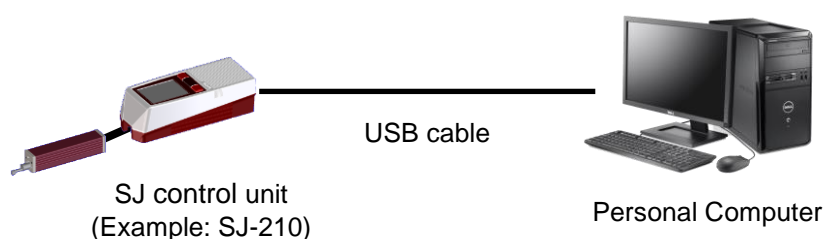
• In Windows 7 / 8, some of the messages shown below are different.

Please perform installation according to the displayed message.

• In Windows 7 / 8, the procedure for opening Device Manager ((4) to (7) below) is different. Please refer to Section 8.

(1) Prepare one SJ control unit ,and turn on the SJ.

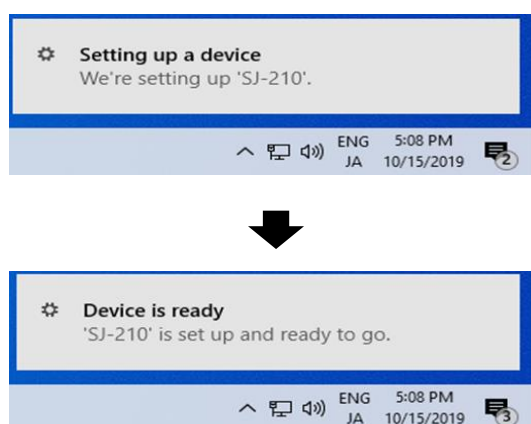
(2) Connect the SJ control unit and the personal computer with a USB cable.



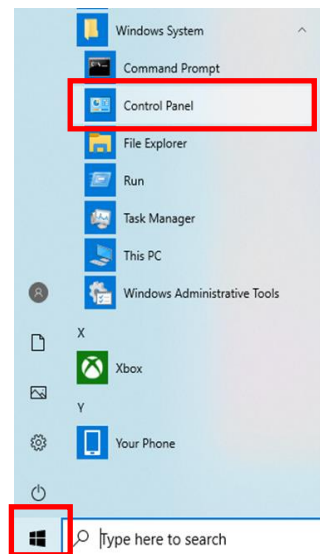
(3) After connecting the cable, messages will be displayed in the lower right corner of the computer screen.

Please wait for the message to disappear.

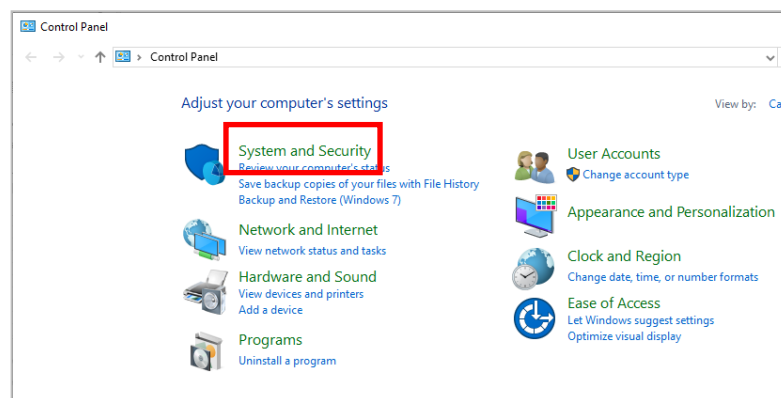
(If the message is not displayed, Please proceed to the next step.)



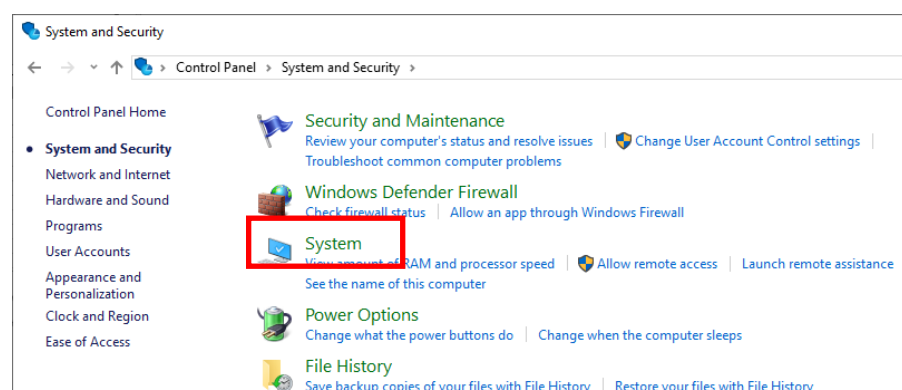
(4) Click the start button. Then select "Control Panel" in "Windows System".



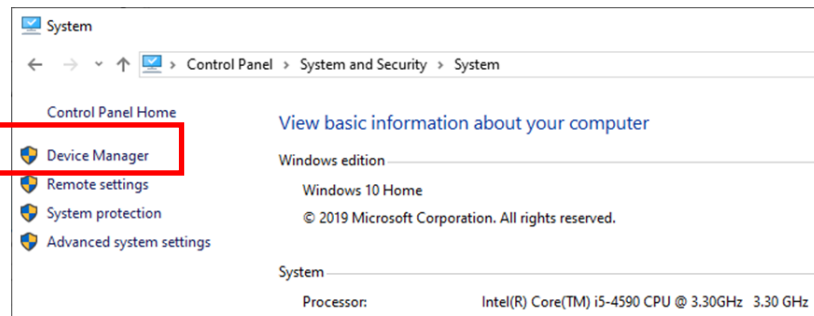
(5) Select "System and Security".



(6) Select "System".



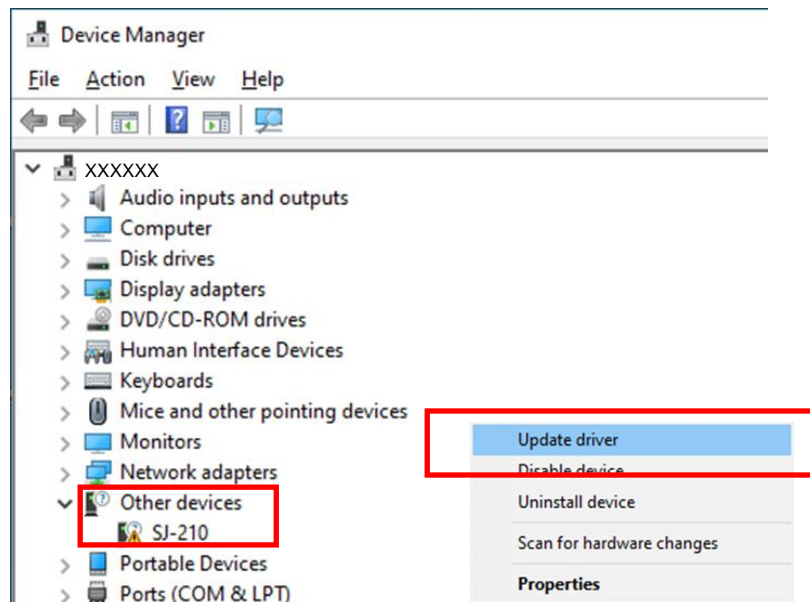
(7) Select "Device Manager".



(8) Expand "Other devices".

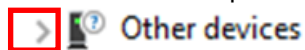
NOTE

And then, right click on "SJ-XXX" , and select "Update driver".

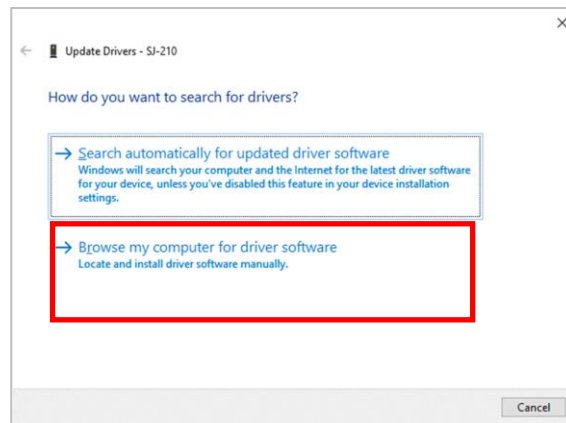


NOTE

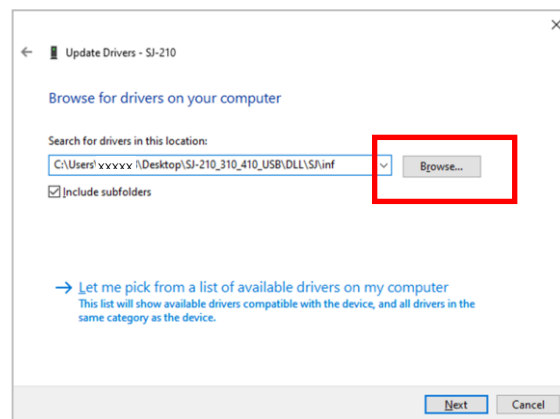
• Please click ">" below to expand "Other devices".



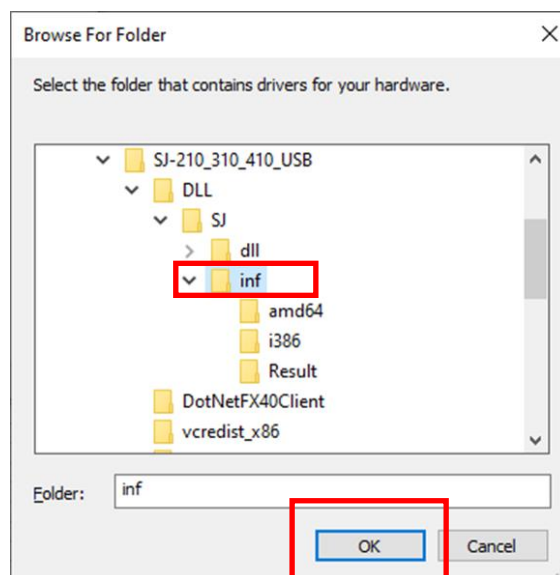
(9) Select "Browse computer for driver software".



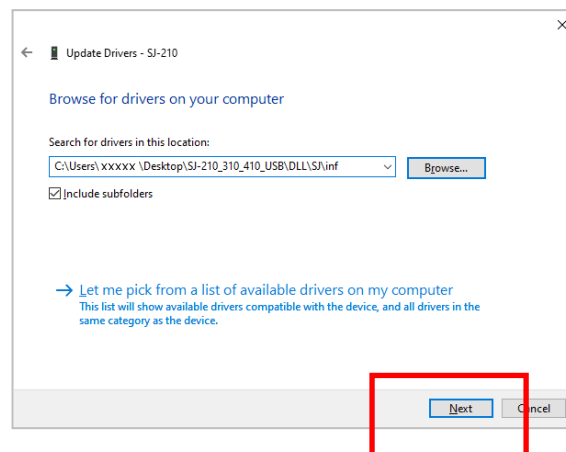
(10) Select "Browse..".



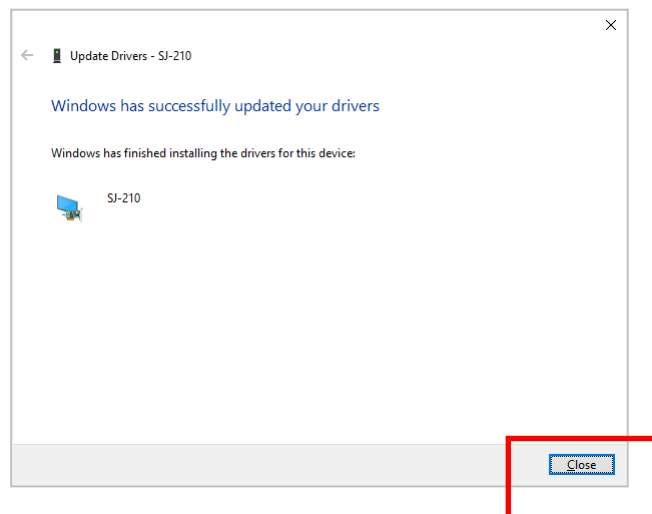
(11) Click the "inf" folder in the DLL folder shown in Section 2-2, and select "OK".
Refer to the figure below for the location of the "inf" folder.



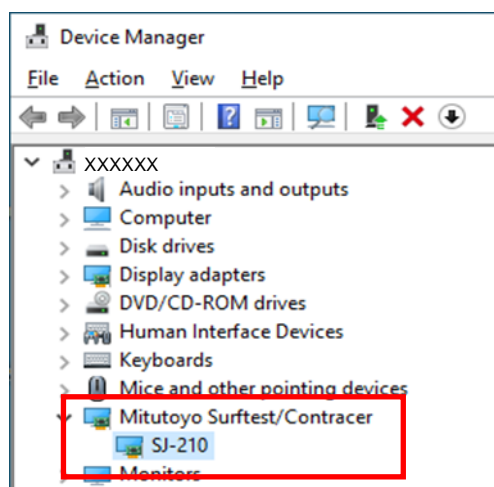
(12) Select "Next".



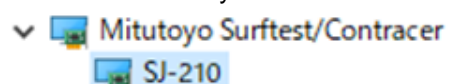
(13) Select "Close".



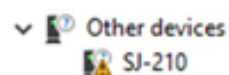
- (14) If the USB driver has been successfully installed, close the screen
If it is not installed correctly, Please start again from the beginning of Section 2-4.



< Installed correctly >



< Not installed >



NOTE

• USB driver is different for SJ-210 / 310/410.

Please perform the above USB driver installation for each SJ-210 / 310/410.

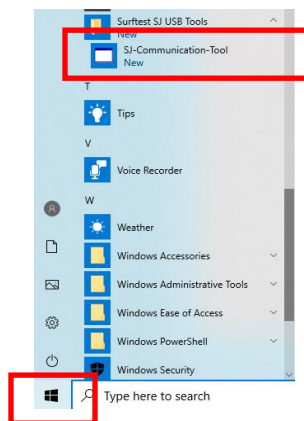
3

START THIS SOFTWARE

This section describes how to start this software.

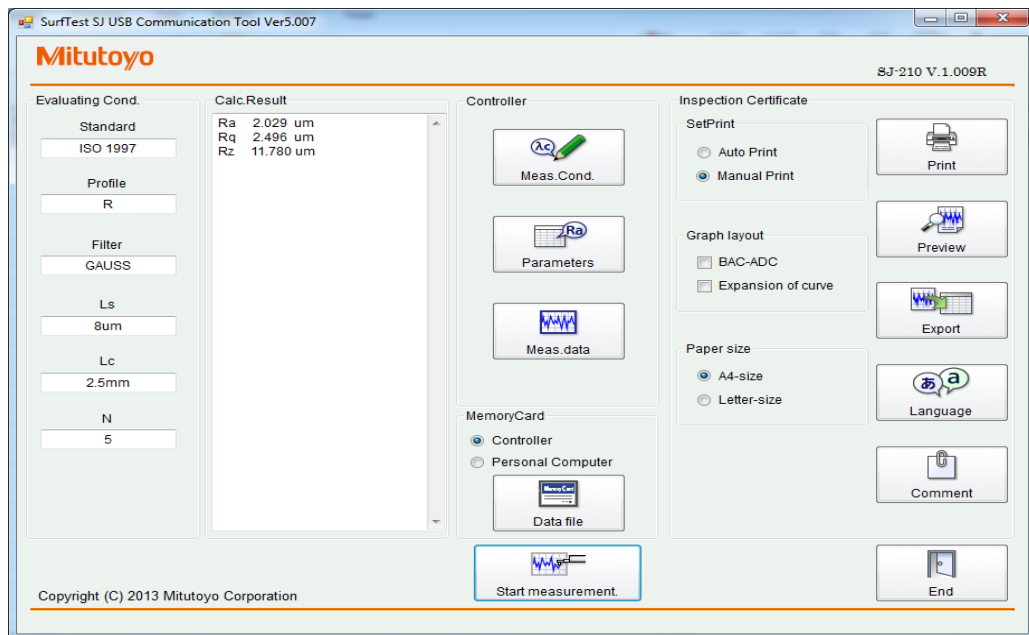
Please perform the following procedure. (Example: When using Windows 10)

- (1) Prepare one SJ control unit ,and turn on the SJ.
- (2) Connect the SJ control unit and the personal computer with a USB cable.
- (3) Click the start button. Then select "SJ-Communication-Tool" in "Surftest SJ USB Tools".



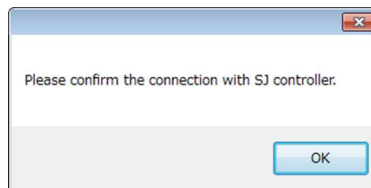
(4) This software starts up.

NOTE



NOTE

- This software is displayed in the same language as the display language set on the SJ control unit.
- If the message “Please confirm the connection with SJ controller” appears, Please execute the procedure in Section 3 again. If the message is displayed again at runtime, Please check Section 2 and install the USB driver for SJ you are using.



- If the message “Controll ers are not connected” appears, Please check Section 2 and install the USB driver for SJ you are using.



- Once you have started this software following the procedure in Section 3, you can start this software without connecting a USB cable. However, in this case, some functions such as measurement start cannot be used.

4

GENERATING AN INSPECTION CERTIFICATE

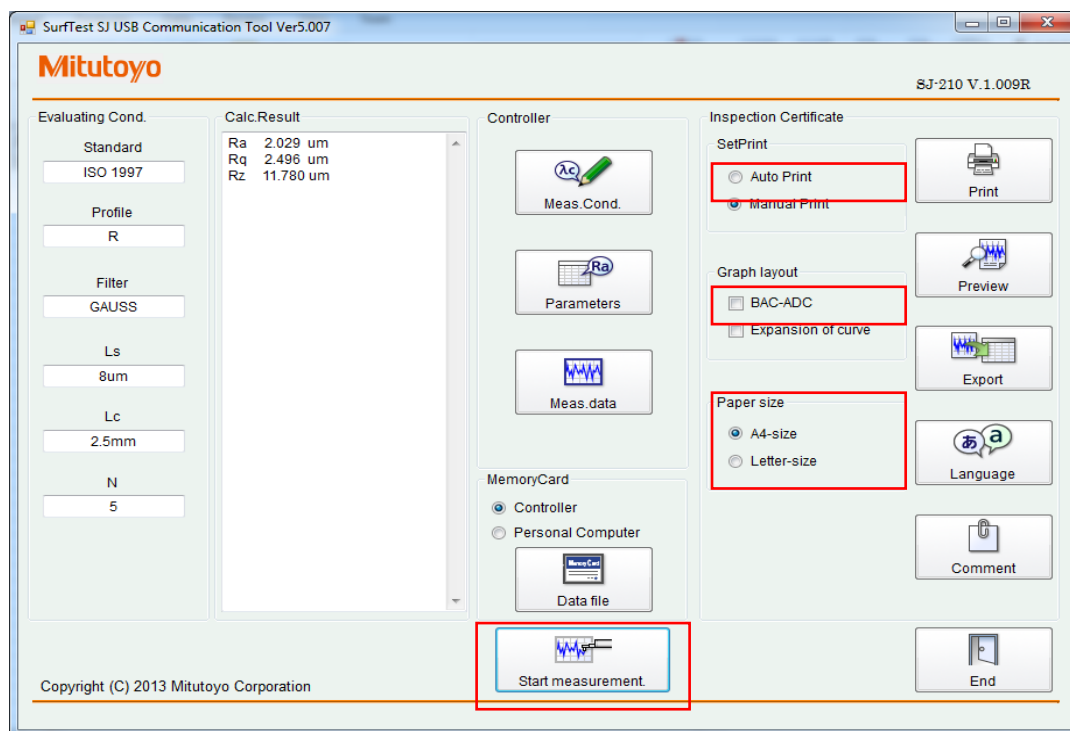
This section describes how to create inspection certificate.

By performing the procedure shown in this chapter, you can automatically perform everything from measurement to printing of a simple inspection certificate.

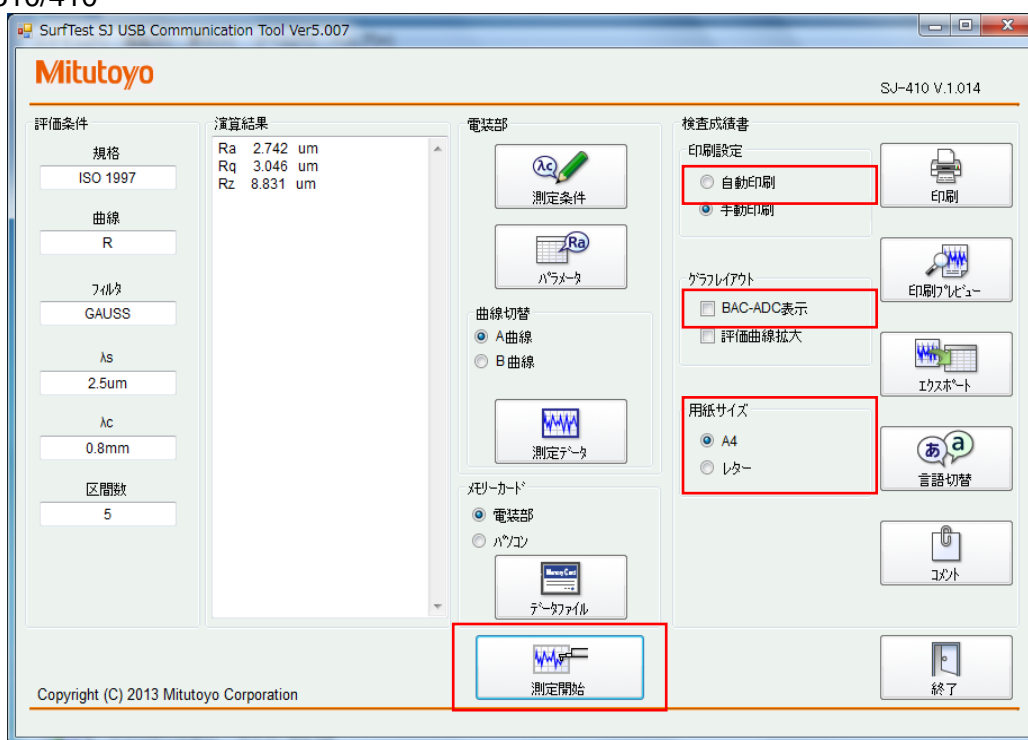
Plaese perform the following procedure.

- (1) Start this software referring to Section 3.
- (2) Select **Auto Print** on the SetPrint.
- (3) Select **BAC - ADC** on the Graph layout.
- (4) Select **A4-size** or **Letter-size** on the Paper size.
- (5) Select **Start measurement** .

•SJ-210



・SJ-310/410



- NOTE**
- ・In the inspection certificate, 24 parameters can be displayed at maximum.
 - ・ The files required to create the inspection certificate are saved in the “Mitutoyo SurfTest” folder in the C drive of your computer.

5

DESCRIPTION OF EACH FUNCTION

This section describes each function.

5-1. Home Screen

This screen is used to make settings for measurement, generating an inspection certificate, and printing it .

- | | | |
|------|-----------------------------|--|
| (1) | Evaluating Cond. | Displays evaluation conditions such as standard and profile of Loaded data. |
| (2) | Calc. Result | Displays calculation results of loaded data. |
| (3) | Meas. Cond. | Opens the measurement conditions screen.
(Refer to Section 5-2). |
| (4) | Parameters | Opens the Select parameter screen.
(Refer to Section 5-3). |
| (5) | Meas. data | SJ-210: Loads the measurement conditions, calculation results, and evaluation profile data from the SJ control unit |
| | Switch Profile | SJ-310/410: Loads the measurement conditions, calculation results of a profile selected from the SJ control unit. |
| (6) | Set Print | |
| | Auto Print : | Automatically loads data from the control unit, generates and prints an inspection certificate. |
| | Manual Print : | Generates and prints an inspection certificate using already loaded data. |
| (7) | Graph layout | |
| | BAC-ADC : | Displays a BAC-ADC graph on an inspection certificate. |
| | Expansion of curve : | Displays an enlarged evaluation profile, if no BAC or ADC is displayed. |
| (8) | Paper size | Either A4-size or letter-size print sheet can be selected. |
| (9) | Print | Prints an inspection certificate according to a specified print method. |
| (10) | Preview | Displays the print image of an inspection certificate.
During the print preview mode, the Home screen is minimized. When the print preview mode exits, the Home screen is restored to the original size |
| (11) | Export | An inspection certificate can be saved as a file excluding the Excel Macro function. For details about the saving method, refer to the Excel Operation Manual. |

(12) **Language** Allows a language displayed on an inspection certificate to be switched.

(13) **Comment** Allows edition of a comment in an inspection certificate.

CAUTION : If language is switched to other one, a comment is changed to the default setting.

(14) **Memory Card**

Control Unit : Allows data in a memory card inserted in the control unit to be loaded.

PC : Allows SJ-210/310/410 data saved in a memory card connected to a PC or contained in a folder to be loaded.

CAUTION : The format of the files to be loaded among those saved in a memory card is limited to the text file format.
On the SJ control unit, select [Environment Settings], [Memory Card (SD Card)], and then [Text File]. And set "all data".

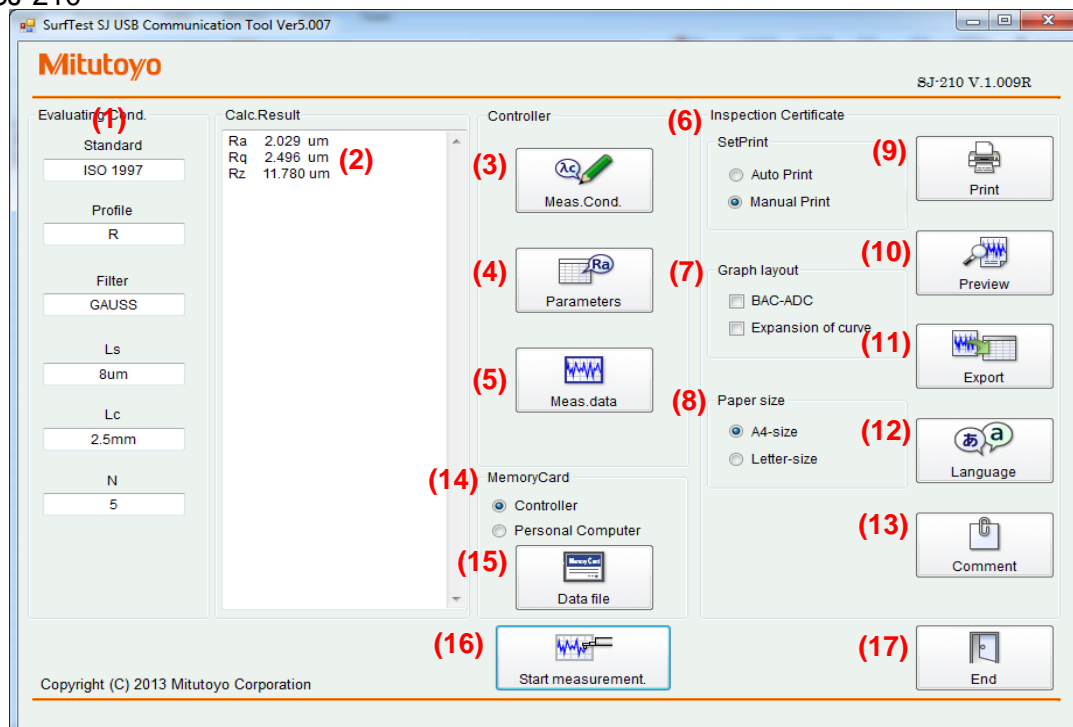
(15) **Data File** Displays the data file list of SJ-210/310/410 saved in a memory card.
Select a file from list and click call button.

CAUTION : Although Auto Print is selected in the [Set Print], it is not possible to print automatically by loading data from a memory card. To continue generation of an inspection certificate, click the [Print] button.

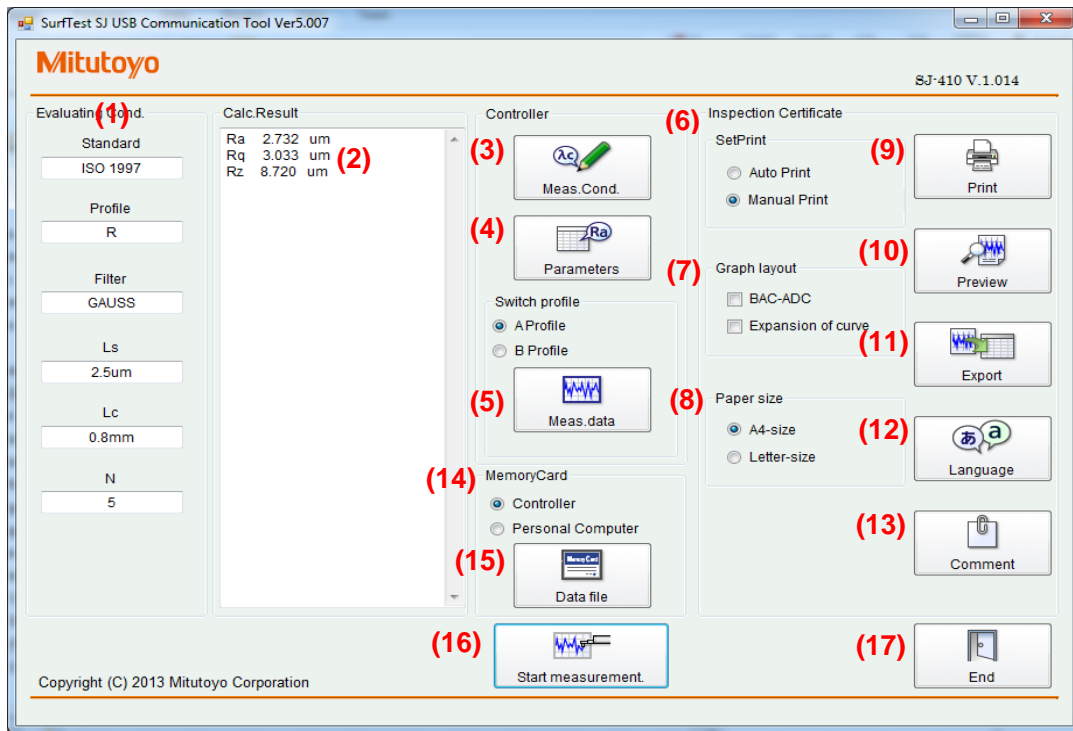
(16) **Start measurement** Performs measurement to load the measurement conditions / the calculation result / the evaluation profile data of the profile selected in the SJ control unit

(17) **End** Quits this software.

•SJ-210



•SJ-310/410



5-2. Measurement Conditions Screen

This screen is used to set measurement conditions such as standards, curves and filters.
If you want to change the Opt Length , Please clicks **Save** .

•SJ-210

Measurement Conditions

Standard

- ☐ JIS1982
- ☐ JIS1994
- ☐ JIS2001
- ☒ ISO1997
- ☐ ANSI
- ☐ VDA
- ☐ Free

Profile

- ☐ P
- ☒ R
- ☐ DF
- ☐ R-Motif

Filter

- ☐ 2CR75
- ☐ PC75
- ☒ GAUSS
- ☐ NONE

Lc

- ☐ 0.08
- ☐ 0.25
- ☐ 0.8
- ☒ 2.5

mm

Ls

- ☐ 2.5
- ☒ 8
- ☐ NONE

um

M-Speed

- ☐ 0.25
- ☒ 0.5
- ☐ 0.75

mm/s

N

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10

☒ Opt Length

5.00 mm

5.00 - 16.00

Save

Motif-A

- ☐ 0.02
- ☒ 0.1
- ☐ 0.5

0.64 mm

3.20 mm

16.00 mm

5.00 - 16.00

Save

Pre/Post

- ☐ OFF
- ☒ ON

Meas.Length

5.00 mm

Eval.length

2.50 um

Range

- ☒ AUTO
- ☐ 360
- ☐ 100
- ☐ 25

Exit

•SJ-310

Measurement Conditions

Standard

- ☐ JIS1982
- ☐ JIS1994
- ☐ JIS2001
- ☒ ISO1997
- ☐ ANSI
- ☐ VDA
- ☐ Free

Profile

- ☐ P
- ☒ R
- ☐ DF
- ☐ R-Motif
- ☐ W-Motif

Filter

- ☐ 2CR75
- ☐ PC75
- ☒ GAUSS
- ☐ NONE

Lc

- ☐ 0.08
- ☐ 0.25
- ☒ 0.8
- ☐ 2.5
- ☐ 8

mm

Ls

- ☒ 2.5
- ☐ 8
- ☐ NONE

um

M-Speed

- ☐ 0.25
- ☒ 0.5
- ☐ 0.75

mm/s

Range

- ☒ AUTO
- ☐ 360
- ☐ 100
- ☐ 25

um

N

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10

☒ Opt Length

5.00 mm

1.60 - 16.00

Save

Motif-A

- ☐ 0.02
- ☒ 0.1
- ☐ 0.5

0.64 mm

3.20 mm

16.00 mm

1.60 - 16.00

Save

Motif-B

- ☐ 0.1
- ☒ 0.5
- ☐ 2.5

0.64 mm

3.20 mm

16.00 mm

1.60 - 16.00

Save

Pre/Post

- ☐ OFF
- ☒ ON

Meas.Length

5.00 mm

Eval.length

4.20 mm

Exit

Switch profile

•SJ-410

Measurement Conditions

Standard <input type="radio"/> JIS1982 <input type="radio"/> JIS1994 <input type="radio"/> JIS2001 <input checked="" type="radio"/> ISO1997 <input type="radio"/> ANSI <input type="radio"/> VDA <input type="radio"/> Free	Profile <input type="radio"/> P <input checked="" type="radio"/> R <input type="radio"/> W <input type="radio"/> DF <input type="radio"/> R-Motif <input type="radio"/> W-Motif	Filter <input type="radio"/> 2CR75 <input type="radio"/> PC75 <input checked="" type="radio"/> GAUSS <input type="radio"/> NONE	Lf <input type="radio"/> 0.25 <input type="radio"/> 0.8 <input checked="" type="radio"/> 2.5 <input type="radio"/> 8 <input type="radio"/> NONE mm	Lc <input type="radio"/> 0.08 <input type="radio"/> 0.25 <input checked="" type="radio"/> 0.8 <input type="radio"/> 2.5 <input type="radio"/> 8 <input type="radio"/> 25 mm	Ls <input checked="" type="radio"/> 2.5 <input type="radio"/> 8 <input type="radio"/> 25 <input type="radio"/> NONE um	M-Speed <input type="radio"/> 0.05 <input type="radio"/> 0.1 <input type="radio"/> 0.2 <input checked="" type="radio"/> 0.5 <input type="radio"/> 1.0 mm/s	Range <input checked="" type="radio"/> AUTO <input type="radio"/> 800 <input type="radio"/> 80 <input type="radio"/> 8 um
---	--	--	---	---	--	---	---

N <input type="radio"/> 1 <input type="radio"/> 6 <input type="radio"/> 11 <input type="radio"/> 16 <input type="radio"/> 2 <input type="radio"/> 7 <input type="radio"/> 12 <input type="radio"/> 17 <input type="radio"/> 3 <input type="radio"/> 8 <input type="radio"/> 13 <input type="radio"/> 18 <input type="radio"/> 4 <input type="radio"/> 9 <input type="radio"/> 14 <input type="radio"/> 19 <input type="radio"/> 5 <input type="radio"/> 10 <input type="radio"/> 15 <input type="radio"/> 20 <input checked="" type="radio"/> Opt Length 5.00 mm 1.60 - 25.00 <div style="border: 2px solid red; padding: 2px; display: inline-block;">Save</div>	Motif-A L 0.10 mm <div>Save</div> <input type="radio"/> L 3.20 mm <input type="radio"/> 0.02 0.64 mm <input checked="" type="radio"/> 0.1 3.20 mm <input type="radio"/> 0.5 16.00 mm <input type="radio"/> 2.5 25.00 mm 1.60 - 25.00 <div>Save</div>	Motif-B L 0.50 mm <div>Save</div> <input type="radio"/> L 3.20 mm <input type="radio"/> 0.1 0.64 mm <input checked="" type="radio"/> 0.5 3.20 mm <input type="radio"/> 2.5 16.00 mm <input type="radio"/> 12.5 25.00 mm 1.60 - 25.00 <div>Save</div>	Pre/Post <input type="radio"/> OFF <input checked="" type="radio"/> ON Meas.Length 5.00 mm Eval.length 4.20 mm
---	--	--	---

A

A

B

Switch profile

Exit

5-3. Select parameter Screen

This screen is used to set parameters for surface roughness measurement.

- (1) Judge Rules can be selected from Maximum value rule / 16% rule / Mean rule value. In SJ-310/410, standard deviation $\sigma 1$, standard deviation $\sigma 2$, standard deviation $\sigma 3$ can be selected as well.
- (2) All the parameters can be set or cancel at once.
- (3) All the tolerance judgement can be set or cancel at once.
- (4) Each parameter can be selected either ON or OFF individually.
- (5) Tolerance judgment of each parameter can be selected either ON or OFF individually. However, tolerance judgment is not performed where tolerance limit value is "0".
- (6) Tolerance judgement result of each parameter is displayed as below:
OK: Green / +NG: Red / -NG: Blue.
- (7) In SJ-310/410, profile can be switched.

▪ SJ-210

Select parameter

(1) JudgeRules

☐ Max ☐ 16% ☒ Mean

(2) Parameter

(3) Judge

Tol.Judge	LowLimit	Up Limit	Tol.Judge	LowLimit	Up Limit	Tol.Judge	LowLimit	Up Limit
Ra <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.000 2.000 um	RDa <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000	Mr2 <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 %
Rq <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.000 1.000 um	RDq <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000	A1 <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000
Rz <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.000 1.000 um	Rlr <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000	A2 <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000
Ry <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Rmr <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 %	Vo <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000
Rp <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Rmr(c) <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 %	K <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 mm
Rv <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Rdc <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	R <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um
R3z <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Htp <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Rx <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um
Rsk <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000	tp <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 %	AR <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 mm
Rku <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000	Rt <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	W <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um
Rc <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Rz1max <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Wx <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um
RPe <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 /cm	R3zm <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	AW <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 mm
RSm <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Rpm <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Wte <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um
S <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Rk <input type="checkbox"/>	<input type="checkbox"/>	0.000 100.000 um			
HSC <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 /cm	Rpk <input type="checkbox"/>	<input type="checkbox"/>	0.000 100.000 um			
RzJIS <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 um	Rvk <input type="checkbox"/>	<input type="checkbox"/>	0.000 100.000 um			
Rppi <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 /E	Mr1 <input type="checkbox"/>	<input type="checkbox"/>	0.000 0.000 %			

(4) (5) (4) (5) (4) (5)

•SJ-310/410

Select parameter

JudgeRules (1)

☐ OFF
 ☒ Max
 ☐ 16%
 ☐ Mean
☐ Std.Dev.1s
☐ Std.Dev.2s
☐ Std.Dev.3s

Parameter (2)

		LowLimit	Up Limit			LowLimit	Up Limit			LowLimit	Up Limit			
Ra	<input checked="" type="checkbox"/>	2.000	3.000	um	RDa	<input type="checkbox"/>	0.000	0.000		Rk	<input type="checkbox"/>	0.000	0.000	um
Rq	<input checked="" type="checkbox"/>	3.000	4.000	um	RDq	<input type="checkbox"/>	0.000	0.000		Rpk	<input type="checkbox"/>	0.000	0.000	um
Rz	<input checked="" type="checkbox"/>	10.000	11.000	um	RLa	<input type="checkbox"/>	0.000	0.000	mm	Rvk	<input type="checkbox"/>	0.000	0.000	um
Ry	<input type="checkbox"/>	0.000	0.000	um	RLq	<input type="checkbox"/>	0.000	0.000	mm	Mr1	<input type="checkbox"/>	0.000	0.000	%
Rp	<input type="checkbox"/>	0.000	0.000	um	RLo	<input type="checkbox"/>	0.000	0.000	mm	Mr2	<input type="checkbox"/>	0.000	0.000	%
Rv	<input type="checkbox"/>	0.000	0.000	um	RLr	<input type="checkbox"/>	0.000	0.000		A1	<input type="checkbox"/>	0.000	0.000	
R3z	<input type="checkbox"/>	0.000	0.000	um	Rmr	<input type="checkbox"/>	0.000	0.000	%	A2	<input type="checkbox"/>	0.000	0.000	
Rsk	<input type="checkbox"/>	0.000	0.000		Rmr(c)	<input type="checkbox"/>	0.000	0.000	%	Vo	<input type="checkbox"/>	0.000	0.000	
Rku	<input type="checkbox"/>	0.000	0.000		Rdc	<input type="checkbox"/>	0.000	0.000	um	K	<input type="checkbox"/>	0.000	0.000	mm
Rc	<input type="checkbox"/>	0.000	0.000	um	Htp	<input type="checkbox"/>	0.000	0.000	um	R	<input type="checkbox"/>	0.000	0.000	um
RPc	<input type="checkbox"/>	0.000	0.000	cm	tp	<input type="checkbox"/>	0.000	0.000	%	Rx	<input type="checkbox"/>	0.000	0.000	um
RSm	<input type="checkbox"/>	0.000	0.000	um	Rt	<input type="checkbox"/>	0.000	0.000	um	AR	<input type="checkbox"/>	0.000	0.000	mm
S	<input type="checkbox"/>	0.000	0.000	um	Rz1max	<input type="checkbox"/>	0.000	0.000	um	W	<input type="checkbox"/>	0.000	0.000	um
HSC	<input type="checkbox"/>	0.000	0.000	cm	R3zm	<input type="checkbox"/>	0.000	0.000	um	Wx	<input type="checkbox"/>	0.000	0.000	um
RzJIS	<input type="checkbox"/>	0.000	0.000	um	Rpm	<input type="checkbox"/>	0.000	0.000	um	AW	<input type="checkbox"/>	0.000	0.000	mm
Rppi	<input type="checkbox"/>	0.000	0.000	E						Wte	<input type="checkbox"/>	0.000	0.000	um

A (4) (5) (7)

A ↔ B
Switch profile

(4) (5) **Exit**

MEMO

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UNINSTALLATION

This section describes how to uninstall.

By performing the procedure described in this chapter, this software will be uninstalled.

Please perform the following procedure. (Example: When using Windows 10)

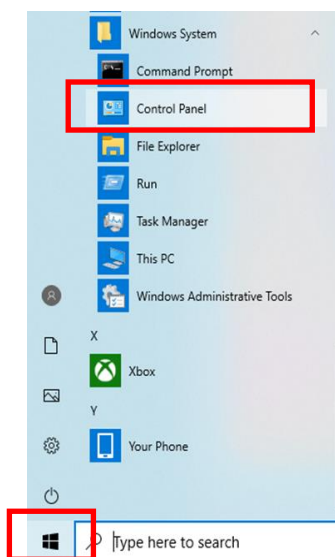
NOTE

NOTE

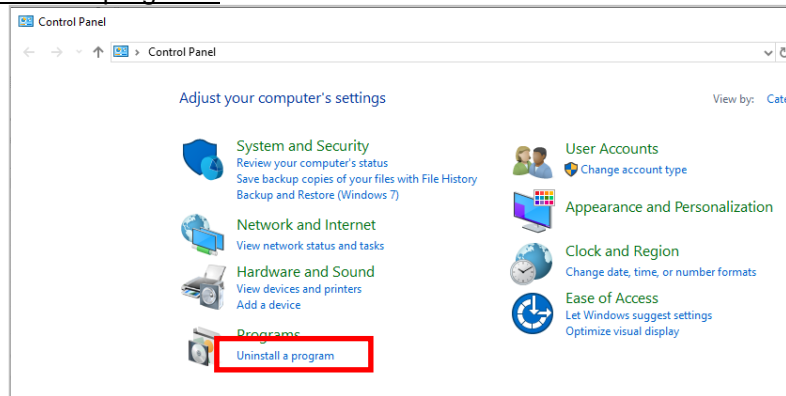
•In Windows 7/8, the procedure (1) below is different.

Please refer to the procedure (1), (2) in Section8-1, 8-2..

(1) Click the start button. Then select "Control Panel" in "Windows System".



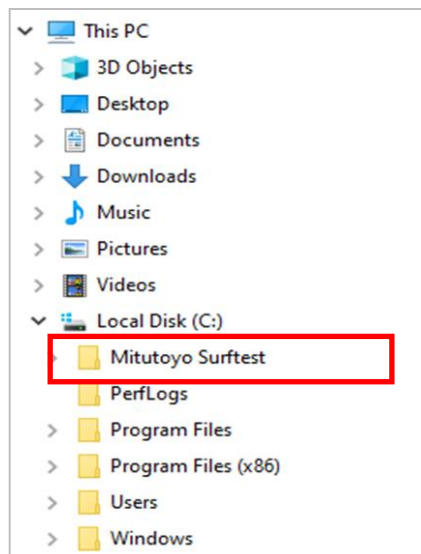
(2) Select "Uninstall a program".



(3) Double click "Surftest SJ-Communication-Tool" in the displayed program list

(4) When a message to confirm the deletion is displayed, Select "Yes".

(5) Delete the "Mitutoyo Surftest" folder in the C drive of your computer



7

OPERATING ENVIRONMENT AND OTHERS

This section describes the operating environment, etc.

(1) Operation verified environment

The operation confirmed environment is as follows.

OS	Windows 7 / 8 / 8.1 / 10 (64bit)
Excel	Excel 2010 / 2013 / 2016 (32bit)

NOTE

- Please use Windows as an administrator.
 - Please use Excel with the macro function enabled.
 - It may not operate properly, if the security level of the Excel is high.
-

- (2) Windows is a trademark of Microsoft Corporation.
- (3) Excel is a registered trademark of Microsoft Corporation.
- (4) Other corporate and product names that appear in this manual are generally their trademarks or registered trademarks.

MEMO

8

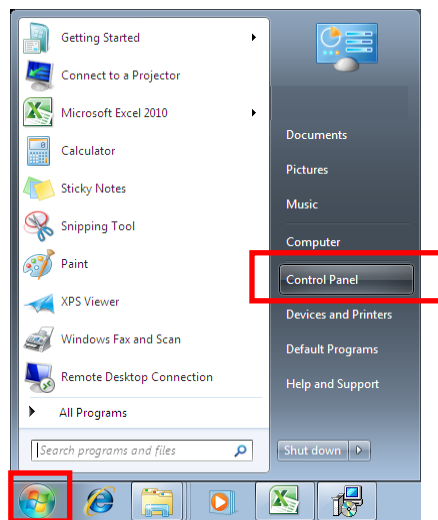
REFERENCE

This section describes how to open Device Manager.

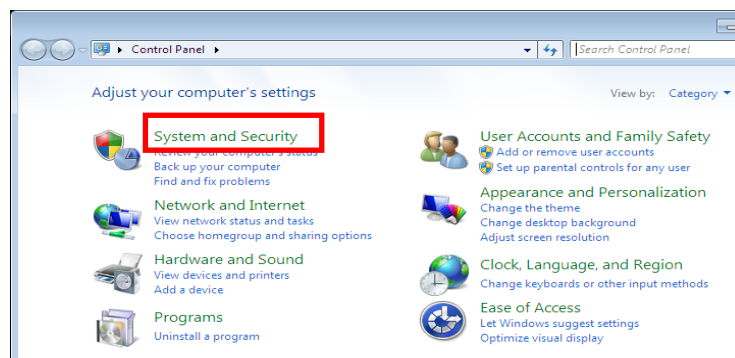
8-1. Windows 7

Please perform the following procedure.

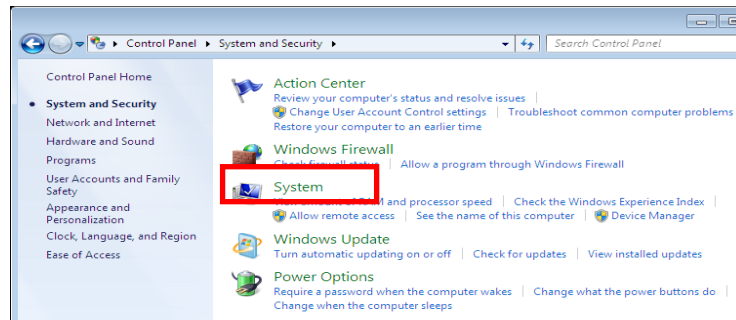
- (1) Click the start button. Then select "Control Panel" in "Windows System".



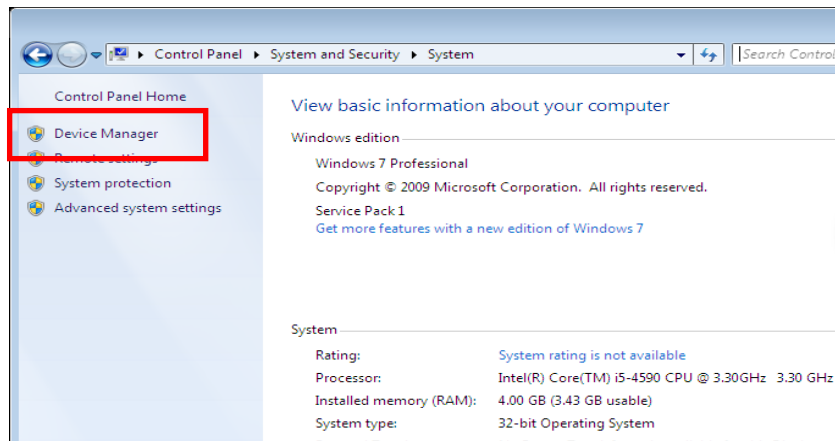
- (2) Select "System and Security".



(3) Select "System".



(4) Select "Device Manager".



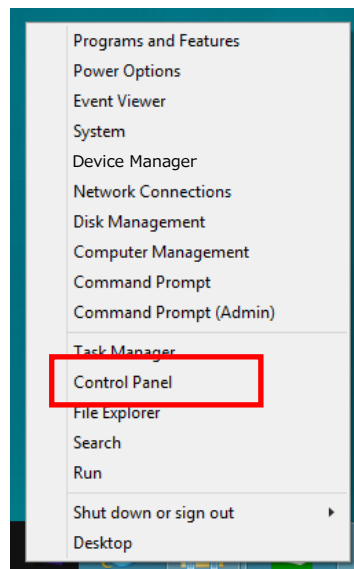
8-2. Windows 8 / 8.1

Please perform the following procedure.

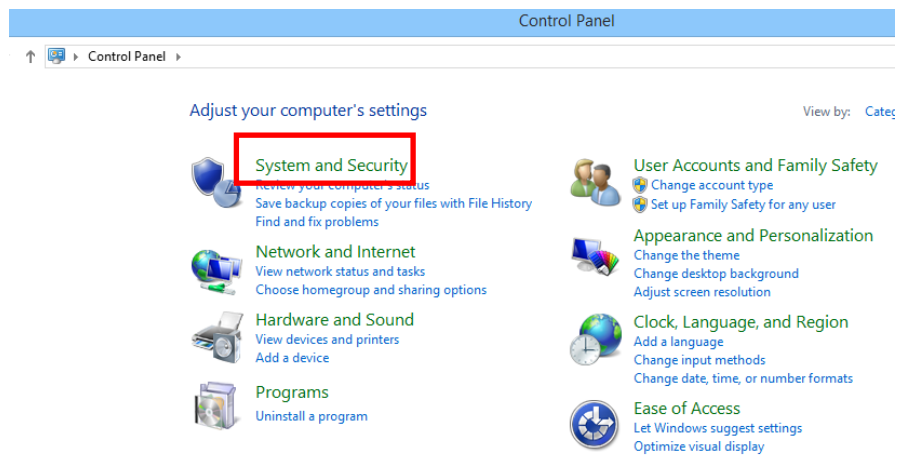
- (1) Press "Windows" key and "X" key on keyboard simultaneously".



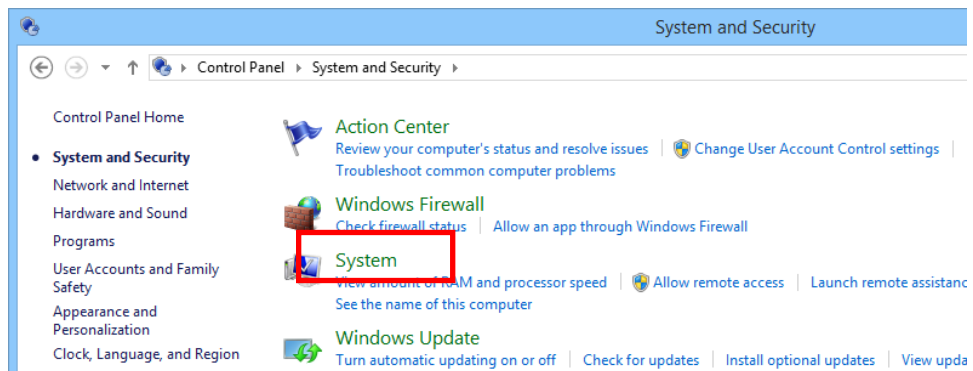
- (2) Select "Control Panel".



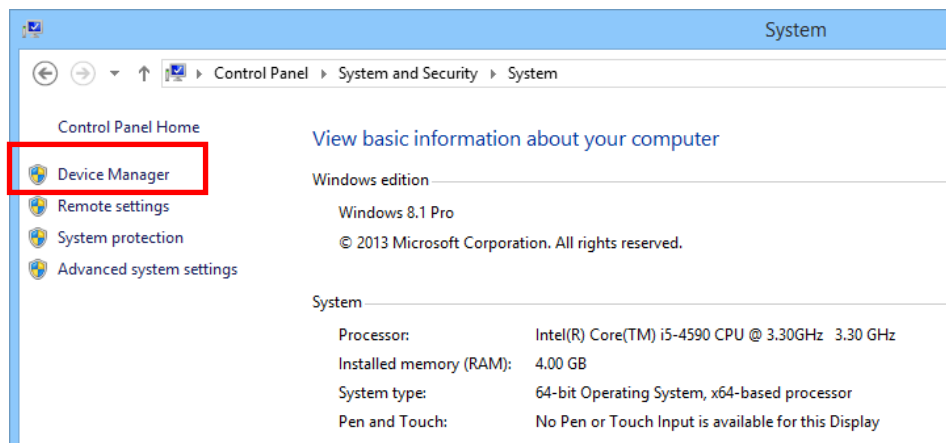
(3) Select "System and Security".



(4) Select "System".



(5) Select "Device Manager".



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*As of January 2019

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