RMS (Remote Management System)

Contents

1. RMS

RMS (Remote Management System) is a function to remotely operate several BF2-Monitor systems on one PC.

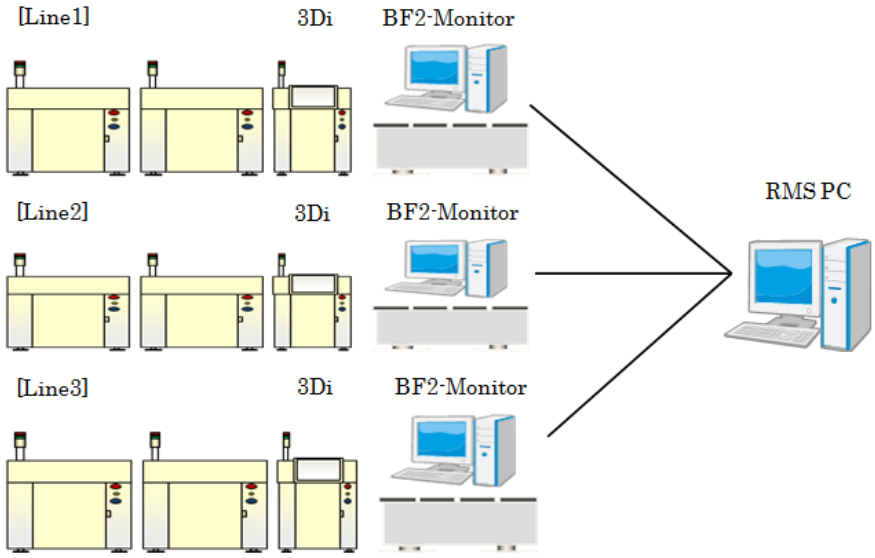

Figure1 RMS (Remote Management System)

2. RMS settings

Settings are required each for BF2 (AOI), BF2-Monitor and RMS PC.

2.1 Settings on BF2 (AOI)

Step1: Click **BF2 Option** from the **BF2** menu.

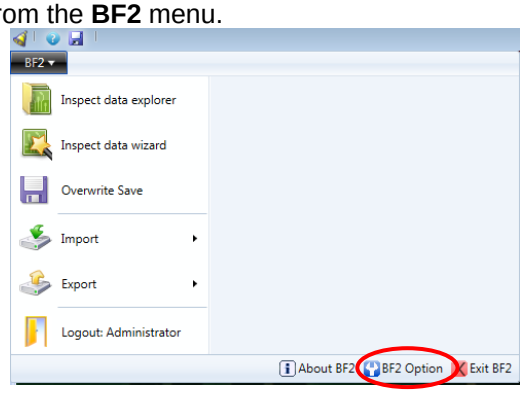

Figure2 BF2 Option

Step2: Select the check box of **SPCManager**, and set **SPCWindow** to **True**.

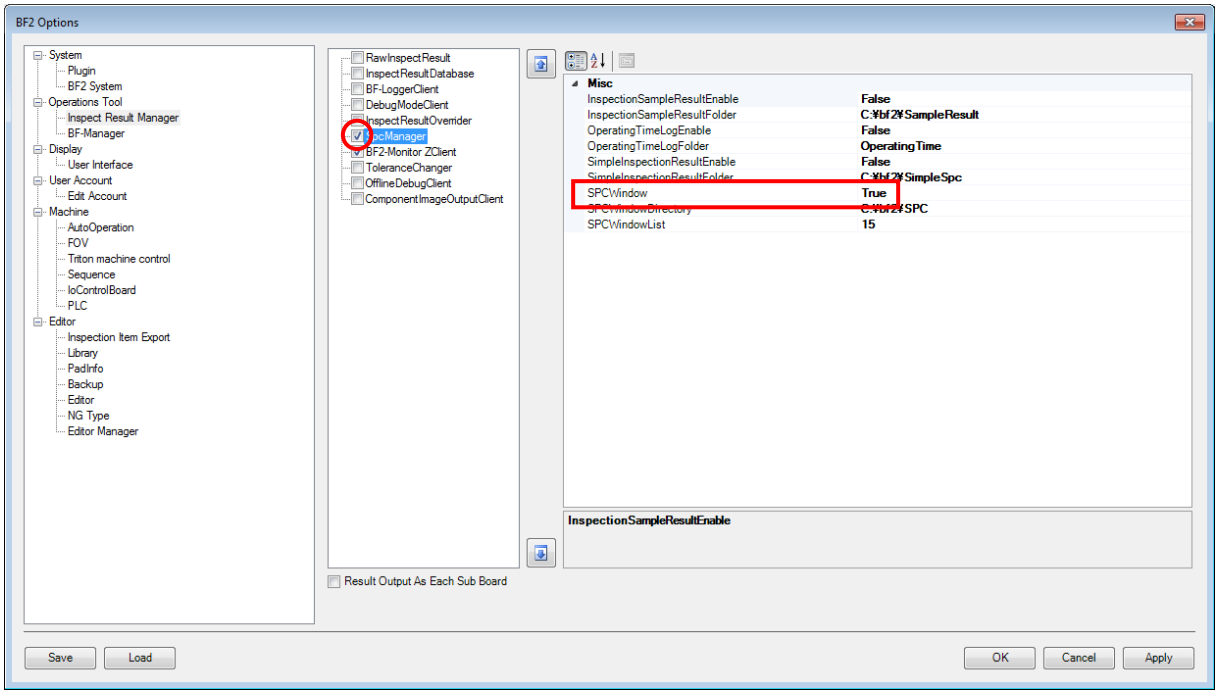

Figure3 SPCManager

Step3: Click **Operation Tool** -> **Inspect Result Manager**. Then, select the check box of **BF2-Monitor ZClient**, and configure the settings shown with the red frames below.

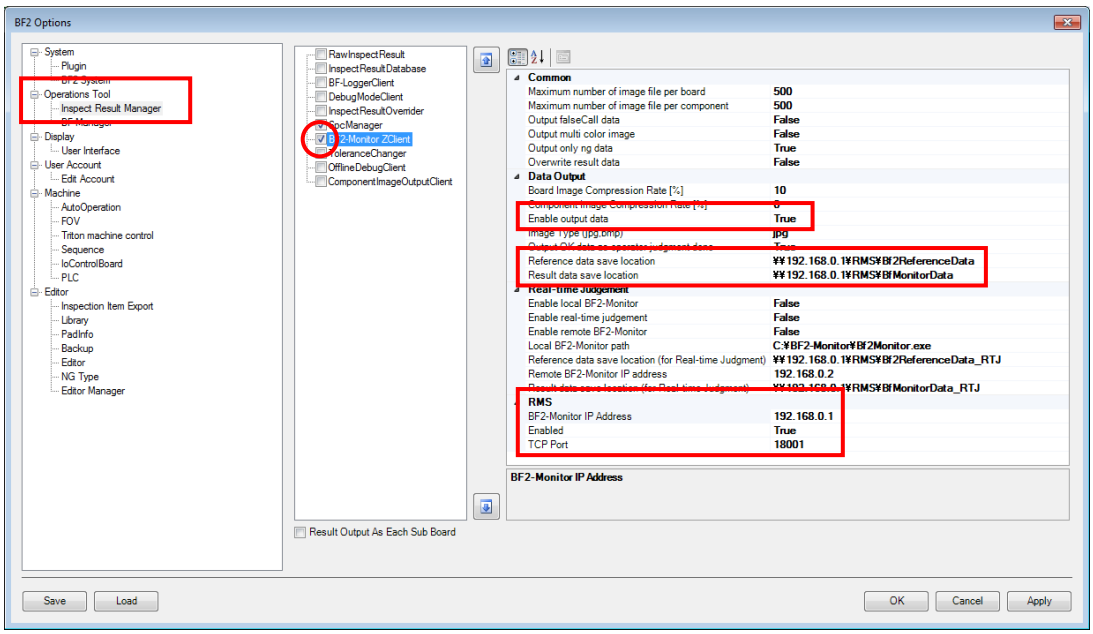

Figure4 BF2-Monitor ZClient

Enable output data	Outputs inspection results to BF2-Monitor. Set to **True**.
Reference data save location	Specify a folder to output reference images.
Result data save location	Specify a folder to output inspection result files.

Table1 Details of the settings (Data Output)

)Specify a folder with an IP address for **Reference data save location** and **Result data save location**. No network drives are available for the paths.

(e.g.) IP address of the PC where BF2-Monitor is installed ¥¥192.168.0.1
Reference data save location ¥¥192.168.0.1¥ RMS¥ BF2ReferenceData
Result data save location ¥¥192.168.0.1¥ RMS¥ BF2MonitorData
(You can specify any characters in the red part.)

BF2-Monitor IP Address	Specify an IP address of the PC where BF2-Monitor is installed.
Enabled	Set to **True** to use the RMS function.
TCP Port	Specify a port number to use for communication. Confirm it is set to **18001**. For 3Di-D, set to **18002** for lane B.

Table2 Details of the settings (RMS)

Step4: Create a new folder with any name, such as RMS, under drive C of the BF2-Monitor PC. Right-click on the folder, and click Property.
) Create a folder indicated in (e.g.) above.

Step5: Click **Advanced Sharing** in the **Sharing** tab.

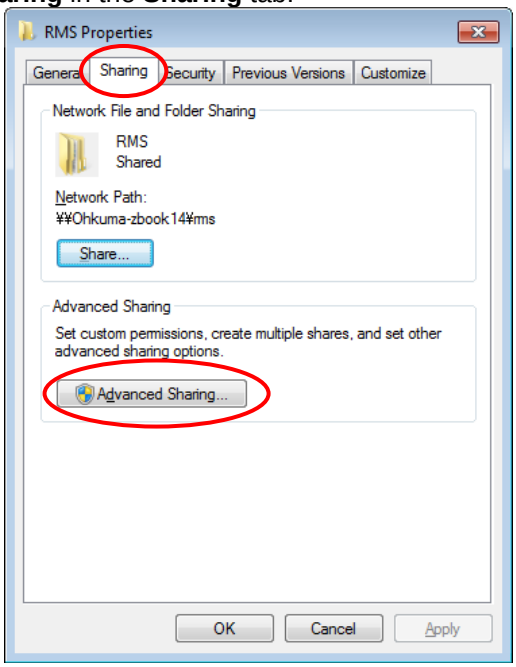

Figure5 Advanced Sharing

Step6: Select the check box of **Share this folder**, and click **Permissions**.

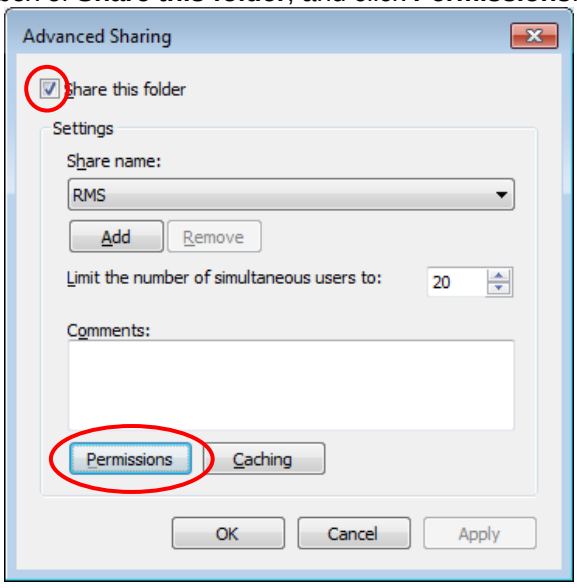

Figure6 Permissions

Step7: Select the check box of **Full Control**, and click **OK**.

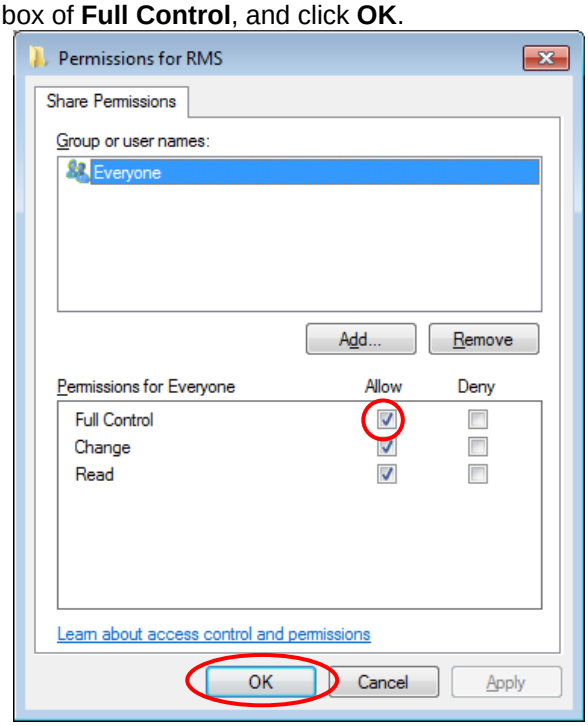

Figure7 Full Control

Step8: Confirm that “Windows Firewall” and a Firewall function of antivirus software are disabled.

2.2 Settings on BF2-Monitor

Step1: Right-click on the BF2-Monitor icon in the task tray, and click **Options**.

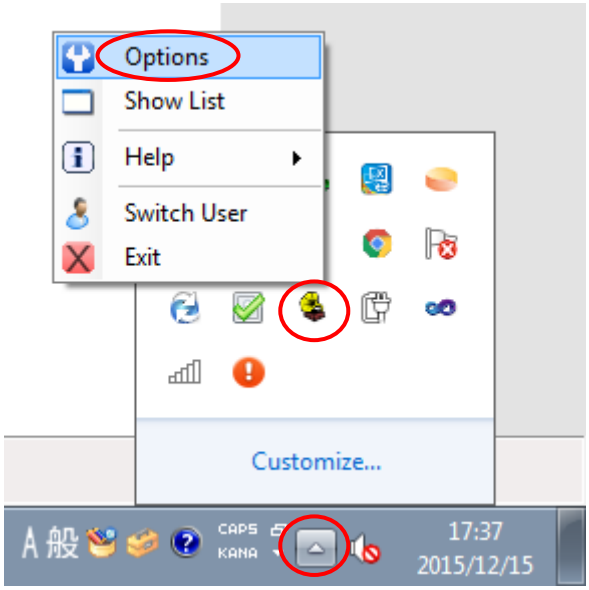

Figure8 BF2-Monitor Option

Step2: Click **General** -> **Bf2Monitor**. Enter the same path as **Result data save location** you set in Step3 of 2.1 Settings on BF2 (AOI) for **Monitor data location**.

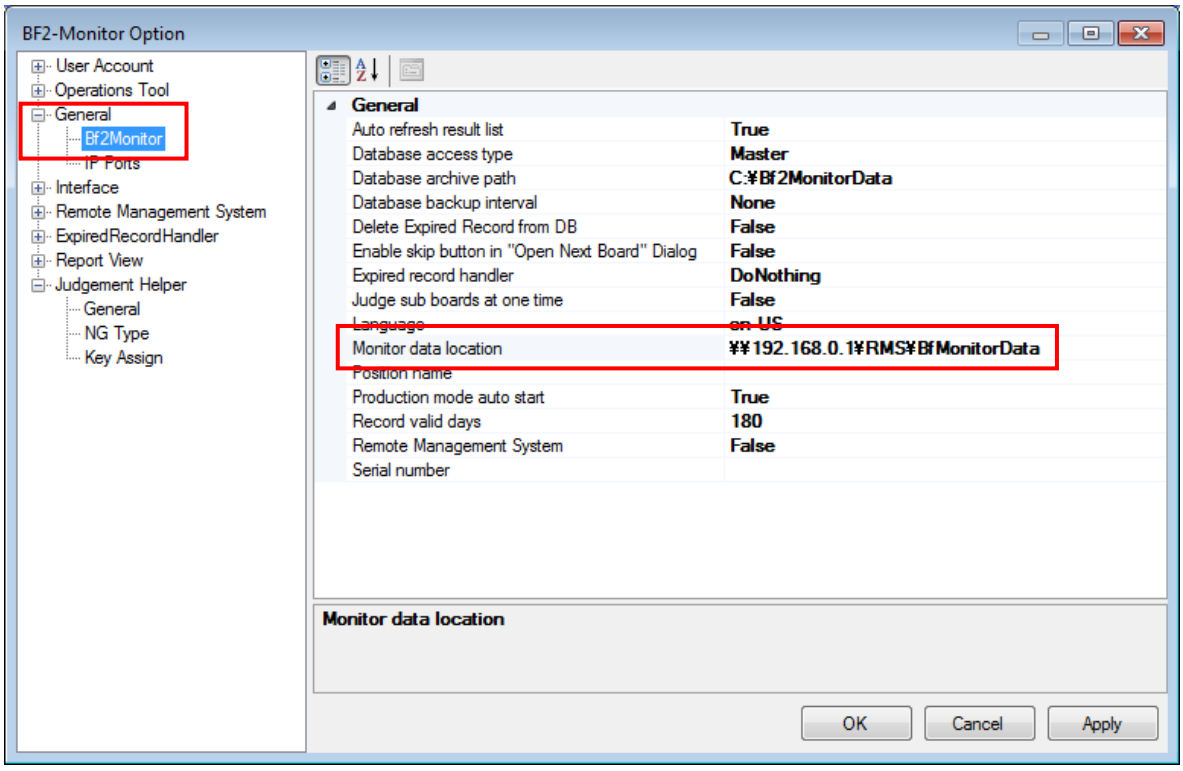

Figure9 Monitor data location

Step3: Click **Judgement Helper** -> **General**. Enter the same path as **Reference data save location** you set in Step3 of 2.1 Settings on BF2 (AOI) for **ReferenceDataPath**.

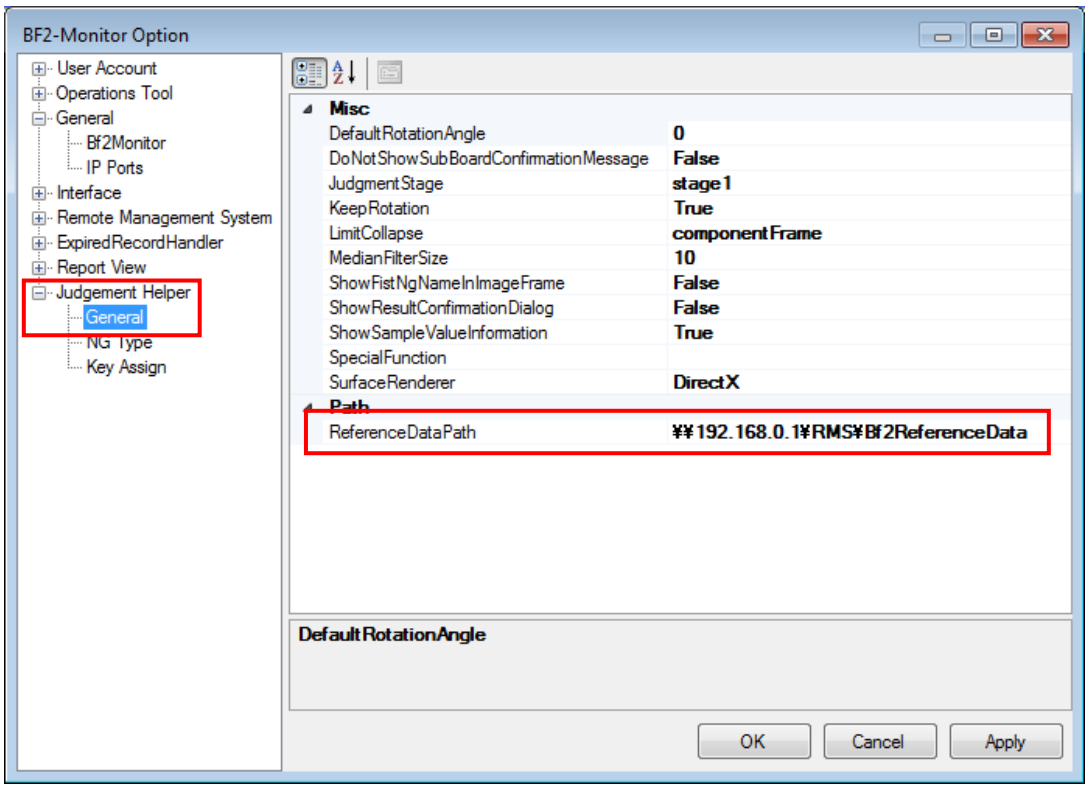

Figure10 Reference data path

2.3 Settings on RMS PC

Step1: Right-click on the BF2-Monitor icon in the task tray, and click **Options**.

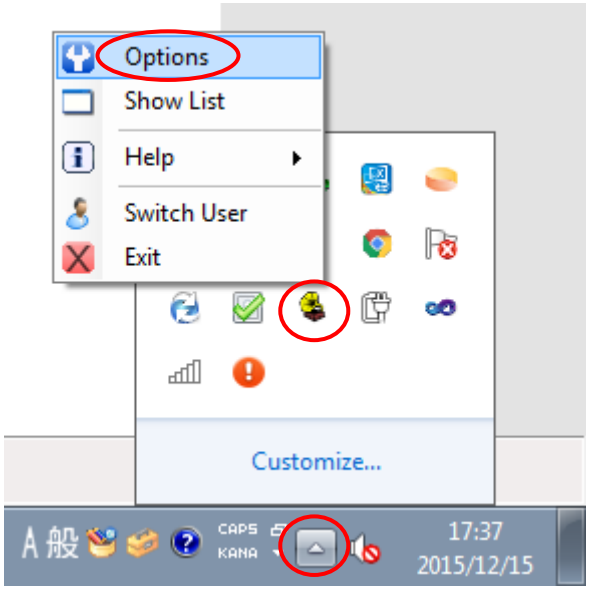

Figure11 BF2-Monitor Option

Step2: Click **General** -> **Bf2Monitor**. Set **Remote Management System** to **True**.

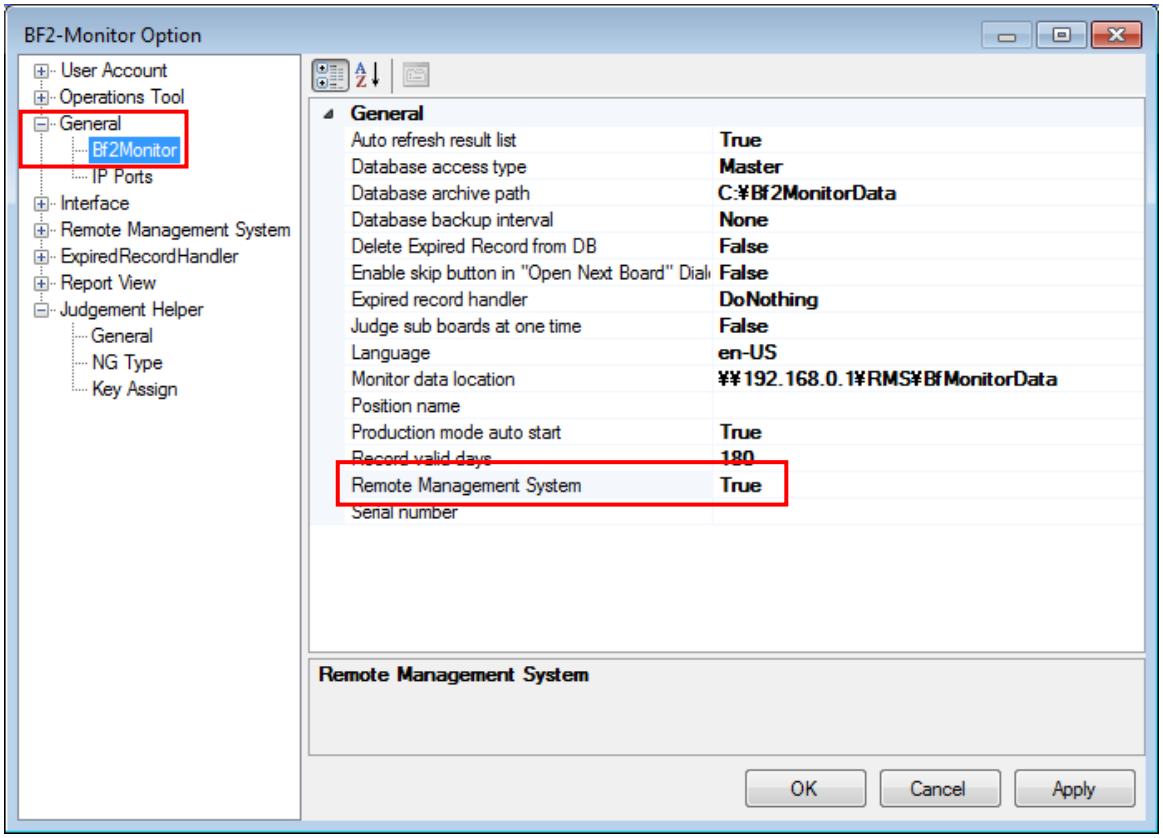

Figure12 Monitor data location

Step3: Specify IP addresses of BF2-Monitor systems to be connected to RMS on **Bf2 Monitors Setup** in **Remote Management System**.

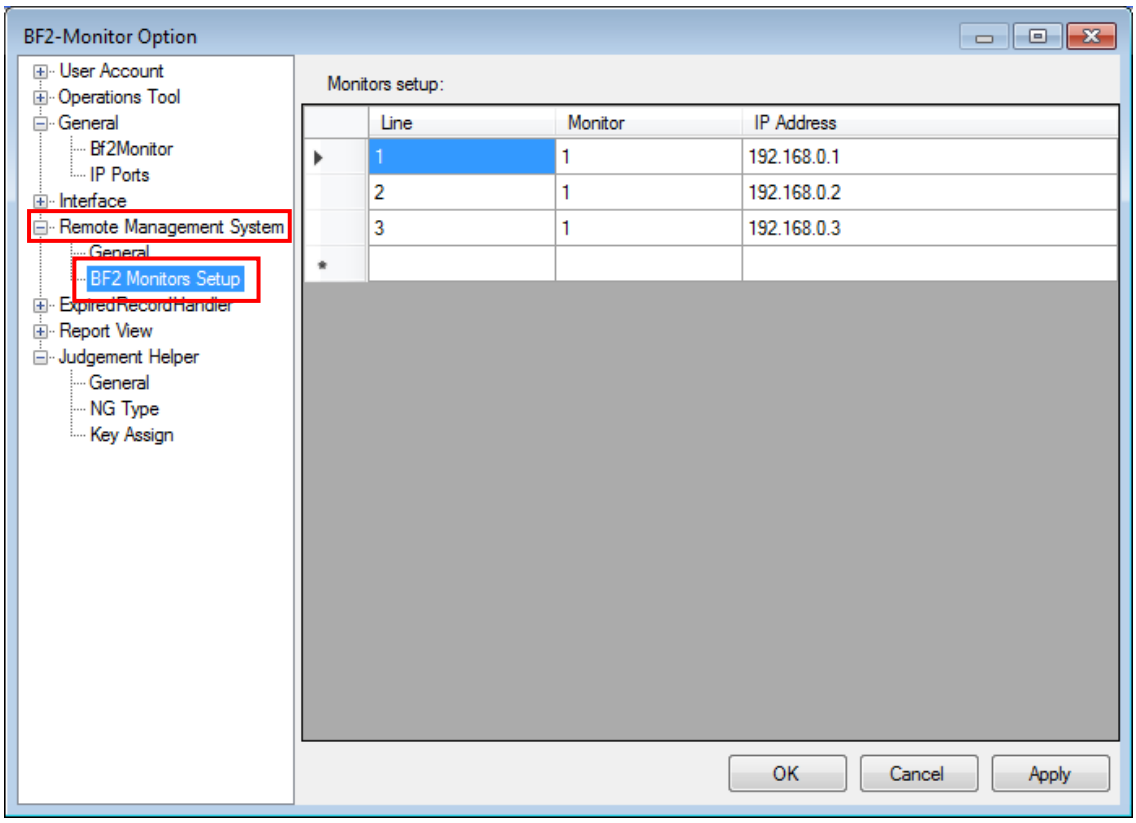

Figure13 BF2 Monitors Setup

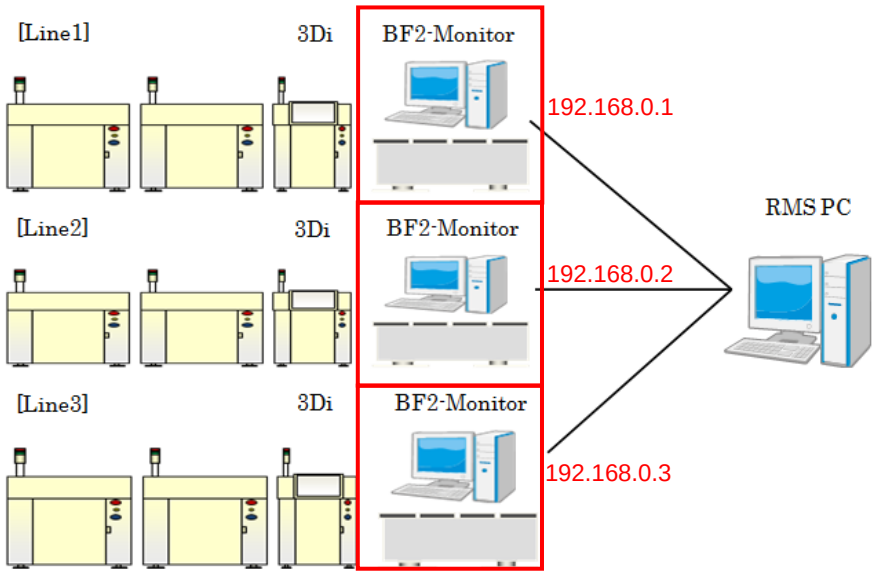

Figure14 Specify IP addresses

Step4: Click **Remote Management System** -> **General**. Set **Start judgement automatically** to **True**.

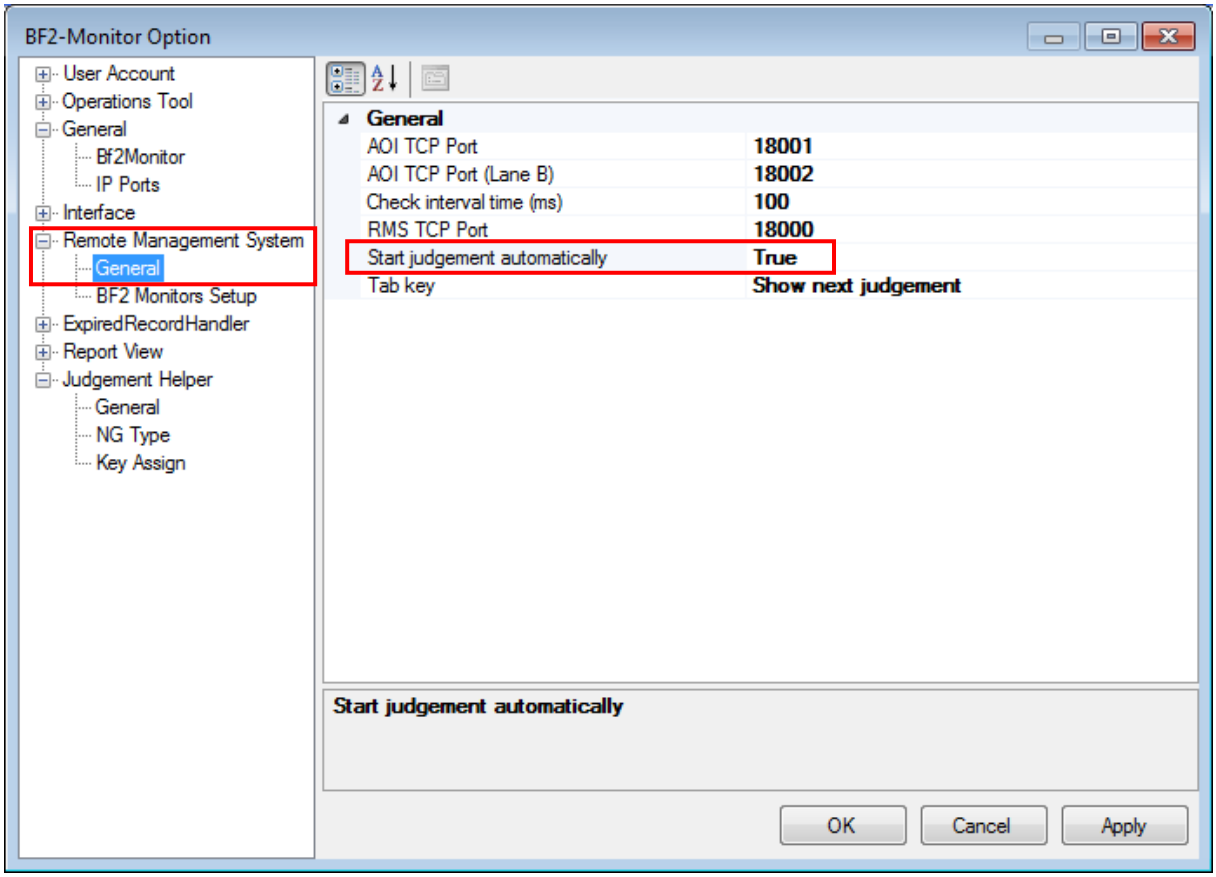

Figure15 BF2 Monitors Setup

Step5: Restart BF2-Monitor on the RMS PC. After the restart, the screen is shown as below. SPC information for each line is shown.

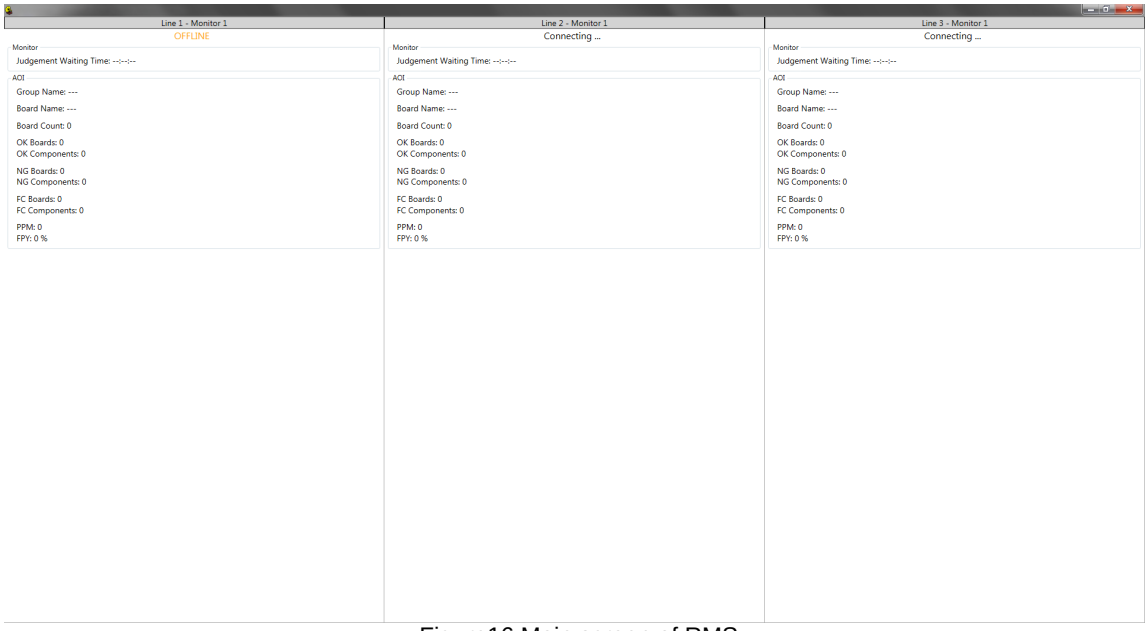

Figure16 Main screen of RMS

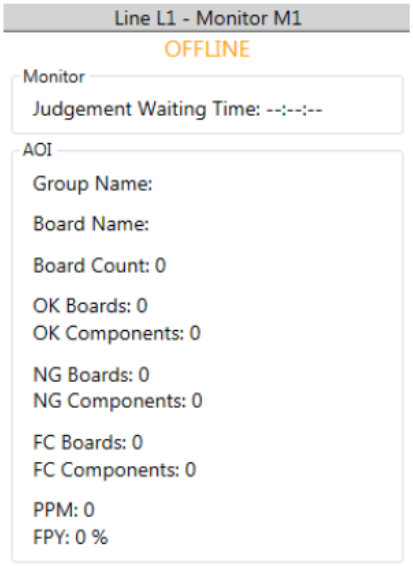

Figure17 SPC information

Line Name and Monitor Name	The line name and Monitor number set in Step3 of 2.3 Settings on RMS PC are shown in the gray header.
Machine State	Displays the status of inspection machines. When a machine is in auto mode, it shows **Automode** in green. When a machine is in manual mode, it shows **Manual** in blue. If BF2-Monitor and RMS PC are communicated, and data is not transferred from the machine to BF2-Monitor, it shows **OFFLINE** in orange. While BF2-Monitor and RMS PC are being communicated, it shows **Connecting** in black. If the communication between BF2-Monitor and RMS PC is failed, it shows **Connection Error** in red. In this case, confirm the network is available and the Firewall setting is disabled.
Group Name	Shows a group name of inspection data.
Board Name	Shows a board name of inspection data.
Board Name	Shows the number of inspected boards.
OK Boards	Shows the number of OK boards.
OK Components	Shows the number of OK components.
NG Boards	Shows the number of NG boards.
NG Components	Shows the number of NG components.
FC Boards	Shows the number of boards with false calls.
FC Components	Shows the number of components with false calls.
PPM	Shows a ratio of NG components to inspected components.
FPY	Shows a ratio of OK boards to inspected boards.

Table3 SPC information

2.4 RMS operation

Step1: Select **All New Records** from the drop-down list in the upper right corner of the BF2-Monitor main screen, and click **Production Mode**.

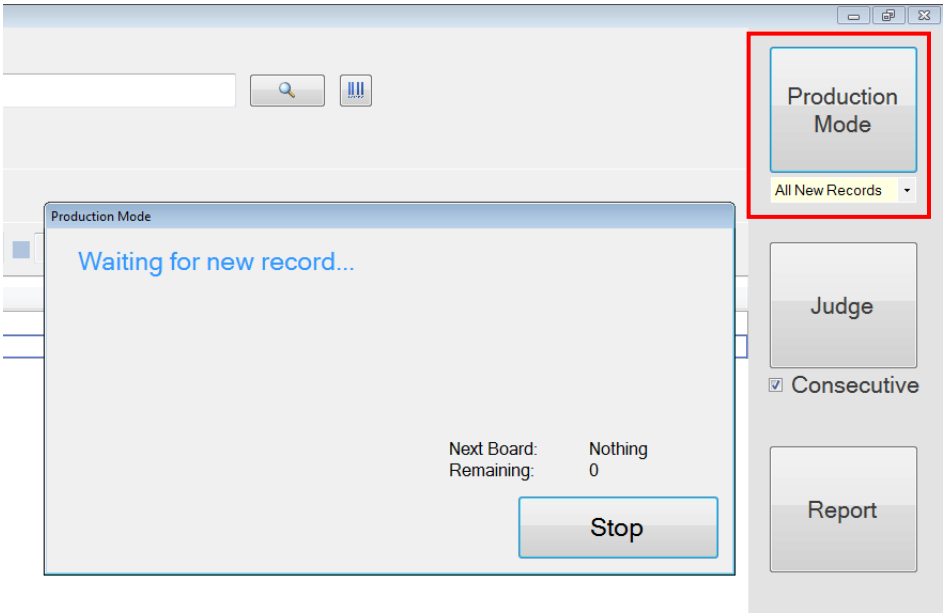

Figure18 Production Mode

Step2: Click **Auto**, and click **Start** on BF2.
The **Auto Mode Setting** dialog is shown. Then, click **OK** to start auto inspection.
After the inspection, its result is sent to BF2-Monitor.

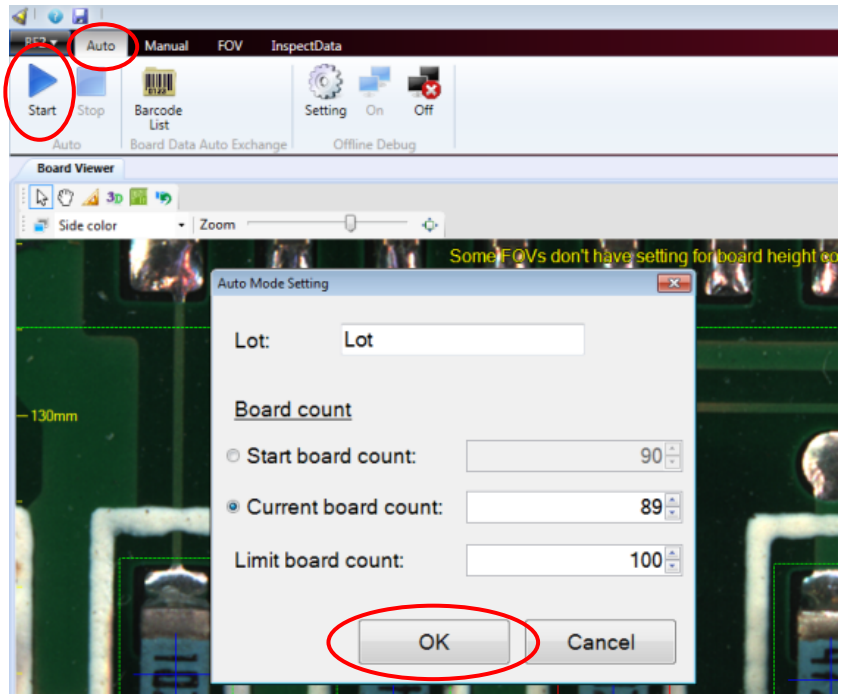

Figure19 Start Auto Mode

Step3: When receiving the inspection result, BF2-Monitor automatically shows the judgement screen. At the same time, the RMS PC automatically shows the judgement screen. You can judge the result on either BF2-Monitor or RMS PC. After the judgement, both the screens are automatically closed.

Figure20 Judgement Window

3. Central control function using RMS

3.1 Central control function

-The central control function enables you to collect detected NG images from an inspection machine in a production line in real time, and to judge them remotely.

-BF2-Monitor has to be installed on the inspection machine.

-If the inspection machine judges NGs, an operator judges them on BF2-Monitor in another PC. However, when the central control function is used, the judgement screen is shown both on the inspection machine and BF2-Monitor in another PC at the same time.
(The judgement screen on the inspection machine is shown when BF2-Monitor installed on the machine is started.)

-The judgement screens on the inspection machine and on BF2-Monitor in another PC are synchronized. When judgement is finished on one judgement screen, the other judgement screen is closed, and next inspection is started.

3.2 Central control function using RMS

-With the current central control function, one system can be connected to one system, such as one inspection machine to one BF2-Monitor in another PC. With the central control function using RMS, several systems can be connected to one system.

-Another PC with BF2-Monitor is replaced with the RMS PC.

4. Settings of central control function using RMS

4.1 Settings on BF2 (AOI)

Step1: Click **BF2 Option** from the **BF2** menu.

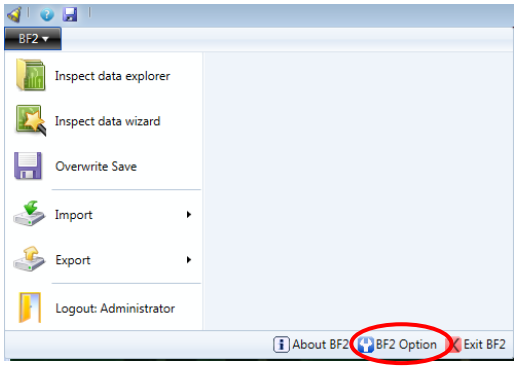

Figure21 BF2 Option

Step2: Click **Operation Tool** -> **Inspect Result Manager**. Select the check box of **BF2-Monitor ZClient**, and configure the settings shown with the red frames below.

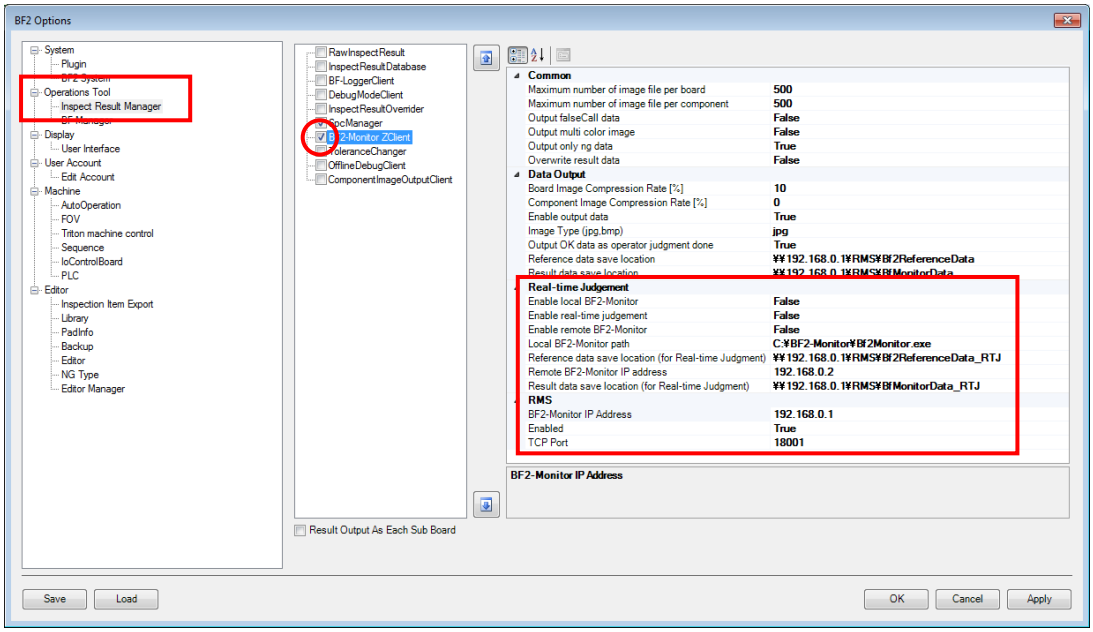

Figure22 BF2-Monitor ZClient

Enable local BF2-Monitor	Uses BF2-Monitor on the machine for judgement when using the central control function. Set to **True**.
Enable real-time judgement	Set to **True** to use the central control function.
Enable remote BF2-Monitor	Uses BF2-Monitor on another PC for judgement when using the central control function. Set to **False** to use RMS.
Local BF2-Monitor path	Specify a folder that BF2-Monitor is executed in the machine.
Reference data save location	Specify a folder to output reference images when using the central control function.
Remote BF2-Monitor IP address	Specify an IP address of another terminal when using the central control function. When RMS is used, this setting is not required.
Result data save location	Specify a folder to output inspection result files when using the central control function.

Table4 Details of the settings (Real-time Judgement)

) Specify a folder with an IP address for **Reference data save location** and **Result data save location**. No network drives are available for the paths.

(e.g.) IP address of the PC where BF2-Monitor is installed ¥¥192.168.0.1
Reference data save location ¥¥192.168.0.1¥ RMS¥ BF2ReferenceData_RTJ
Result data save location ¥¥192.168.0.1¥ RMS¥ BF2MonitorData_RTJ
(You can specify any characters in the red part.)

BF2-Monitor IP Address	Specify an IP address of the PC where BF2-Monitor is installed.
Enabled	Set to **True** to use RMS.
TCP Port	Specify a port number to use for communication. Confirm it is set to **18001**. For 3Di-D, set to **18002** for lane B.

Table5 Details of the settings (RMS)

Step3: See Steps 4 to 8 in 2.1 Settings on BF2 (AOI) to configure the same settings.

4.2 Settings on BF2-Monitor

No setting is required.

4.3 Settings on RMS PC

See procedure 2.3 Settings on RMS PC to configure the same settings.

4.4 Operation of central control function using RMS

Step1: Click **Auto**, and click **Start** on BF2.
Click **OK** on the **Auto Mode Setting** dialog to start auto inspection.

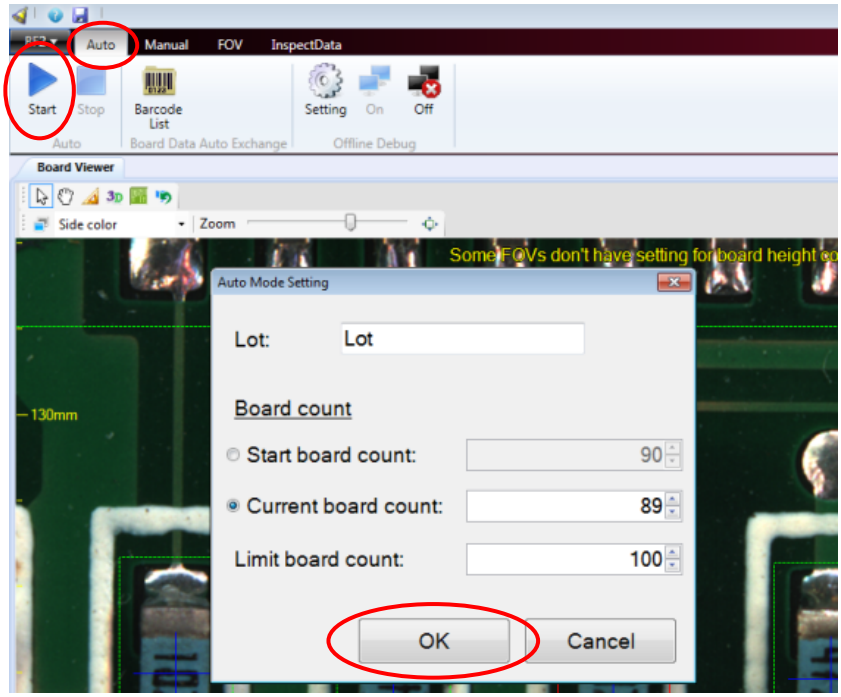

Figure23 Start Auto Mode

Step2: When the inspection result is NG, the progress bar below is shown on BF2. Wait until the judgement on BF2-Monitor or RMS PC is finished.

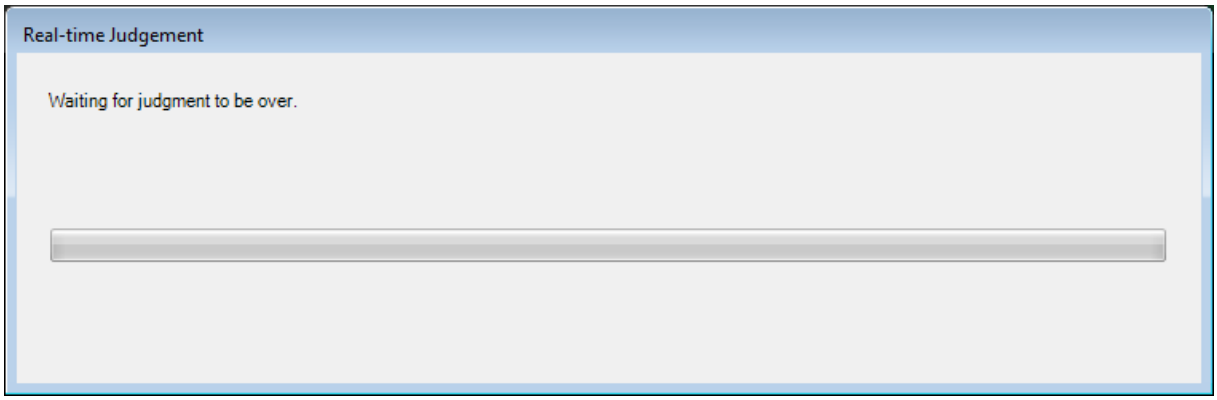

Figure24 Progress bar

Step3: When receiving the inspection result, BF2-Monitor automatically shows the judgement screen. At the same time, the RMS PC automatically shows the judgement screen. You can judge the result on either BF2-Monitor or RMS PC. After the judgement, both the screens are automatically closed.

Figure25 Judgement Window

5. Revision history

Revision	Date	Description	Written by
1.00	16/12/2015	Initial Creation	T.Ohkuma