

# **EOSTATE Quality Reports**

## Overview of program versions

Software	Edition 11.21	Edition 05.22
EOSTATE Quality Reports - Report Application	1.2.2	1.3.1
EOSTATE Quality Reports - Report Engine	2.2.6	2.3.7

## Overview of supported systems

## Machine types:

- ➤ EOS M 290
- > EOS M 300-4
- > EOS M 400
- > EOS M 400-4
- ➤ EOS P 500
- ➤ EOS P 396
- ➤ EOS P 770
- ➤ EOS P 810

EOS GmbH - Electro Optical Systems



### Version 2.3.7

#### **General Information**

- EOSTATE Quality Reports consists of two components. One component (Report Engine) is installed on the machine IPC and creates the pdf-report. The other component (Report Application) is installed on a separate PC which is connected to the machine and triggers the report creation and then also displays the pdf document.
- EOSTATE Reports Application is compatible with Edition 05.22, Edition 11.21, Edition 05.21 and Edition 11.20. The software is not downwards compatible to Edition 05.20 or previous versions. For those editions EOSTATE Base 1.5 is required.
- EOSTATE Quality Reports Application has been tested and is released for Windows 10. Details regarding system requirements can be found in the software manual.

## **Important Note**

- The Job Rating ("OK", "Warning", "Error") is based on the EOSYSTEM events, which for example occur if certain limits are breached. The Job Rating is only based on events that occur during the building process. Besides that, only partially built parts, compared to the original task file result in an "Error" in the Job Rating. More details regarding this topic can also be found in the software manual.
- With the Quality Report license on the machine, the reports can be accessed using the EOSTATE Quality Reports Application or by using the EOSCONNECT Core Web API.
- Information regarding the required ports can be found in the latest version of the EOS Industrial Cybersecurity Guide.

### Solved Items

• Item 159871: The EOSCONNECT Core license was necessary to generate reports from machines with Edition 11.21 and Edition 05.21. It is now possible to use the EOSTATE Quality Reports – Report Application 2.3.7 to generate reports from machines with Edition 11.21 and Edition 05.21. The Job Quality Report license still has to be available on those machines.

### **New Functions**

• Item 167144: In the section "Job Heights" in the Job Quality Report the Bottom-Offset and the Top Offset are now shown in brackets for the Job Z-Start and Job Z-End.



### Version 2.2.6

#### **General Information**

- EOSTATE Quality Reports consists of two components. One component (Report Engine) is installed on the machine IPC and creates the pdf-report. The other component (Report Application) is installed on a separate PC which is connected to the machine and triggers the report creation and then also displays the pdf document.
- EOSTATE Reports Application is compatible with Edition 11.21, Edition 05.21 and Edition 11.20. The software is not downwards compatible to Edition 05.20 or previous versions. For those editions EOSTATE Base 1.5 is required.
- EOSTATE Quality Reports Application has been tested and is released for Windows 10. Details regarding system requirements can be found in the software manual.

## **Important Note**

- The Job Rating ("OK", "Warning", "Error") is based on the EOSYSTEM events, which for example occur if certain limits are breached. The Job Rating is only based on events that occur during the building process. Besides that, only partially built parts, compared to the original task file result in an "Error" in the Job Rating. More details regarding this topic can also be found in the software manual.
- With the Quality Report license on the machine, the reports can be accessed using the EOSTATE Quality Reports Application or by using the EOSCONNECT Core Web API.
- Information regarding the required ports can be found in the latest version of the EOS Industrial Cybersecurity Guide.



### Solved Items

- Item 120121;154464: The job list in the EOSTAE Quality Reports Application did not always show the correct local time. Now the correct local time is shown in EOSTATE Quality Reports and in SmartService.
- Item 129307: Jobs with process parameters that had been changed compared to the EOS parameters were not marked as "customized" on the Job Quality Report. It now states "customized" for the process parameter if the parameters differ from the EOS parameters.
- Item 138439: In some cases, for parts with a Job Z-End height below the ZMax of the part, the part was marked as "aborted" if the layer thickness was not the same for all layers. Now it ensured that a part is not marked as "aborted" if it is built completely.
- 155531: Only for EOS P 500: The build height calculation for jobs with a "bottom offset" or a "top offset" was not correct. Now the building height is calculated correctly, also for jobs that have a "bottom offset" or a "top offset".

## **New Functions**

• Item 133283: Only for EOS P 500: Several set points for parameters that can be changed during the job by the user can now be seen in the Job Quality Report. Details regarding topic can be found in the software manual.



### **Version 2.1.11**

### **General Information**

- EOSTATE Quality Reports consists of two components. One component (Report Engine) is installed on the machine IPC and creates the pdf-report. The other component (Report Application) is installed on a separate PC which is connected to the machine and triggers the report creation and then also displays the pdf document.
- EOSTATE Reports Application is compatible with Edition 05.21 and Edition 11.20. The software is not downwards compatible to Edition 05.20 or previous versions. For those editions EOSTATE Base 1.5 is required.
- EOSTATE Quality Reports Application has been tested and is released for Windows 10. Details regarding system requirements can be found in the software manual.

## **Important Note**

- The Job Rating ("OK", "Warning", "Error") is based on the EOSYSTEM events, which for example occur if certain limits are breached. The Job Rating is only based on events that occur during the building process. Besides that, only partially built parts, compared to the original task file lead to an "Error" in the Job Rating. More details regarding this topic can also be found in the software manual.
- With the Quality Report license on the machine, the reports can be accessed using the EOSTATE Quality Reports Application or by using the EOSCONNECT Core Web API.
- Information regarding the required ports can be found in the latest version of the EOS Industrial Cybersecurity Guide.

## Solved Items

- Item 119228: The part list in the Job Quality Report did not show the same name for the Exposure Set as in EOSPRINT. Instead an EOS-internal name was shown. Now the correct name is shown for the Exposure Set.
- Item 121086: If a job was being built while the switch to daylight saving time happened or while the switch to standard time happened, the timestamp of all events occurring after the time change showed the time as if the time change did not happen. Now the timestamp of all events is correct, even in this case.
- Item 127182: If a job had been cancelled, the building time showed zero seconds in the report. The overall time was then also based on a building time of zero seconds. Now the building time on the report is correct, even if the job had been cancelled.
- Item 129398: The number of interruptions for the Part Report was based on all the interruptions that occurred during the job. Now for the Part Report, the number is only based on the interruptions that occurred during the building of the selected parts.
- Item 139005: It was not possible to create a Part Report for more than ∼200 parts. It is now possible to create part reports without a limitation regarding the number of selected parts.



### **New Functions**

- Item 108069: Now a search function is available for the list of machines, the list of jobs and the part list.
- Item 125180: The number of decimal places for the values on the report was reduced.

#### Known Issues

- Item 120121: The job list in the EOSTAE Quality Reports Application shows local time. Smart Service shows UTC in its joblist.
- Item 129307: It is no longer shown as "customized" if the process parameters had been changed compared to the EOS parameters.
- Item 138439: In some cases, for parts with a Job Z-End height below the ZMax of the part, the part is marked as "aborted" if the layer thickness is not the same for all layers.

## Version 2.0.6

#### **General Information**

- The new software EOSTATE Quality Reports fully replaces all functions of the Job Quality Report, Part Report and Event Report generation of the corresponding EOSTATE Base 1.5 Plug-ins.
- EOSTATE Quality Reports differs significantly regarding the graphical user interface and usage compared to EOSTATE Base 1.5. However, the basic functionalities regarding the Quality Reports remain the same.
- With the new EOSTATE Quality Reports the Job Quality Report, Part Report and Event Report have an improved layout and now future improvements can also be implemented more easily. Details regarding the changes can be found in the paragraphs "Important Note" and "New Functions".
- EOSTATE Quality Reports consists of two components. One component (Report Engine) is installed on the machine IPC and creates the pdf-report. The other component (Report Application) is installed on a separate PC which is connected to the machine and triggers the report creation and then also displays the pdf document.
- EOSTATE Quality Reports is compatible with Edition 11.20. The software is not downwards compatible to Edition 05.20 or previous versions. For those editions EOSTATE Base 1.5 is required.
- EOSTATE Quality Reports Application has been tested and is released for Windows 10. Details regarding system requirements can be found in the software manual.

## **Important Note**

- The Job Rating ("OK", "Warning", "Error") is based on the EOSYSTEM events, which for example occur if certain limits are breached. The Job Rating is only based on events that occur during the building process. Besides that, only partially built parts, compared to the original task file lead to an "Error" in the Job Rating. More details regarding this topic can also be found in the software manual.
- The Part Report can now be generated for a subset of parts. This Part Report now consists of a Job Summary for all the selected parts and one section with information for each part.
  - With the Quality Report license on the machine, the reports can be accessed using the EOSTATE Quality Reports Application or by using the EOSCONNECT Core Web API.



#### **New Functions**

- Data that is not relevant for the according machine type is no longer shown in the report.
- The graphs have also been adapted. The graphs now show all values in the range of maximum value plus 10 % and minimum value minus 10 %.
- The name for several datapoints has also been adapted. A detailed description for all datapoints can be found in the software manual.
- The field "Process Conditions" is no longer part of the Job Quality Report. Events that changed the Process Conditions rating still influence the overall rating and are also shown in the event list.
- The field "Additional Information" is no longer part of the Job Quality Report.
- The graphs for: "Temperature Regulation", "Variation of Cooling Water" and "Cooling Water Heating Up" are no longer part of the Job Quality Report.
- The module Machine Park Management and the Modul Controlling are no longer supported by EOSTATE Quality Reports.
- Parts are no longer tagged as modified.
  - The Print Domain is no shown in the Job Quality Report under "General Information".

### **Known Issues**

- Item 119228: The part list in the Job Quality Report does not show the same name for the Exposure Set as in EOSPRINT. Instead an EOS-internal name is shown.
- Item 120121: The job list in the EOSTAE Quality Reports Application shows local time. Smart Service shows UTC in its joblist.
- Item 121086: If a job is built during the switch to daylight saving time or during the switch to standard time, the timestamp of alle events occuring after the time change shows the time as if the time change did not happen.
- Item 127182: If a job is cancelled, the building time shows zero seconds in the report. The overall time is then also based on a building time of zero seconds.
- Item 129307: It is no longer shown as "customized" if the process parameters had been changed compared to the EOS parameters.