

BetaFlex Pro WorkFlow Automation

MICRO QR CODE RECOGNITION & RELATIONAL DATABASE

The NEW BETA FLEX PRO WORKFLOW AUTOMATION utilizes a micro QR Code and full relational database to track the photopolymer sheet through imaging, processing, and printing.

Working in conjunction with the ESKO Automation Engine, the QR Code is automatically generated and imaged on the mask. Processing parameters are then automatically set when the code is read at the plate processor. This eliminates the possibility of operator error when keying in the plate exposure and processing settings.

The micro QR Code on the processed plate is automatically recognized by the new BetaFlex PRO software, setting the measurement parameters, recording the measured results of dot area, dot structure, plate thickness, and relief. Errors in configuration of the BetaFlex PRO due to operator error are now eliminated.

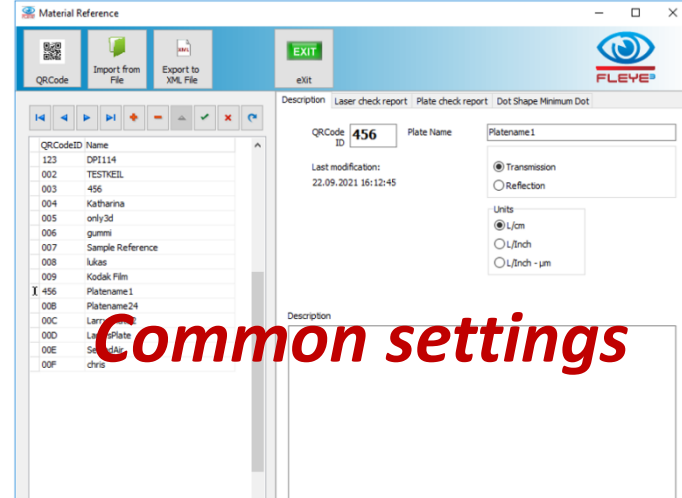
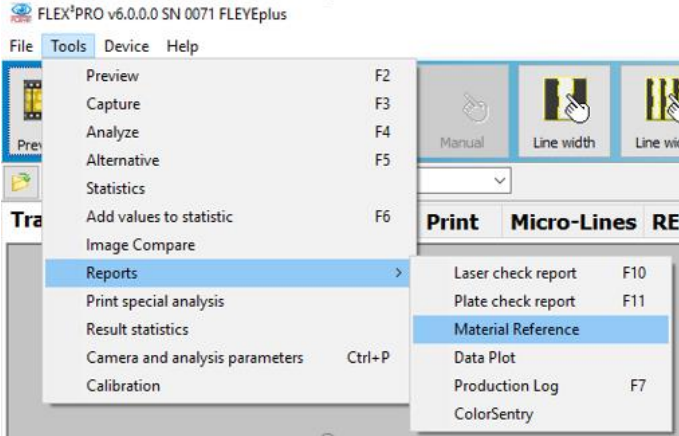
A report is generated and written to the database, linking the plate measurements with the customer and job

When the plate is mounted and printed, the micro QR Code can then be measured on the finished product, closing the loop on the process.

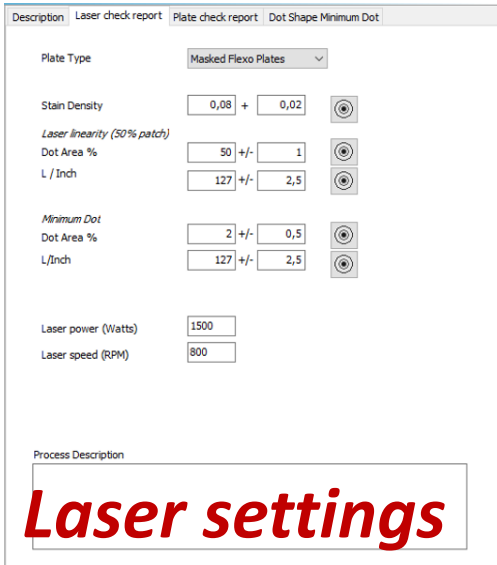
A report is generated and written to the database, linking the plate measurements with the customer and job.

When the plate is mounted and printed, the micro QR Code can then be measured on the finished product, closing the loop on the process.

Common Database for Reports and Production Logs



Common settings



Laser settings

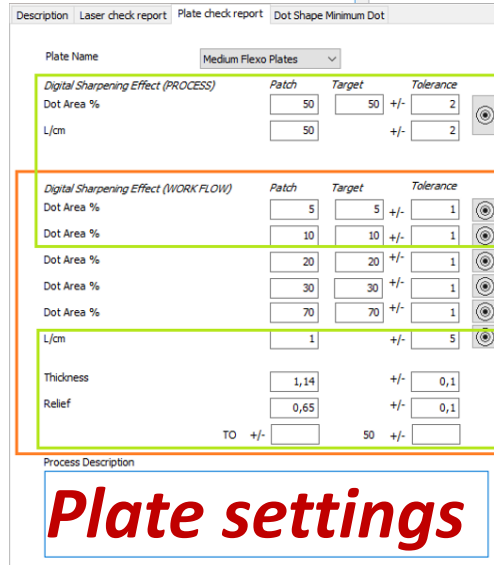
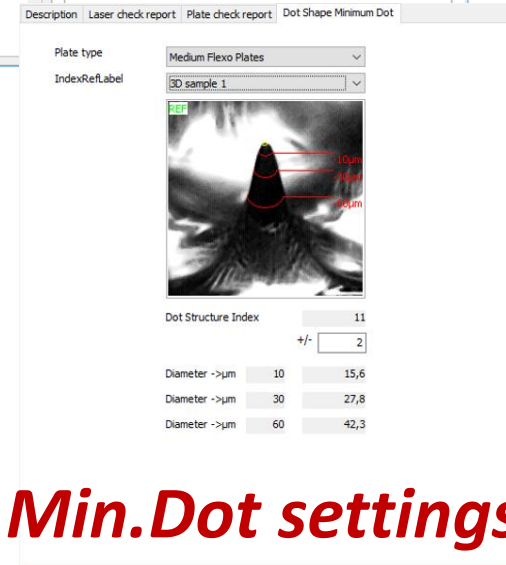
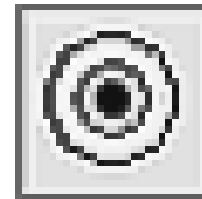
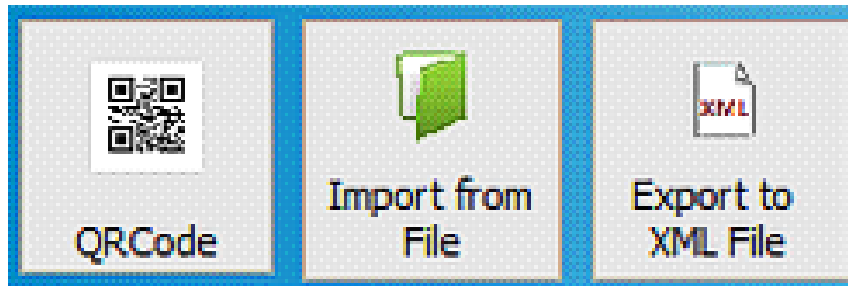


Plate settings



Min.Dot settings

Reference Database



Micro QR Code Scanning with BetaFlex Pro

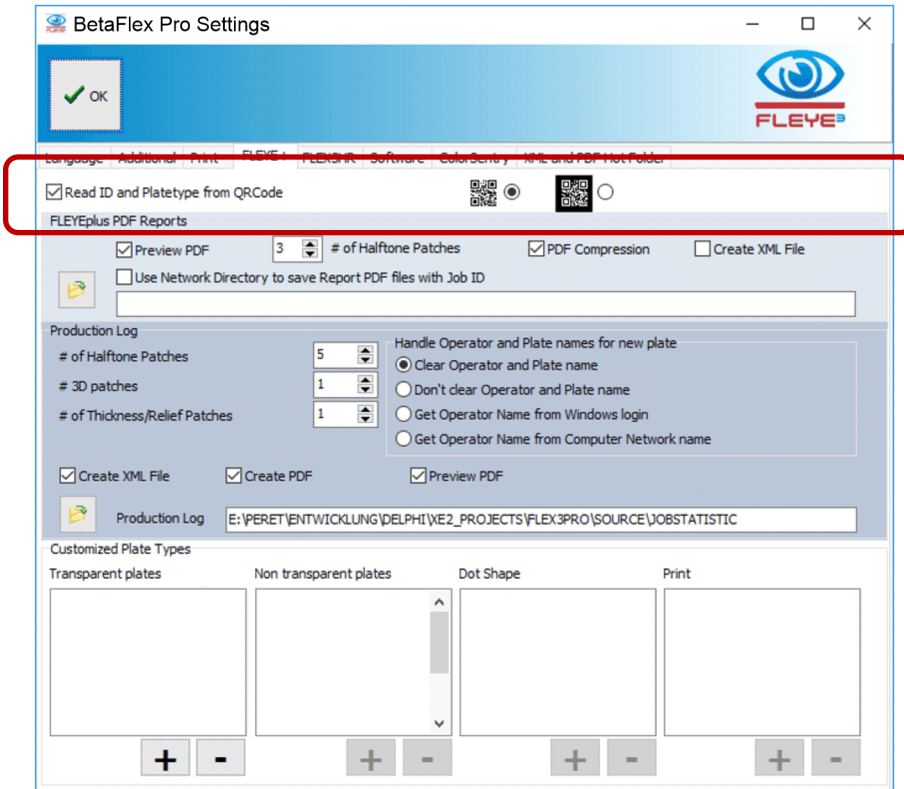
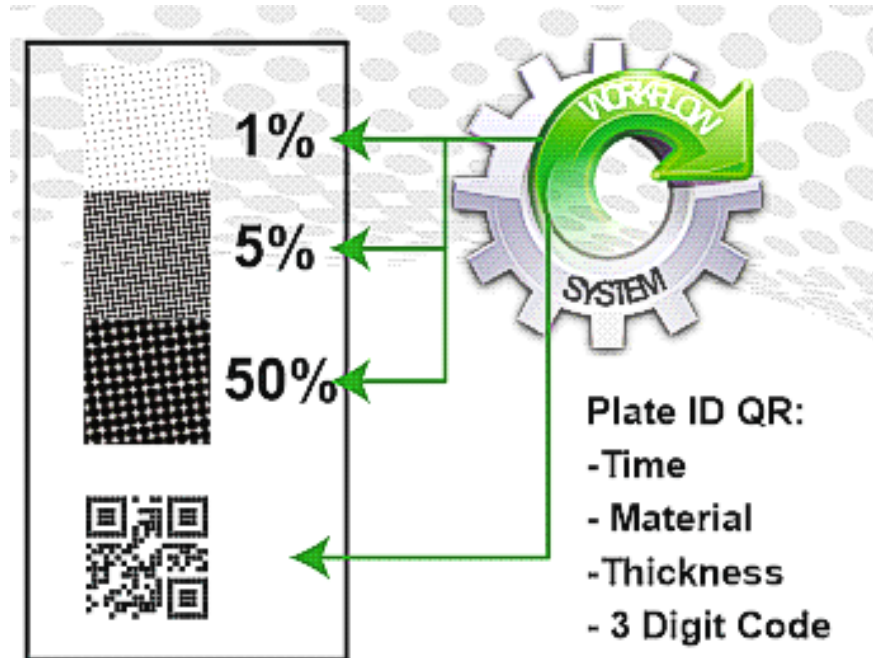


Plate Identifier

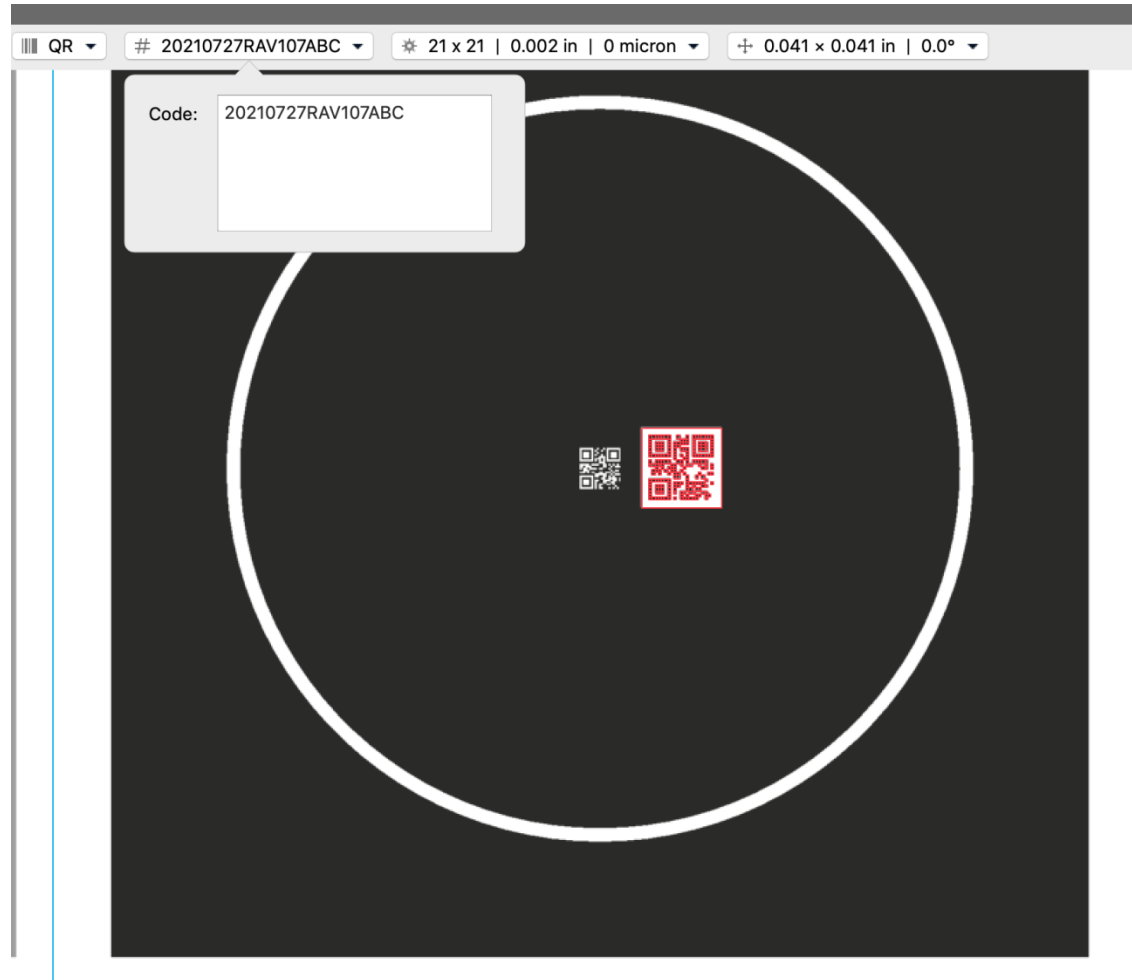


BetaFlex Pro
Settings Identifier

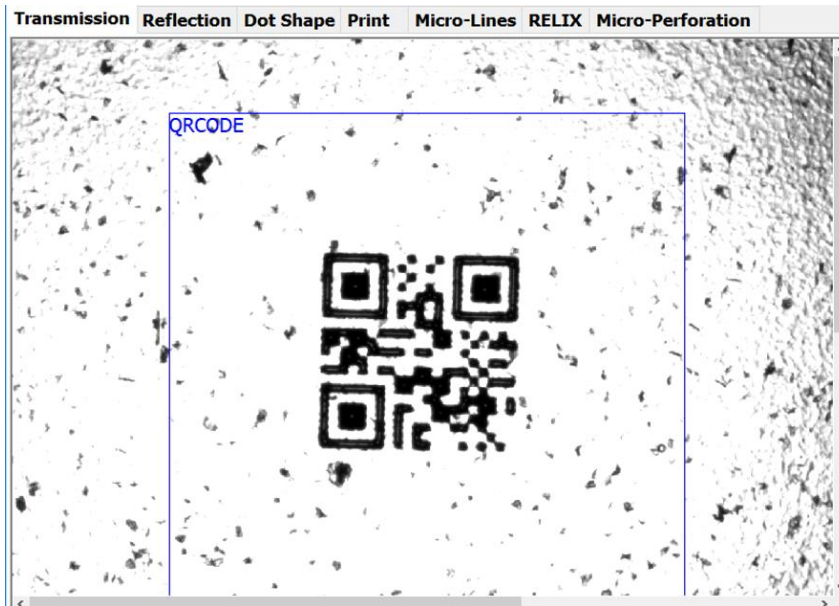
Create the control Strip including the QR Code



Create the QR Code

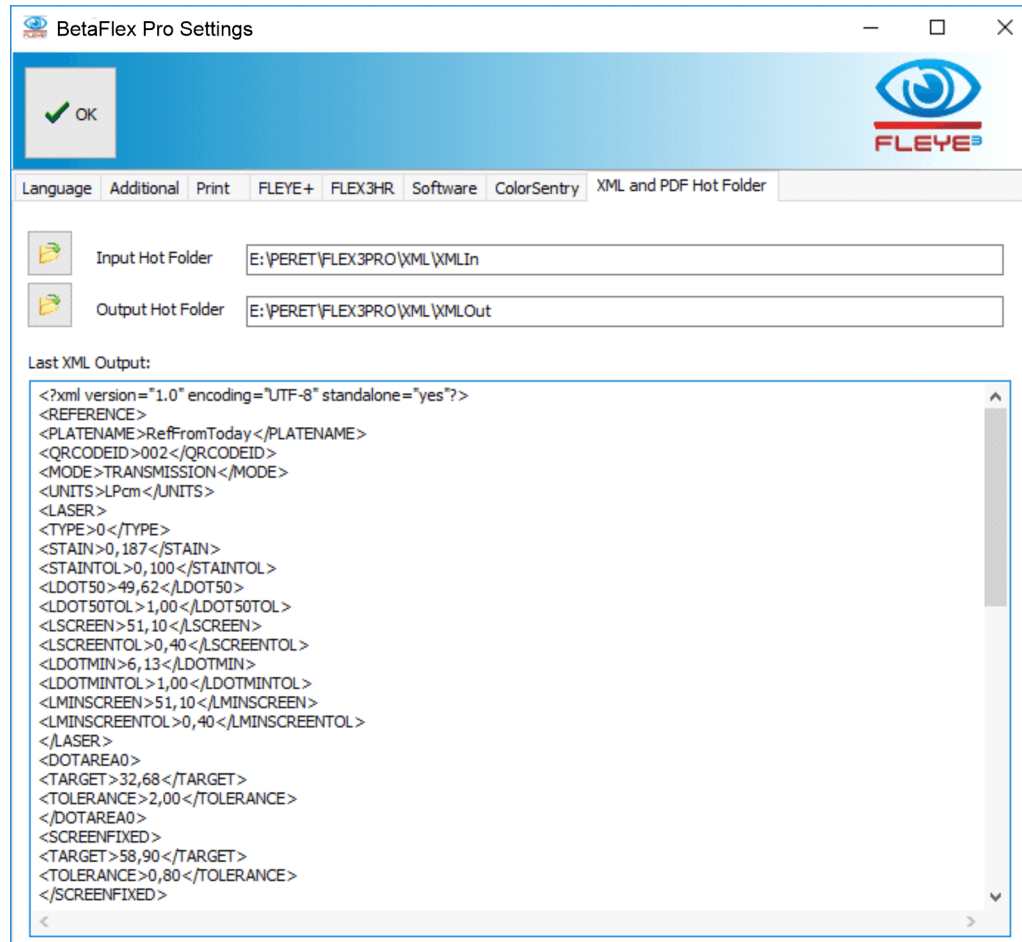


QR Code Scanning with BetaFlex Pro WorkFlow Automation

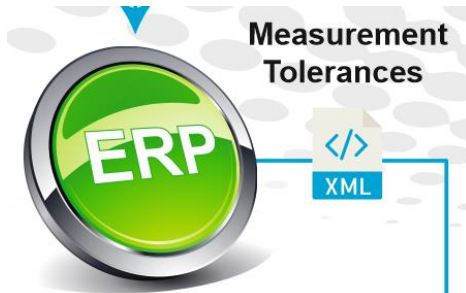


- The QR Code scanning is performed in Transmission mode
- The QR Code size limit is 0.041 x 0.041 inches (1.2mm x 1.2mm)
- The QR Code definition is 21 x 21
- Click CAPTURE to decode the QR Code

Specify the Hot Folders for XML Input and XML Output



Update References by XML File in Hot Folder



Measurement Tolerances

XML



Decoding QR Sets:

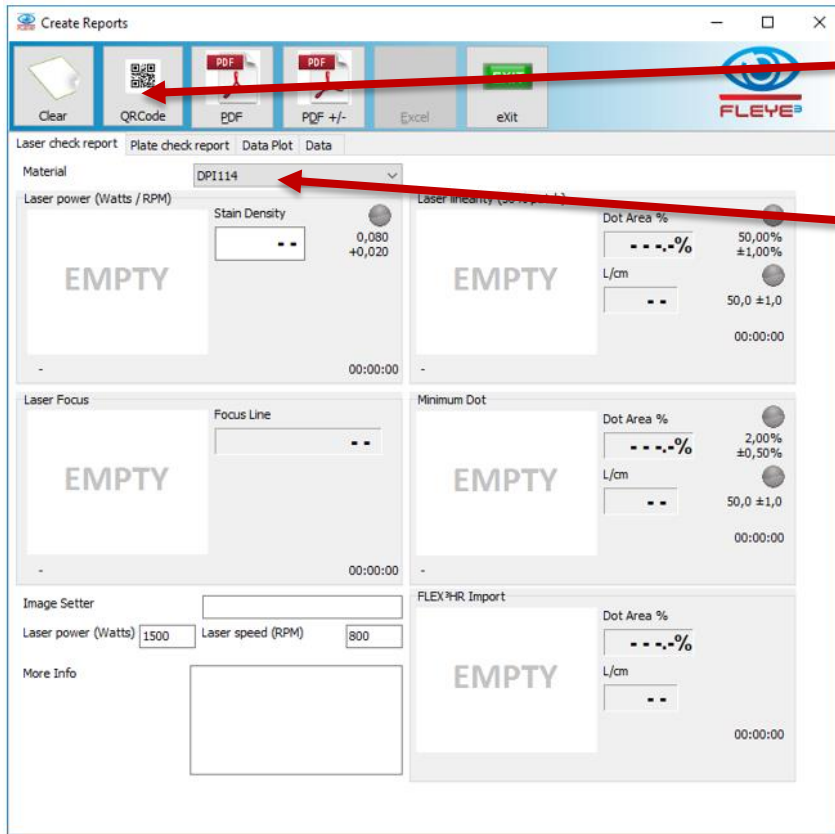
- Camera
- Material Settings
- Time Stamp
- Plate ID



```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<REFERENCE>
<PLATENAME>RefFromToday</PLATENAME>
<QR CodeID>002</QR CodeID>
<MODE>TRANSMISSION</MODE>
<UNITS>LPcm</UNITS>
<LASER>
<TYPE>0</TYPE>
<STAIN>0,187</STAIN>
<STAINTOL>0,100</STAINTOL>
<LDOT50>49,62</LDOT50>
<LDOT50TOL>1,00</LDOT50TOL>
<LSCREEN>51,10</LSCREEN>
<LSCREENTOL>0,40</LSCREENTOL>
<LDOTMIN>6,13</LDOTMIN>
<LDOTMINTOL>1,00</LDOTMINTOL>
<LMINSCREEN>51,10</LMINSCREEN>
<LMINSCREENTOL>0,40</LMINSCREENTOL>
</LASER>
<DOTAREA0>
<TARGET>32,68</TARGET>
<TOLERANCE>2,00</TOLERANCE>
</DOTAREA0>
<SCREENFIXED>
<TARGET>58,90</TARGET>
<TOLERANCE>0,80</TOLERANCE>
</SCREENFIXED>
<SCREENRULING>
<TARGET>58,90</TARGET>
<TOLERANCE>0,40</TOLERANCE>
</SCREENRULING>
<DOTAREA1>
<TARGET>30,05</TARGET>
<TOLERANCE>2,00</TOLERANCE>
</DOTAREA1>
<DOTAREA2>
<TARGET>1,54</TARGET>
<TOLERANCE>1,00</TOLERANCE>
</DOTAREA2>
<DOTAREA3>
...

```

Laser Check Report

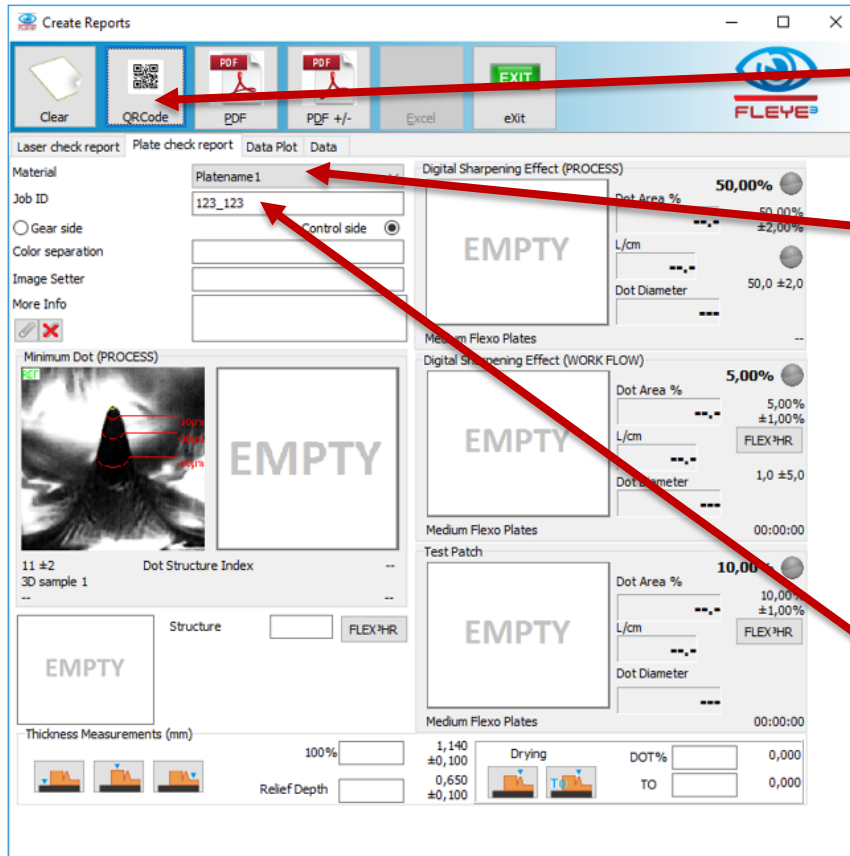


Click the QR Code Icon to scan the QR Code

Last 3 digits are used to identify the material

- The **XMLIn Hot Folder** is automatically checked for updated references and tolerances

Plate Check Report



Click the QR Code Icon to scan the QR Code

Last 3 digits are used to identify the material

The XMLIn Hot Folder is automatically checked for updated references and tolerances

The prefix digits are automatically copied to the Job ID field.

Production Log

Production Log

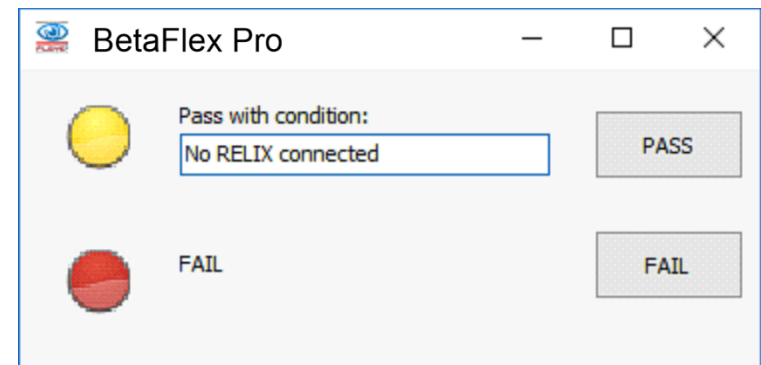
Open Save +Close +New Save +Continue QR Code New Plate Add measure Zero Thickness Relief Delete Row Chart Excel EXIT

SHIFT: SHIFT 2021-09-22_15-52.txt Operator: Lukas Plate Name: Platename1 Login: Pescoller Computer: PESCOLLER-NB

Date&Time	Operator	Plate	L/cm	5,00%	10,00%	20,00%	30,00%	70,00%	11	1,140	0,650	PLATE IDENTIFIER
22.09.2021 16:15:04	Lukas	Platename1										123_123

- Click the QR Code Icon to scan the QR Code
- Last 3 digits are used to identify the material
- The **XMLIn Hot Folder** is automatically checked for updated references and tolerances
- The prefix digits are automatically copied to the Job Plate Identifier field.

Create a PDF Report and an XML Output file





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[BetaFlex Pro Workflow Automation / QR Code Relational Database for the BetaFlex Pro](#)

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