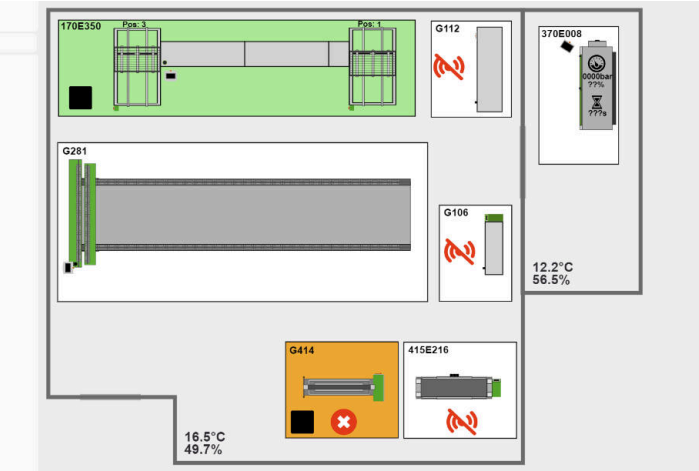
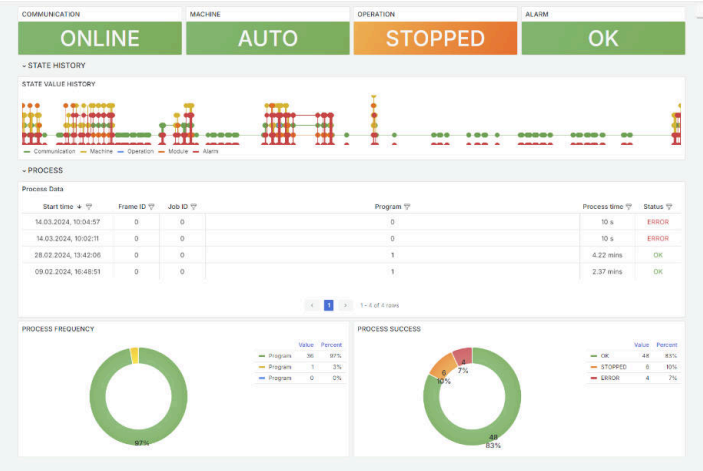
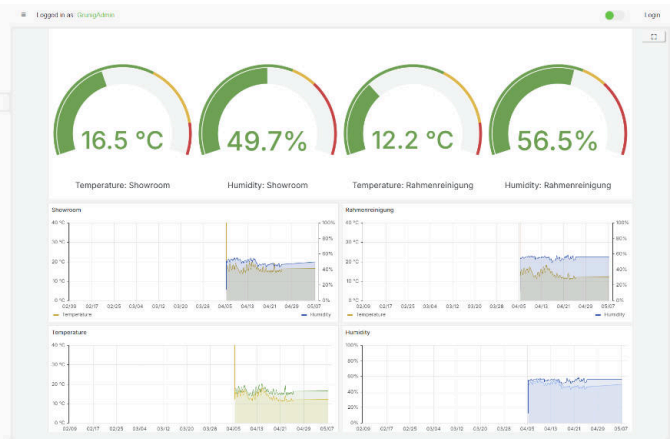




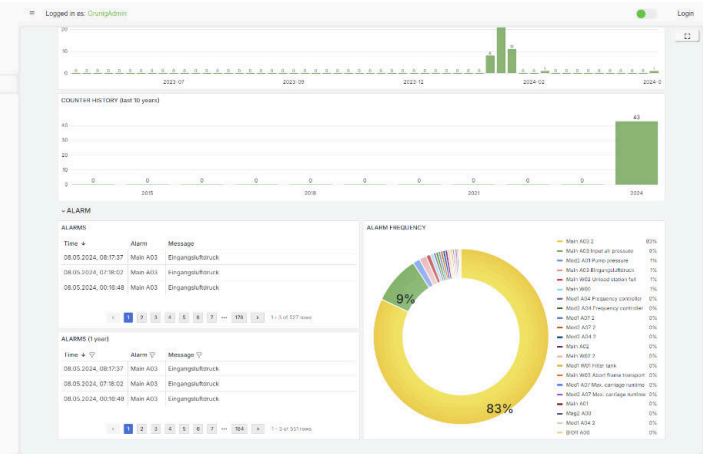
G-GATEWAY Dashboard



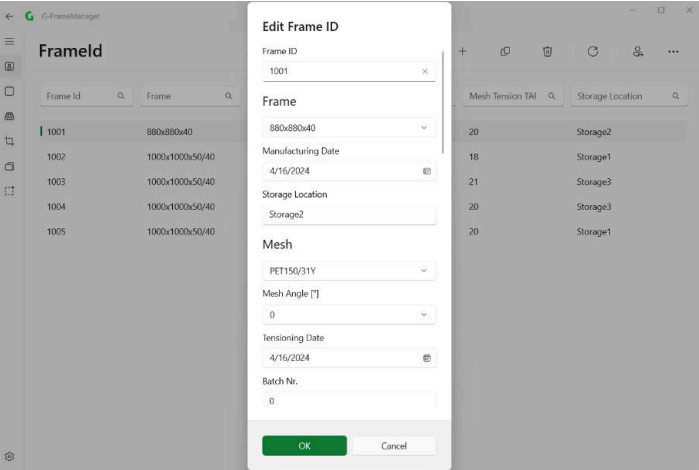
Process visualization



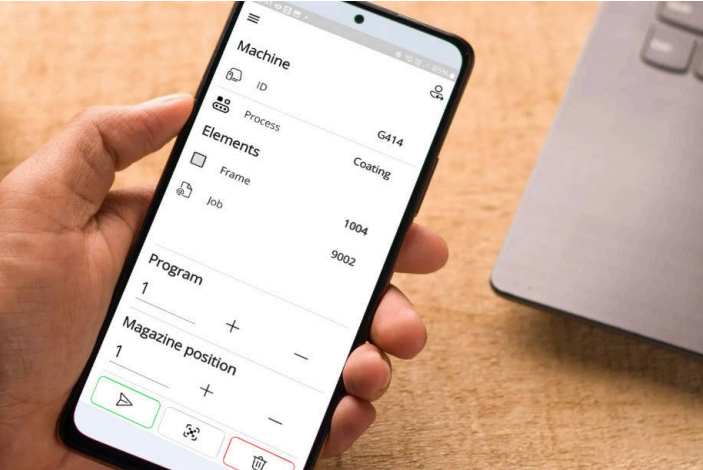
Visualization of the room climate



Machine status



G-FrameManager



G-ProcessControl App

G-GATEWAY automates and visualizes the processes of your Grünig equipment for screen preparation



G-GATEWAY



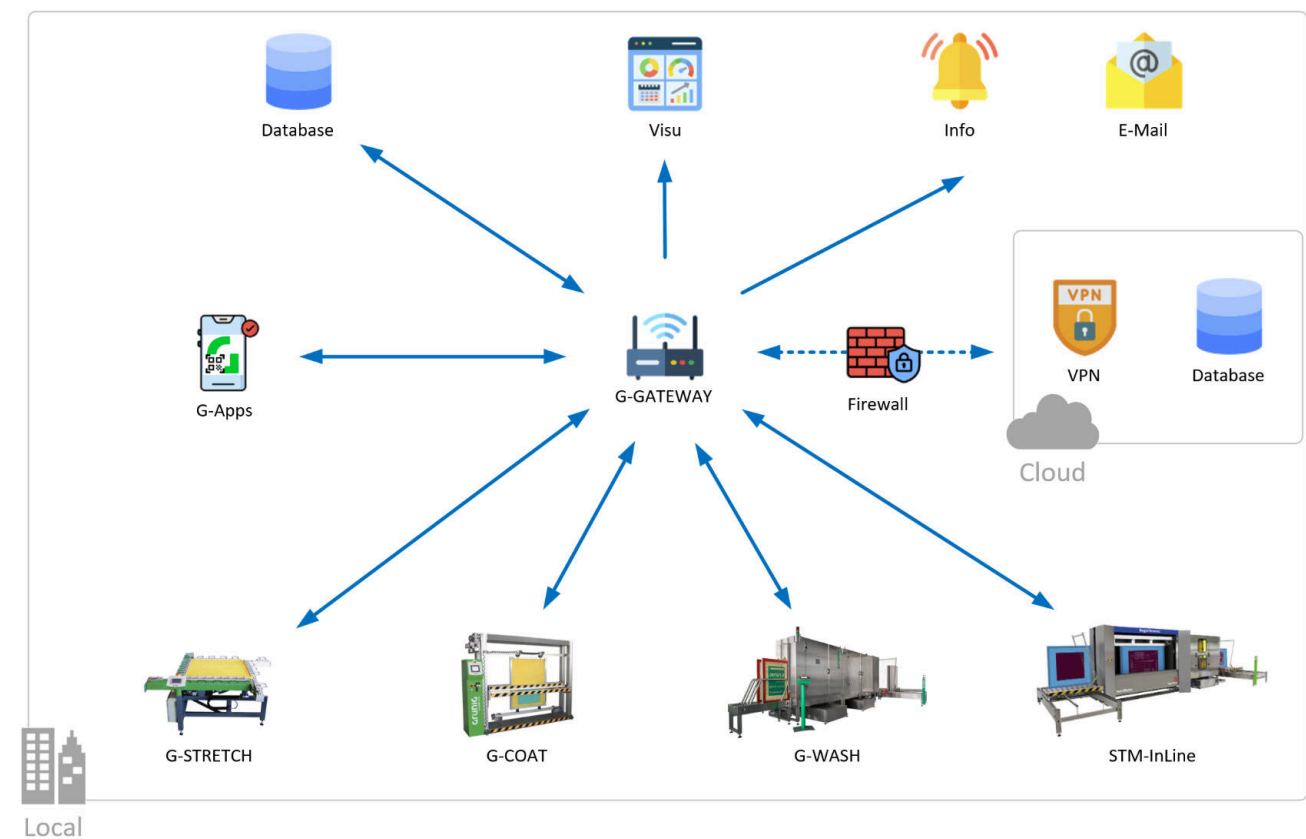
EC Conformity
The product answers the requirements of the EU Machinery Directive.

All dimensions are in mm
Subject to technical changes

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G-GATEWAY - The control center



The G-GATEWAY is the central junction point between the machine, the data acquisition, the process control and visualization.

Based on a Linux-MiniPC equipped with installed and pre-configured OpenSource Software, the standard package offers the following possibilities and service performances:

- Control of several Grünig machines
- Recording of process data in a database
- Visualization of data such as machine status, process data, counter history and alarm history
- Remote maintenance of the machine, including error analysis and software updates

Moreover, the G-Gateway also offers the possibility to integrate additional functions, such as:

- Transfer of the process data into customized MS SQL or MySQL databases
- Notification per e-mail or via a Microsoft TEAMS channel about events
- Process control by means of the G-ProcessControl App

The G-ProcessControl App is a mobile Android application which, in conjunction with the G-Gateway, is used for machine control and the acquisition of process data.

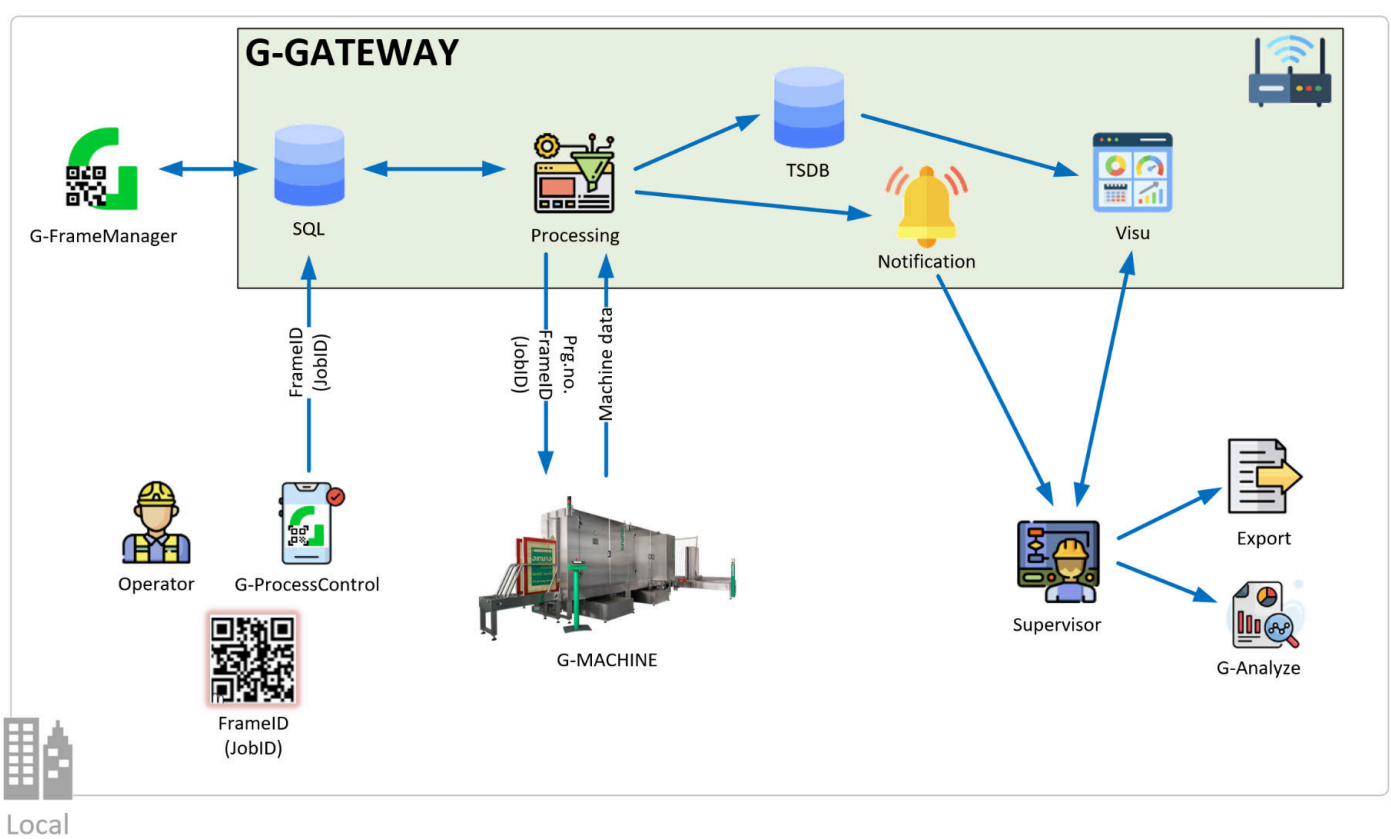
The App offers the following functions:

- Recording of the frame ID by scanning QR or bar codes
- Recording of the order ID by scanning QR or bar codes
- Recording of storage sites by scanning QR or bar codes
- Allocation of machine programs by scanning QR or bar codes

The G-FrameManager is a Windows Desktop Application which, in conjunction with the G-GATEWAY and the G-ProcessControl App, is used for controlling the machine.

- The software manages important information such as frame format, mesh type, stretching values, process programs and storage sites.
- Together with the G-ProcesControl App, the application offers the possibility of automating and supervising machine processes.
- This guarantees an uncomplicated recording and tracking of the present location or storage site of the printing screens.

G-GATEWAY – The process control



Manual process:

1. The operator scans the QR codes by means of the G-ProcessControl App:

- Machine ID (QR code on the machine)
- Frame ID (QR code on the frame)
- Order ID (QR code on the order documents or transfer from customer system (optional))
- In the event of screen feeder magazines, the frame and order ID's can be individually allocated for every feeder position.

2. The operator sends the data from the G-ProcessControl App to the G-GATEWAY.

3. The G-GATEWAY sends the data to the machine:

- Frame ID
- Order ID (optional)
- By means of the G-FrameManager, the stored treatment program is read out from the database and transferred to the machine.
- In the absence of a G-FrameManager, the desired treatment program must be manually selected on the machine.

4. The operator starts the machine.

5. Upon termination of the program, the process data are logged in the database.

6. The present machine status and the process data can be viewed at any time on the G-GATEWAY.

Automatic process (In-Line):

1. The frame ID is automatically scanned by a code reader on the machine during the loading process:

- By means of the G-FrameManager, the number of the program to be processed is read out from the database. To this effect, the frame ID is sent to the G-GATEWAY which then sends the corresponding program number back to the machine.
- In the absence of a G-FrameManager, the program number is manually entered on the machine (unless the program number is also included in the QR code).
- For processing the order ID's, it is necessary to use one-way QR codes which contain not only the order data but also the production data.

2. The process is automatically started by the machine.

3. Upon termination of the program, the process data are logged in the database.

4. The present machine status and the process data can be viewed at any time on the G-GATEWAY.