Gema Powder Coating Equipment

Powder coating is accepted as a solution to increasingly stringent environmental regulations, rising costs, and demands by consumers for higher quality and more durable products.

The Surface Finishing Equipment Group work in conjunction with GEMA, the industries global powder coating equipment development pioneer. We provide everything from manual machines, automatic guns, reciprocators, powder booths, colour change systems, along with the after sales support of spares servicing, and spares.

Gema Powder Coating Equipment Range

- Complete Powder Coating Plants
- Gema Optiflex Pro Manual Machines
- Gema Opti Automatic Guns and Reciprocators
- Booths and Curing Ovens
- Powder Feed and Colour Change Systems
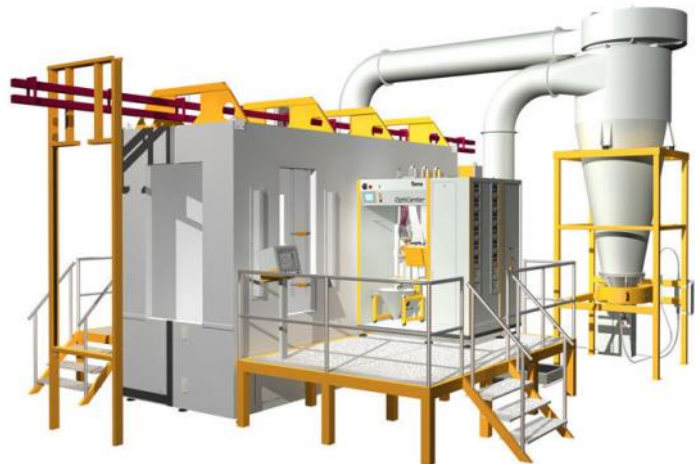
THE SURFACE FINISHING EQUIPMENT GROUP are :-

Hogg Blasting & Finishing Equipment Ltd (North East)
Unit 10 Armstrong Road, Washington. Tyne & Wear . NE37 1PR. Tel: 0191 415 3030.   info@hoggblasting.com

Abraclean Ltd and Jedtec Finishing Equipment (North West)
4 Kelbrook Road, MANCHESTER. M11 2QA. Tel: 0161 480 8087.   sales@abraclean.co.uk

Complete Finishing Systems (Finishing Plant UK)
Unit 2 Cleton Business Park, Cleton Street. Tipton. DY4 7TR. Tel: 01902 601 312.   info@sfeg.co.uk

OptiStar 4.0 / Gema E-App

Easy for beginners, powerful for specialists

The **OptiStar 4.0** offers **3 pre-set standard** application programs for flat parts, profiles and recoating based on Gema experience. Advanced users can create and store a **library of application programs**, optimized for their parts and powder.


| Clear interface | Easy for beginners | Powerful for specialists |

Power on your fingerprints

- The **OptiStar 4.0** control features the most advanced technologies to control the powder application:
  - o **PCC** technology allows to optimize the electrostatic charging even with challenging powders
  - o **DVC** technology grants the most precise and repeatable powder output settings
- A clear and easy to use interface makes it easy for every user to take advantage of these powerful technologies
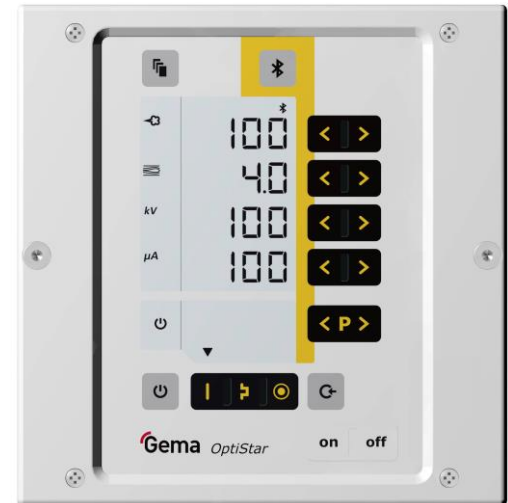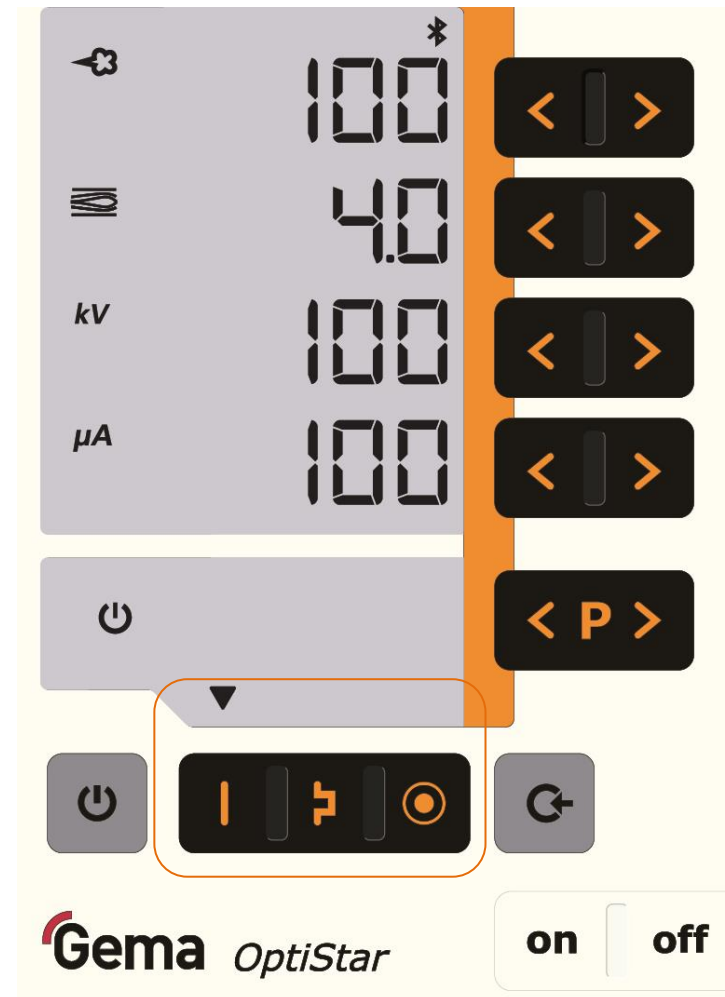
Easy control of the application parameters
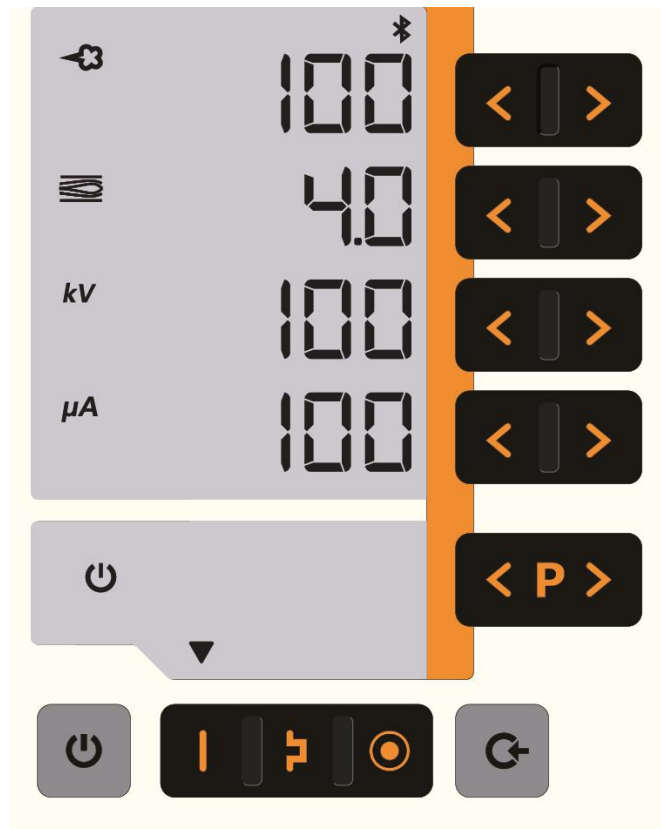
Powder Output   [%]

Total Air volume [Nm³/h] or [scfm]

High Voltage   [kV]

Spray Current   [µA]

Pre-set application programs

- **3 pre-set application programs**, based on Gema's 40 years experience, are a great help for less experienced users.

  The **flat parts program** is ideal for the coating of panels and flat parts.

  The **complex parts program** is designed for the coating of three dimensional parts with complex shapes such as profiles.

 The **recoat program** parts is optimized for the re-coating of parts which have already been coated.

Application programs library

- Advanced users can create and easily recall their **library of application programs.**

- Each program **includes all the application parameters** (powder output, air volume, high voltage, charging current).

- The programs are **automatically saved** and can be easily recalled when required.

- Each part can be coated always with its ideal settings.
 **This strongly improves the application quality.**
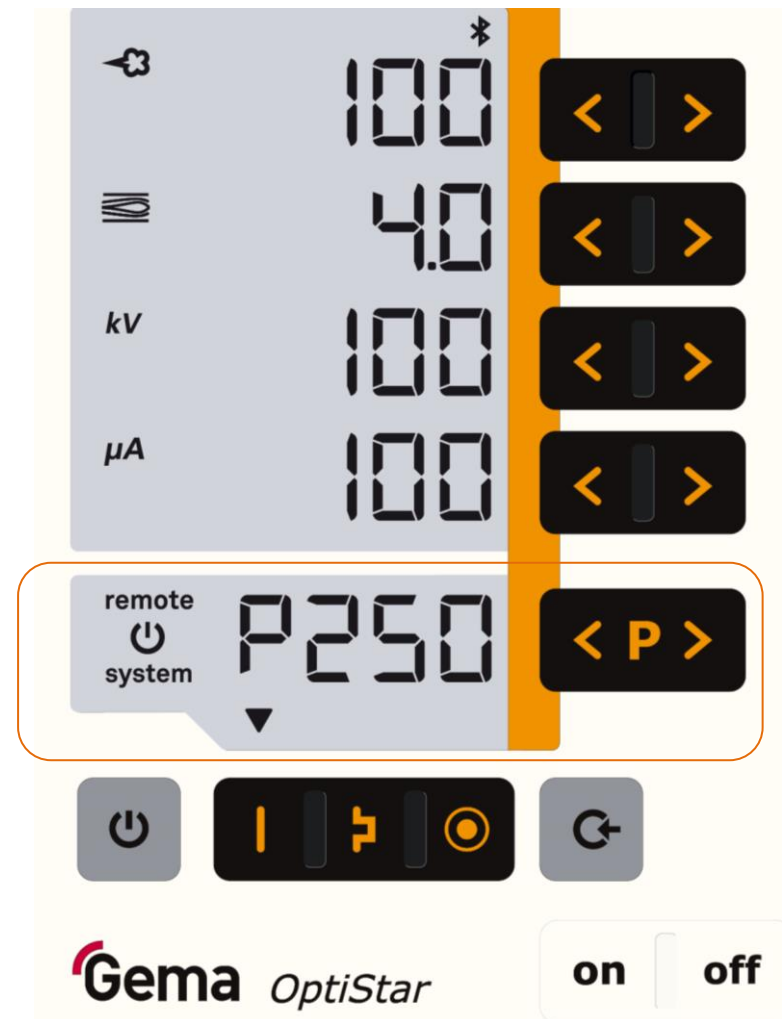
Advanced features

- **Precise Charge Control** (**PCC**) mode is automatically activated when Current is set below 10 µA.

  o HV / Current display turns red

- **Rinsing** mode is used to remove powder accumulations from the injector / hose / gun.

  o Display shows a rotating green symbol
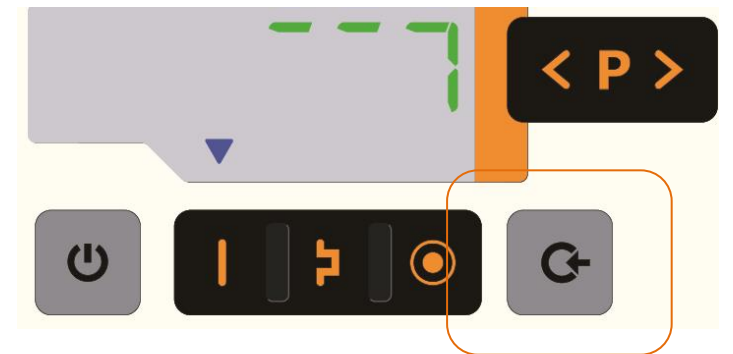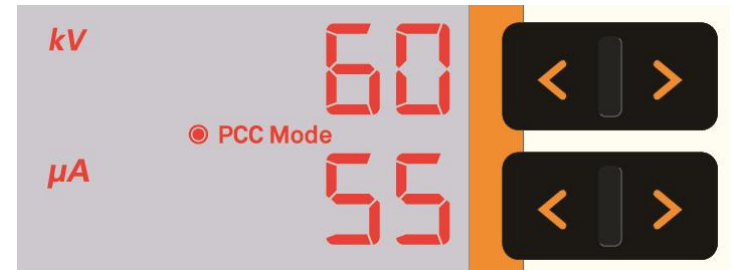
Advanced features

- The control unit offers the possibility to **monitor wearing parts** using up to 4 working hours reverse counters

- **Powder output correction factor** compensates the different hoses lengths and makes sure that all guns have the same powder output

- **Keyboard lock** prevents accidental modification of the parameters

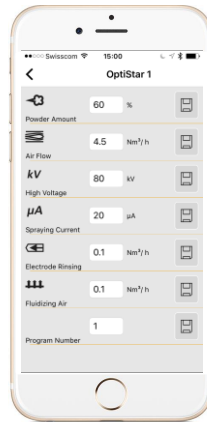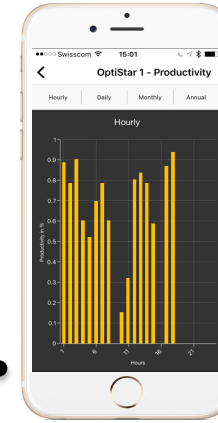- In case of failure the display shows an error code for **easier troubleshooting**
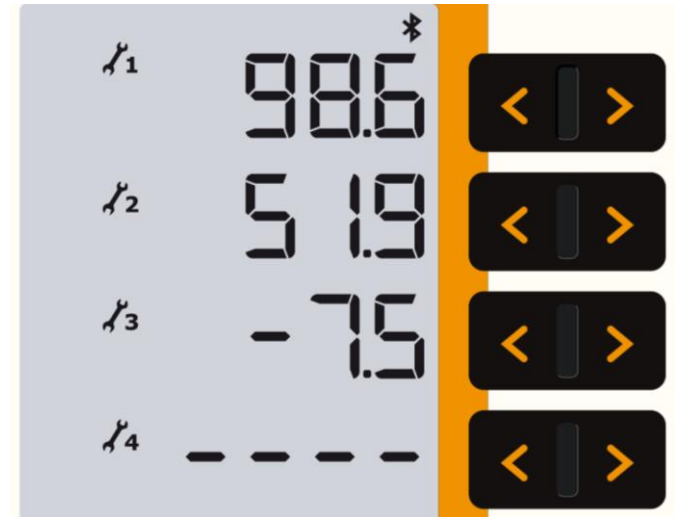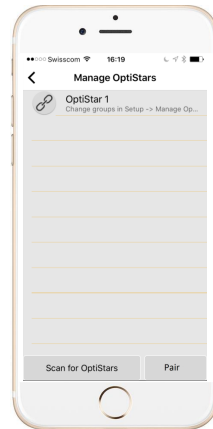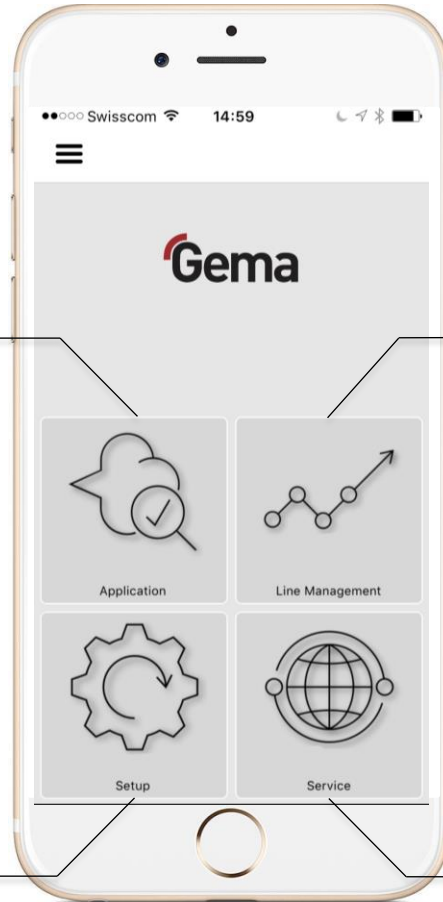
Gema E-App

Gema E-App Functions

Application
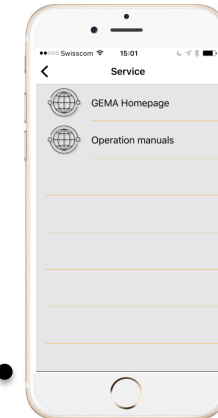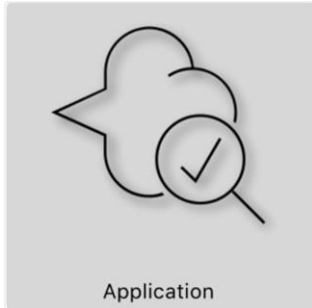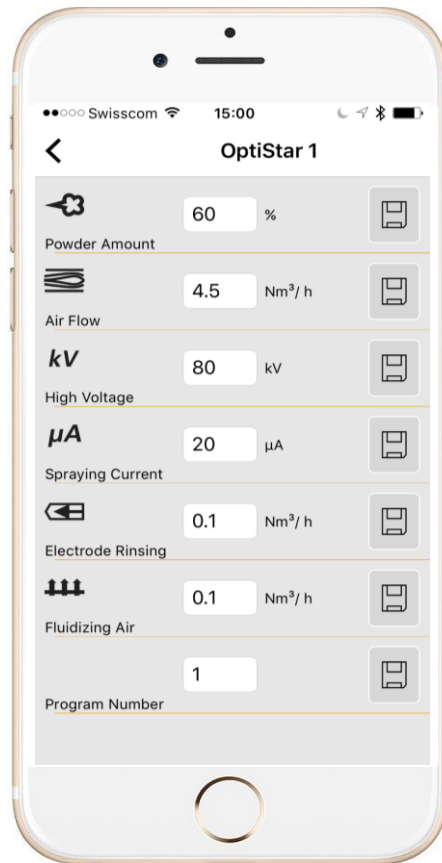
Line
Management

Setup

Service

Gema E-App Application

Application

Control and adjust coating parameters in real time.

Single gun control or Group gun control
(A, B, C, D)

Gema E-App Line Management

Line Management
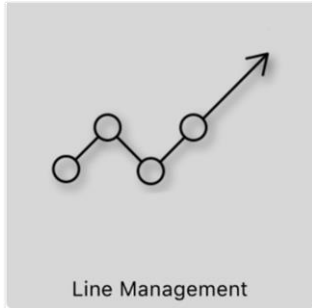
Visualize coating productivity data. Statistics and cost calculations from production are automatically generated.
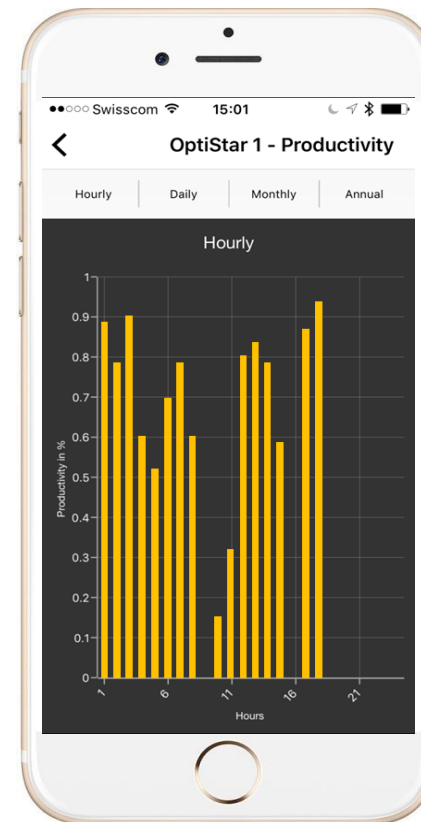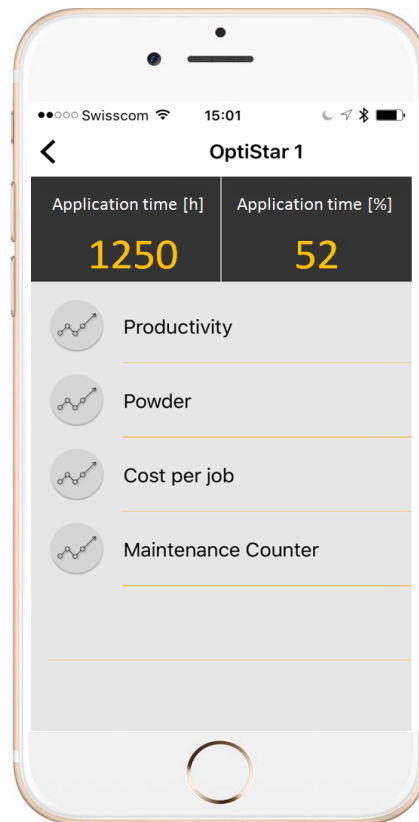
Gema E-App Setup
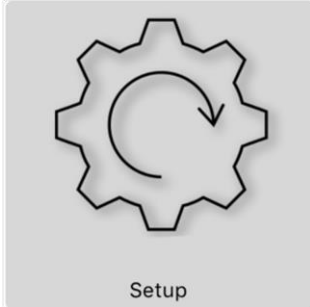
Configure OptiStar individually or in a group of control units. System information and diagnostic data are easily retrievable.

Setup

13
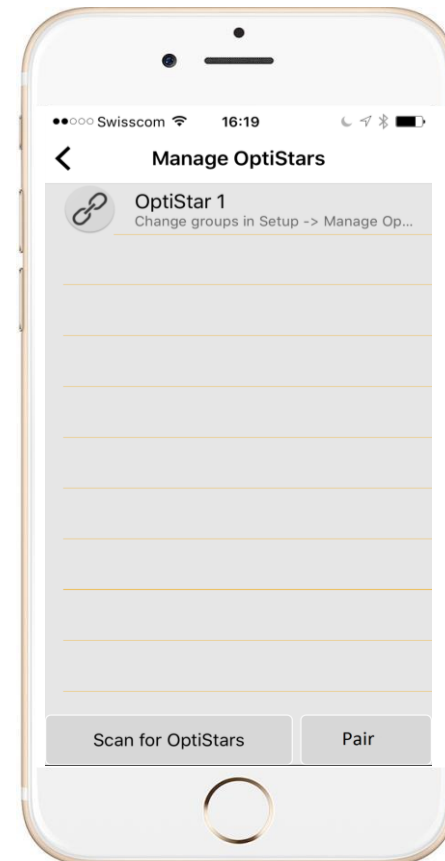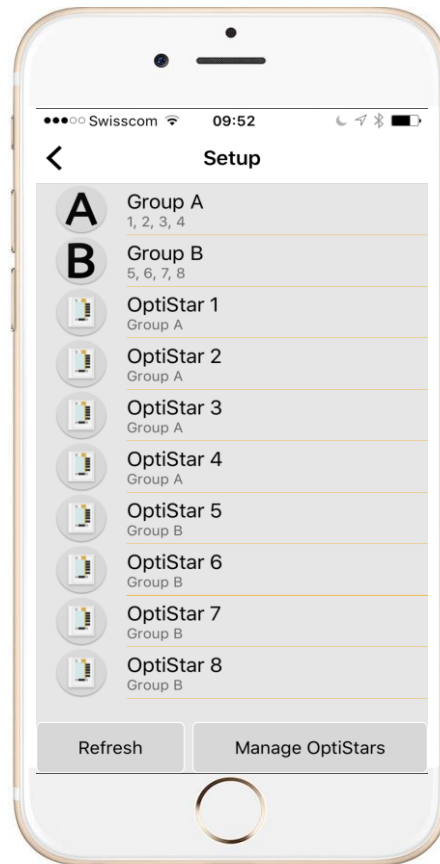
Gema E-App Service

Access directly the operation manuals of the system components or the Gema website.
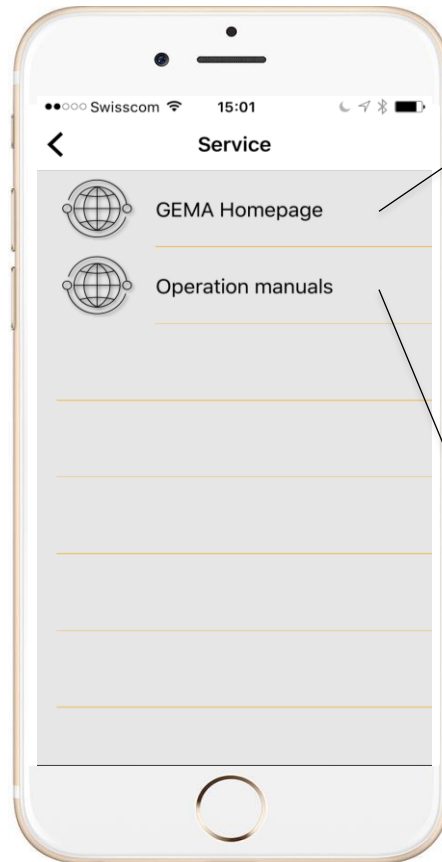
Gema E-App Pairing

Download

Pairing

Search for: Gema e-app
IOS + Android
Mobile App-Stores
Optimized for 6" screen size

Gema *OptiStar*

Gema

OptiStar® 4.0 Gun Control

The benchmark for the efficient gun control

Outstanding performance and process control

OptiStar 4.0 gun control ensures an optimized application with an exceptional coating result. The new generation of OptiStar presents the proven DVC- and PCC-Technologies and the new Electrostatic App, delivering an intelligent control to provide a seamless link to Smart Factory Automation.

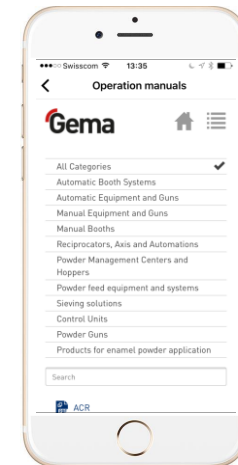With the new Electrostatic App, essential application data and parameters can be retrieved at any time, with crucial coating information and statistics available via your mobile device. This opens up new possibilities for process control.

Your global partner for high quality powder coating

‹Gema

The premier gun control

Ergonomic and precise
The precise application and intuitive handling of OptiStar 4.0 set new standards in gun control technology. With its clear display, all coating parameters (high voltage, current limit, powder output, air volume, electrode rinsing air, fluidizing air) are simply accessed and directly controlled.

### Improved performance and longevity
Optimized functions and the usage of the latest generation of electrical components, guarantee high performance and improved control of the charge technology.

Repeatability
In addition to three preset standard programs, individual coating programs can be saved. Up to 250 customer-specific programs can be stored and individually retrieved at any time. This ensures repeatability and consistently outstanding coating results.
The communication with higher level control systems takes place with CAN-Bus-Technology.

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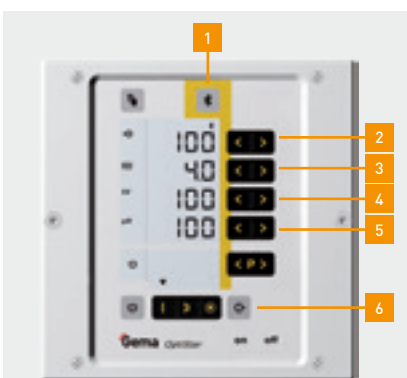
1. Connect to E-App
2. Powder output
3. Total air volume
4. High voltage
5. Spraying current
6. Preset programs

Highest coating quality
The proven DVC- and PCC-Technologies allow you to control crucial parameters such as high voltage, spraying current and powder output, achieving perfect and repeatable coating results.

DVC-Technology
The patented Digital Valve Control (DVC) allows a precise and repeatable setting of the powder output.

PCC-Technology
For the use of all powders, including metallic and special effect materials, OptiStar uses the Precision Charge Control (PCC), which guarantees exact current control below 10 μA in 0.5 increments.
This prevents overcharging of challenging powders.

DVC

0,5 μA 10

PCC
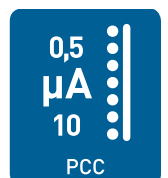
OptiStar® 4.0 providing the link for Smart Factory Automation

Intelligence and flexibility

The Electrostatic App is an innovative feature that allows you to control the coating process improving flexibility and efficiency.
This makes OptiStar 4.0 a pioneer of Smart Factory Automation for the powder coating facility.
The App can be used to control the application parameters on either a single or group of gun controls.

Electrostatic App for greater efficiency

Electrostatic App opens up a whole new range of options for process control – ranging through from Line Management to equipment maintenance data.
Relevant process data and application parameters are visible on a mobile device and can be directly adjusted and controlled.
Coating process calculations and statistics are automatically available at any time. This saves time and improves the efficiency of the powder application process.

Functions of Electrostatic App

With the 4 functions of the App the coating process can be monitored and controlled via a mobile device:

Application: All essential coating parameters are clearly visible on a Smart Device and can be directly adjusted and controlled.
Line Management: Retrieve coating process productivity data at any time. Important statistics and cost calculations from production are automatically generated. Maintenance schedules can easily be reviewed at the touch of a button.
Setup: With this function the configuration of the OptiStar is defined. OptiStar can be controlled as single device or in a group of control units. System information and diagnostic data are easily retrievable and can be sent via e-mail.
Service: Direct access to the user manuals of the system components as well as the Gema website.

Operating system:	IOS + Android
Availability:	Mobile App-Stores
Optimized for:	6˝ screen size

Gema Switzerland

Your global partner for high quality powder coating

Take advantage of our expertise and experience from more than 50 years of electrostatic powder coating applications. From simple hand coating through to fully automated powder coating, we offer solutions that meet the demands and requirements of customers around the world in a wide range of industrial sectors. A global service network ensures you always get professional support, at any time and any place!

Gema is part of Graco Inc. Our goal is to help our customers to increase their productivity while creating attractive, long-lasting products. Our experts continually set new standards in the surface coating industry.

Gema Switzerland GmbH
Mövenstrasse 17 | 9015 St.Gallen | Switzerland
T +41 71 313 83 00 | F +41 71 313 83 83
www.gemapowdercoating.com

Gema