

norelem

SMART 
PRODUCTS



SMART PRODUCTS

INNOVATION
AT THE SERVICE OF
PRECISION



BENEFITS OF **SMART** **PRODUCTS** IN MACHINING

With the growing prominence of the Internet of Things (IoT) and Industry 4.0, modern workshops are quickly transforming into smart and connected environments.

To easily verify clamping and stops before machining, with ergonomic and intuitive implementation, take advantage of this technology.

- **Intuitive setup:** Connected products have simplified settings, allowing for intuitive assembly. This optimizes installation speed, reduces mistakes, and makes it user-friendly, even for those unfamiliar with it.
- **Optimised quality:** Connected products ensure that every part is machined precisely, adhering to strict tolerances, which reduces the number of rejects and the costs associated with re-machining.
- **Wireless operation:** Components install and connect without any wiring.
- **Resistant to cooling lubricants:** Connected products have an IP64 protection rating, suitable for machining with cooling.
- **Increased productivity:** By reducing machining errors, workshops can speed up their production without sacrificing quality.
- **Cost reduction:** Wasted materials, lost time. Connected products minimize these errors.
- **Proactive maintenance:** These products can also signal wear, anomalies, or any maintenance needs, allowing for anticipation of potential problems.
- **Easier training and assistance:** Connected products can be linked to a computer system providing real-time feedback to operators throughout the machining process.

Verifying clamping and stops represents a major advancement in the world of machining. It offers superior quality assurance, but also increased efficiency, reduced costs, and better overall workshop management. In an industry where precision and efficiency are crucial, these products represent the future.

1



UNIVERSAL TRANSMITTER FOR SMART PRODUCTS

A combination of universal transmitters with SMART Products allows a visual, intuitive and quick reading of sensor status. It is also possible to wirelessly transmit the sensor status via Bluetooth.

2



REST PADS WITH SEAT CHECK SENSOR

Rest pads with seat check sensor allow part positioning process control. They can also be used as stops with end position feedback. Switching distance 0,2 mm. Ensure a perfect seating of the part on the machining fixture.

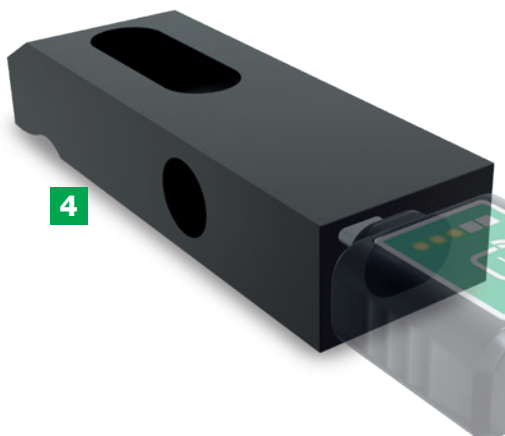
3



FORCE SENSORS FOR TOGGLE CLAMPS

Force sensors for toggle clamps allow part clamping process control. Ensure a perfect clamping of the part with an increased repeatability.

4



CLAMP STRAPS WITH FORCE SENSOR

Clamp straps with force sensor allow part clamping process control. Switching value : ± 10 % of setpoint value. Ensure a perfect clamping of the part with increased repeatability.

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ZERO DEFECT QUALITY
WHEN ALL THE LIGHTS
ARE GREEN !

1



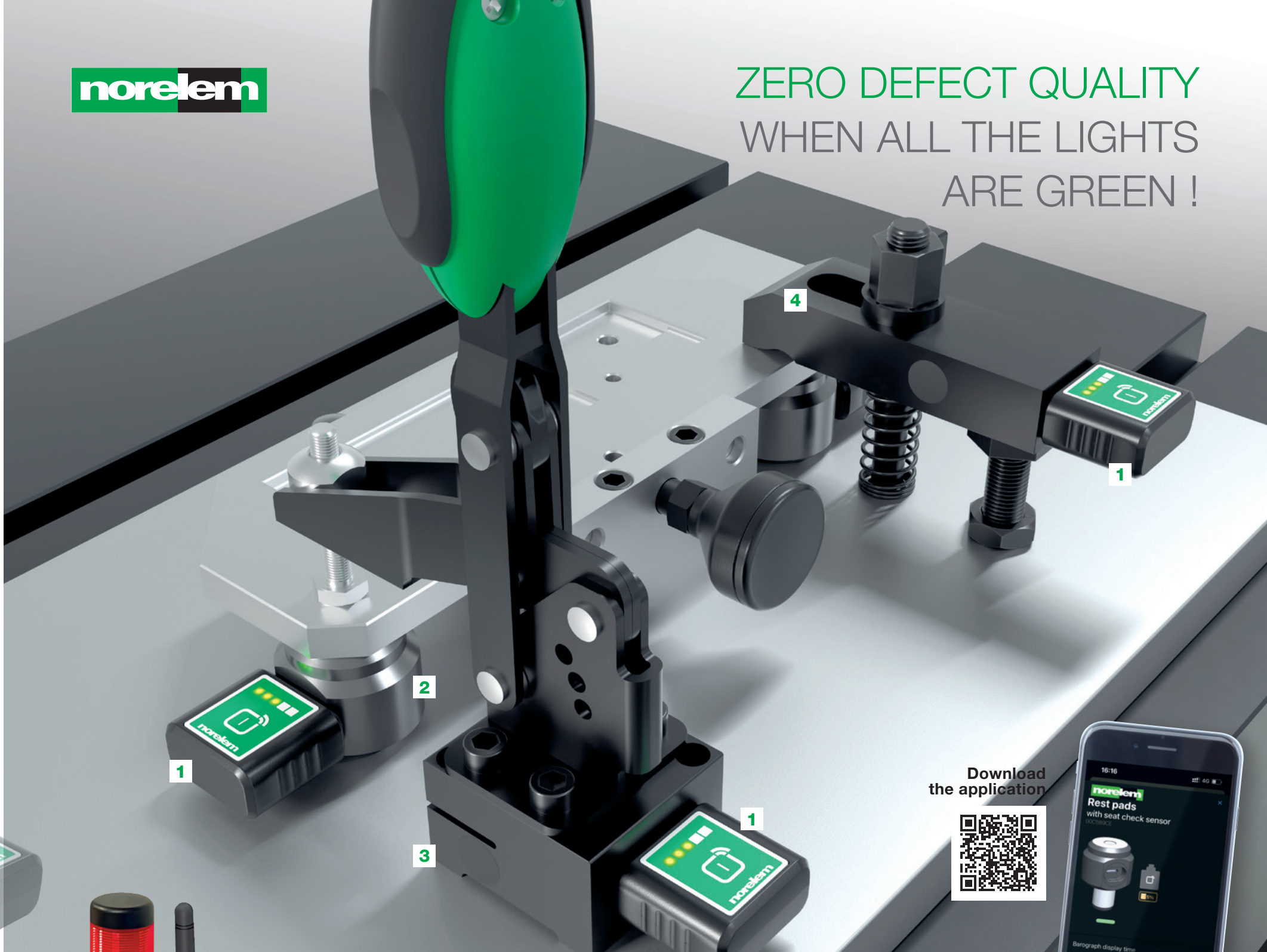
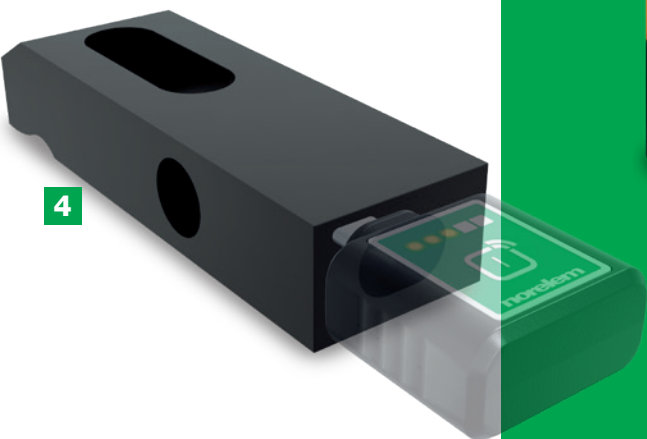
2



3



4



Download
the application



GATEWAY FOR SMART PRODUCTS

The gateway is used to integrate SMART Products into machines and systems.

With the link between the gateway and machine control, the actuation statuses of the SMART

Products can be displayed, checked, and used for process control.

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On a tablet or a smartphone, check your workholding system before, during and after machining!

Quickly visualize your sensor status by monitoring a single SMART Product or a complete gateway.

Connection to a single product is possible via NFC or BLE, connection to a gateway is available via BLE.





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