



# BOLTRAKK

## FASTENERS MONITORING



- ✓ **MONITOR** THE TENSION IN YOUR ASSEMBLIES,
- ✓ **SECURE** YOUR ACTIVITY,
- ✓ **PLAN** YOUR MAINTENANCE.



**PATENTED**  
TECHNOLOGY



**SECURE YOUR EQUIPEMENTS!**  
**DRASTICALLY REDUCE YOUR TIGHTENING TIMES**

### LOOSENING: A UNIVERSAL CHALLENGE

Mechanical assemblies are constantly subjected to **vibrations, temperature fluctuations, deformations, and shocks**. These stresses inevitably lead to **loosening**.

The **consequences** : production downtime, non-compliance, and even serious incidents.

To prevent these risks, the industry relies on nut locking systems and periodic tightening checks. However, these solutions are often **costly, time-consuming...** and **lack precision**.

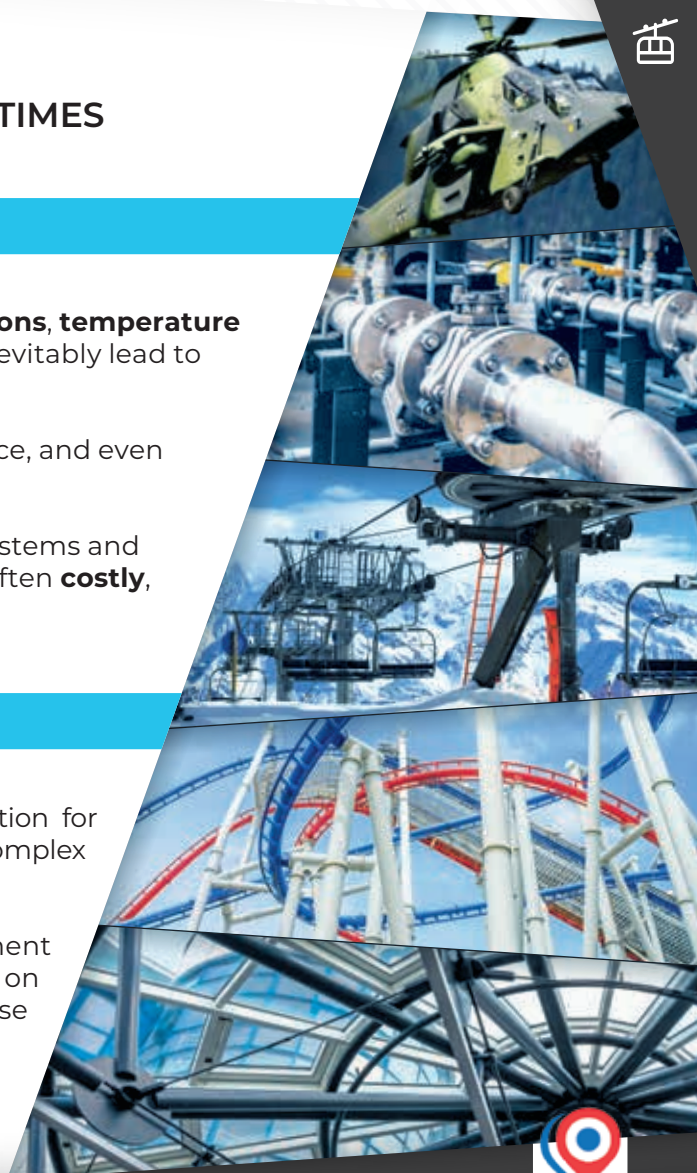
### THE BOLTRAKK ANSWER

JPB Système has developed **BOLTRAKK**, a complete solution for **automatic bolt-tightening monitoring**, even on the most complex assemblies.

**Save** time, **reduce** costs, and **secure** your equipment with automatic recording of tightening checks, even on hard-to-reach bolts (confined spaces, height) or those requiring regular inspections.

Switch to **intelligent, preventive maintenance**, with **no compromise**.

**STOP** SYSTEMATIC CHECKS... **RETHIGHTEN WHEN NECESSARY!**



# HOW IT WORKS

JPB Système developed **specific strain gauges** that allow size reduction of the sensor. The installation of the sensor is easy in your assembly. The sensor is equipped with **smart electronics**. It processes and converts measurements **into a robust signal** that is not affected by distance of communication or variations of temperature. It ensures a **high level of accuracy** over the entire operating range.

JPB Système developed a **data acquisition system** and **displays solutions** according to your needs:



## RFiD BOLTRAKK - Autonomous

The smart reader uses the RFiD technology to supply power to the washer and transmit data. The smart washer is passive (no battery), self-contained and can be installed on mobile equipment.







## Wired BOLTRAKK - Connected




Thanks to continuous power supply and data transmission to a web application, inspections can be performed anytime and remotely using a connected device (PC, tablet).

# USERS BENEFITS

## COMMON ADVANTAGES OF BOTH SOLUTIONS

-  **Secure the tightening** monitoring: check tension in the assembly when and where needed. **Secure the control** by limiting the action of the technician.
-  **Quick** and **accurate** check in few seconds.  
**No disassembly/reassembly**, no torque wrench test.
-  Reduce **maintenance time** and **cost**.
-  **Easy installation** in your assembly (thin thickness = 5mm). **Simple** and **intuitive** to use.

## SPECIFIC FEATURES OF EACH SOLUTION

-  **Alert**
  - **Wired only** : define tightening thresholds and receive alerts by email or SMS when exceeded.
-  **Accessibility**
  - **RFiD** : easy access in confined spaces thanks to the reader's flexible probe.....
  - **Wired** : remote reading via the application.
-  **Traceability**
  - **RFiD** : measurement data stored in sensor memory.
  - **Wired** : automatic recording of measurements in the application.



# EASY TO USE

- ✓ **Place** the BOLTRAKK sensor under the screw head or the nut.
- ✓ **Tighten the bolt as usual** with your torque wrench. No need to change your torque process.

When bolt is properly tightened, **define the "100%" level** with the reader (RFiD Smart Washer) or with the app (Wired Smart Washer).

- At any time, you can check the variation of **the tension in the fastener**: do a manual check with the
- ✓ reader (RFiD Smart Washer); manual or automatic check with the app (Wired Smart Washer).

## TWO SOLUTIONS TAILORED TO YOUR NEEDS

### RFiD - AUTONOMOUS



- ✓ Inert sensor : **no electromagnetic** interference.
- ✓ RFiD: **no battery**, no wire: suitable for sensitive environments.
- ✓ Local data storage : maximum **cybersecurity**.



RFiD communication



On-site check



Manual check



Sensor with no battery



Data stored in the internal memory of the sensor

### WIRED - CONNECTED



- ✓ Wired sensor : **remote** consultation **at any time**.
- ✓ Continuous power supply : **control checks** and **email/SMS alerts**.
- ✓ Automatic data storage in the cloud : **available at any time**.



Mobile network communication



24V ou 230V power supply



Manual or automatic check



On-site check or remote check



Data stored in the cloud

# TECHNICAL FEATURES

	BOLTRAKK RFiD Sensor	BOLTRAKK Wired Sensor
Range	M8 - M22 3/8' - 3/4'	M8 - M24 -
Solution operating temperature	-20°C to +50°C (reader)	-20°C to +65°C
Sensor temperature resistance	-50°C to +150°C	-30°C to +90°C
Water resistance	IP67	
Material of body	Stainless Steel	
Data transmission	Passive RFiD	Mobile network
Data storage	Local data storage	Cloud storage
Power supply	No power (passive RFiD)	24V DC or 230V AC
Type of measurement	Redundant : dual measurement	Single measurement

## HIGH RESISTANCE

BOLTRAKK products are **tested in harsh conditions**: vibrations, drops, shocks, chemical solvents resistance, UV resistance...

We check the product at every step of the manufacturing process to ensure a high level of quality and reliability.



ASSEMBLY SAFETY



TIME SAVING FOR  
MAINTENANCE



EASY TO USE



TRACEABILITY



HUMAN FACTOR  
MITIGATION



PASSIVE DEVICE



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