



POGGIPOLINI

COMPANY PROFILE

Leading company in critical and structural **FASTENERS**,
PRECISION PARTS and engineering solutions for
WEIGHT REDUCTION & STRUCTURES.

THE **CHALLENGE** IS OUR COMFORT ZONE.

WE **INNOVATE** INDUSTRIES.

1970

Starts to produce the **firsts bolts in titanium**.
Become Ducati supplier,
for racing bolts.



1996

Starts to supply
AW – EH101 program.



1988

Become one of the
strategic
Ferrari F1 suppliers.



2009

Starts the technology
transfer to Automotive and
Aerospace.
(Export 2%, 5 Main clients)



2001

NCR brand acquisition.



1984

Starts to supply
in **F1**.



2019

Starts the High Speed
manufacturing fasteners
project.
(Export 35%, +20 clients)



**SMART
FASTENERS
FACTORY**

1950

Founded by **Calisto
Poggipolini**

HEAD OFFICE

Bologna, Emilia Romagna, Italy

SALES OFFICE:

Paris, FRANCE

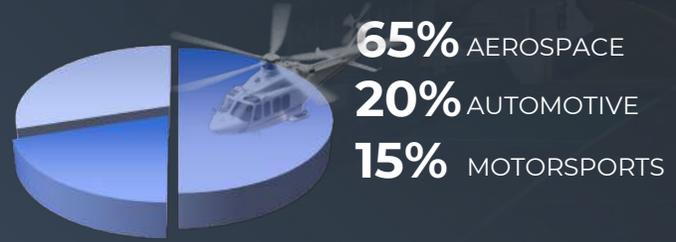
London, UK

Berlin, GERMANY

Bruxelles, BELGIUM

Tokyo, JAPAN

MARKETS



PRODUCTIONS

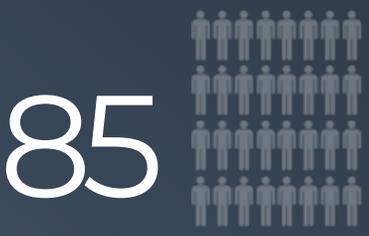


2021

MAIN CUSTOMERS



PEOPLE



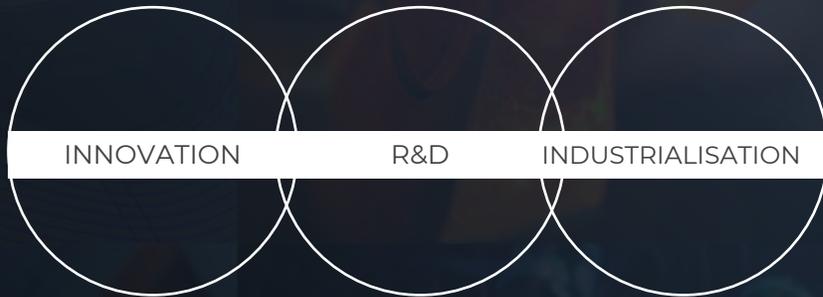
15 ENGINEERS | 30 DIRECT | 10 QUALITY & SPECIAL PROCESSES

SALES 2020



20Mn€ Invested over last 9 yrs
+6% GROWTH VS 2019

ENGINEERING



ADVANCED MANUFACTURING



SPECIAL PROCESSES

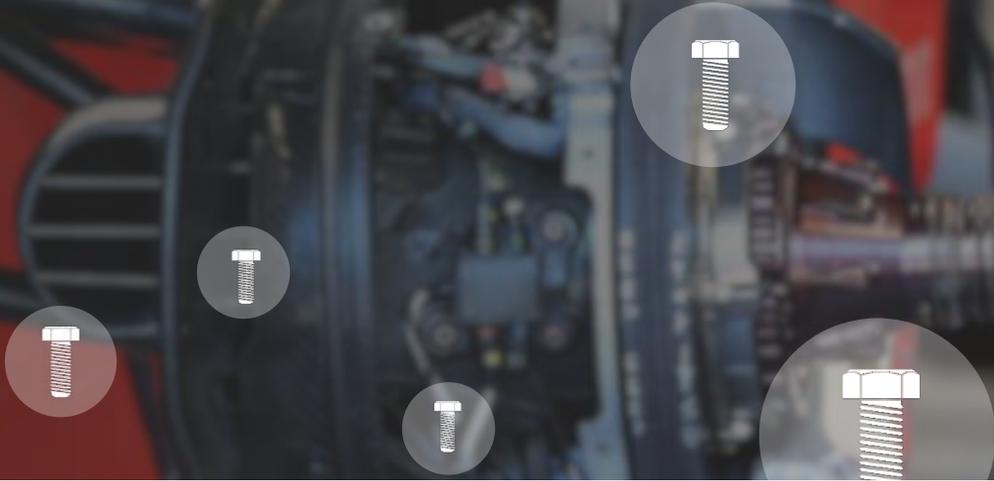




We are the fasteners expert since 1950.

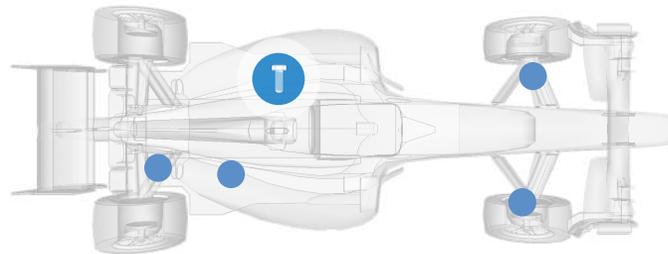


EACH FASTENER IS VERY IMPORTANT



In **1970 Poggipolini started** to engineer & manufacture Titanium fasteners for **motorsports**.

MotoGP
and
F1



MOTORSPORTS MAIN CUSTOMERS



McLAREN HONDA

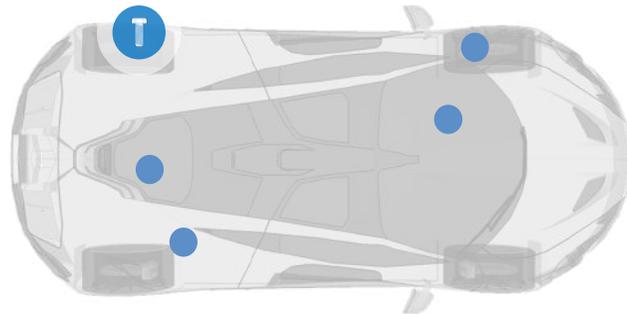


EACH FASTENER IS VERY IMPORTANT



In **1999 Poggipolini** introduces Titanium fasteners into **street cars**.

Hypercars
and
Accessories

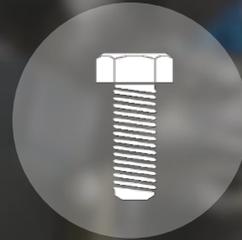


AUTOMOTIVE MAIN CUSTOMERS



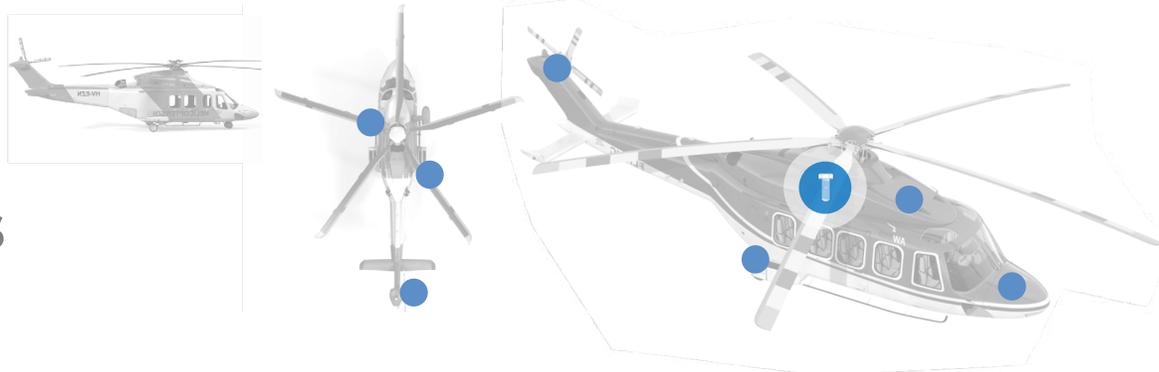


EACH FASTENER IS VERY IMPORTANT



In **2004 Poggipolini** starts to supply critical fasteners for **helicopters**, defence and space.

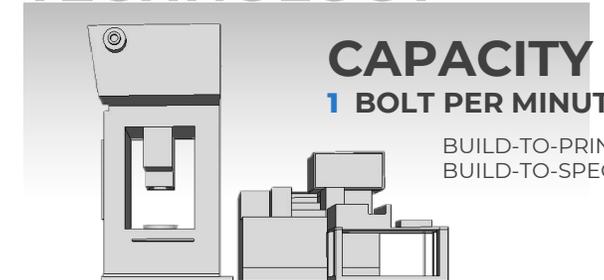
Rotors
and
Structures



EXPERTISE & CERTIFICATIONS
HOT FORGING
HOT & COLD THREAD ROLLING



STANDARD TECHNOLOGY



CAPACITY
1 BOLT PER MINUTE

BUILD-TO-PRINT
BUILD-TO-SPEC

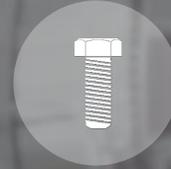
MATERIALS: **Titanium, Inconel, Hard metals**

AEROSPACE MAIN CUSTOMERS





EACH FASTENER IS VERY IMPORTANT



In **2019 Poggipolini** introduced **a new manufacturing process**, to supply Titanium fasteners for applications in **commercial aircrafts**.

Aerostructures
and
Engines



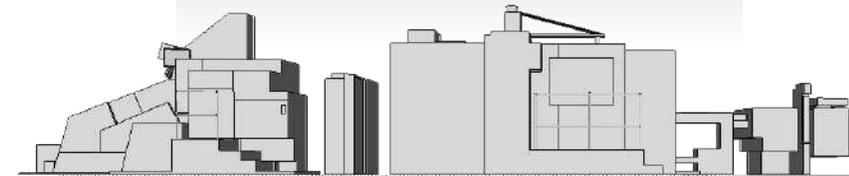
HIGH SPEED

CAPACITY

100 BOLT PER MINUTE



BUILD-TO-PRINT
BUILD-TO-SPEC



MATERIALS: **Titanium, Inconel, Hard metals**

AEROSPACE MAIN CUSTOMERS





I N T E R N E T O F F A S T E N E R S

ENERGY

MISSION

Fully digitise mechanics by **extracting data**
from where it has **never been extracted** before.



PROBLEM

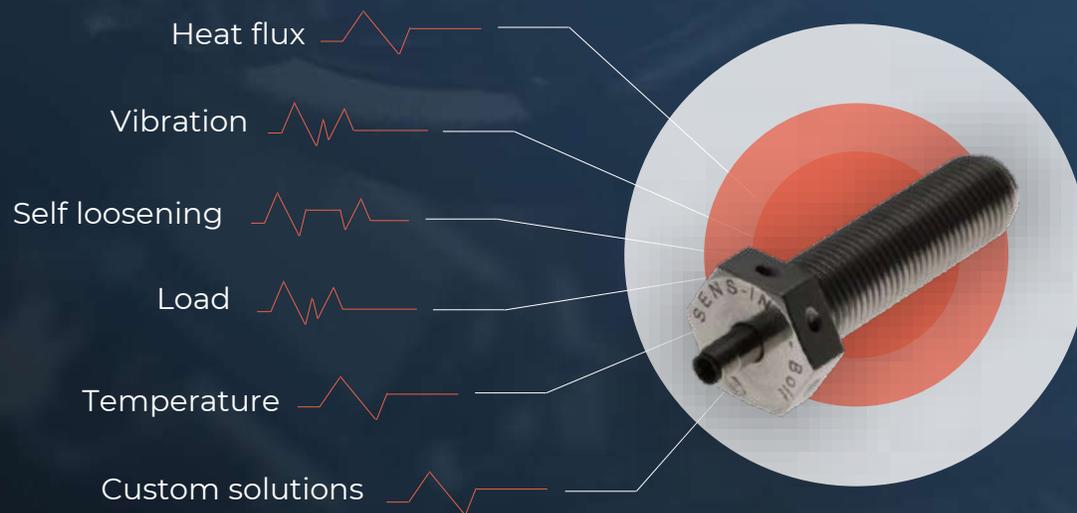
You **cannot improve** what you cannot measure.

At the height of the digital transformation trend, converting mechanical interactions into data remains complicated.

Mechanical data is still hard to generate, extract and compute.

SOLUTION

In 2019 Poggipolini S.p.A. founded **SENS-IN**[®] S.r.l., an innovative start-up with the mission of developing intelligent fasteners capable of communicating data in real time.



Our patented fastening elements, created by **integrating electronic sensors** with precision engineering and advanced light-weight materials, are applicable to any market.

Main Technical Spec for R&D use:

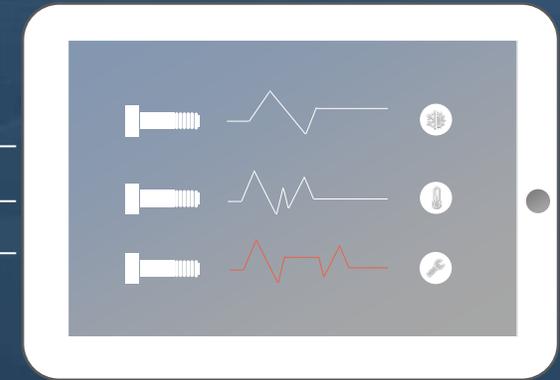
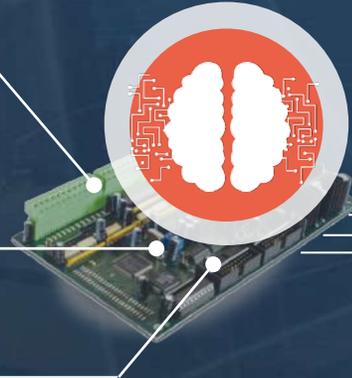
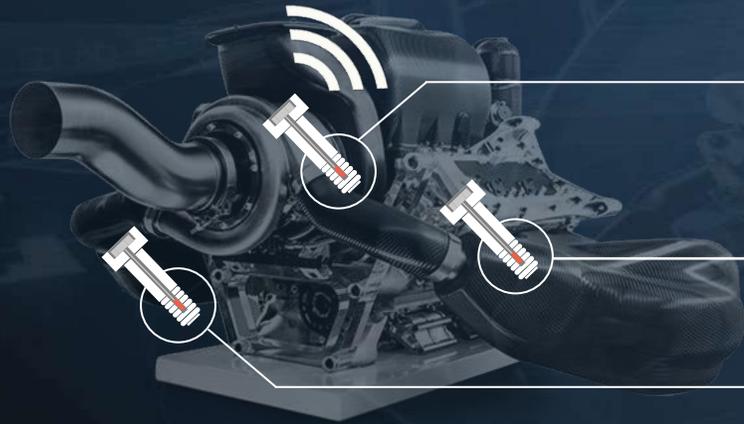
Temperature: range -40C to +140C

Dimensions: from M5, all materials and all geometries

We can also evaluate custom solutions if required.

PRODUCT

A.I.
SW



SENS-IN® Bolts

An IoT device for mechanical data generation

Digital System Integrator (DSI)

AI+ML control unit of all SENS-IN Bolts for data aggregation and prescriptive analytics

SENS-IN Platform

For real time monitoring and control

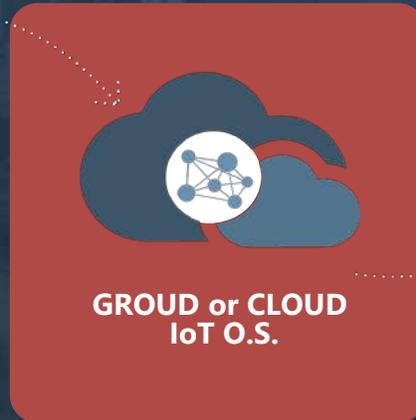
ECOSYSTEM

The **DSI & SENS-IN® Bolts** will create the “bolt connected network” that can be used for health & condition monitoring and predictive maintenance, from engineering tests to full life applications.



SENS-IN® Bolt

Let's think about having a number of SENS-IN® Bolts installed into a system.



GROUD or CLOUD IoT O.S.

The data of each SENS-IN® Bolt is processed and analyzed by the company proprietary self learning algorithms and transferred to a Cloud or Ground IoT O.S.



SENS-IN® Platform

OEMs and END USERS can control, monitor and predict, in real time, events of the system.



SENS-IN® Platform is used for:

Reducing

the time required for routine maintenance and product quality inspection checks and Total cost of Ownership.

Improving:

design of fasteners and related systems, Design to cost and weight reduction solutions.

Optimizing:

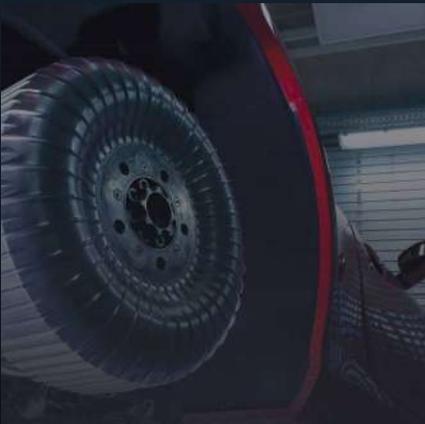
the planning of maintenance interventions.

Preventing:

catastrophic events that affect people's safety.

APPLICATIONS

SENS-IN® is already in use in the following markets:



AUTOMOTIVE

Powertrain, brakes, suspension & chassis.



GENERAL INDUSTRIES

Automated packaging machines, machine tool & industrial.



CONSTRUCTION

Bridges, rail ways & structures in general.



AEROSPACE

Rotors, engine, transmission, structures & landing systems.



V-TOL

Power and structures.



MEDICAL

Prosthesis.



www.sensin.it