Fiam designed and manufactured a new solution to process two different types of stud bolt: symmetric and asymmetric, threaded elements diffused mainly in the automotive sector (engine assembly, alternator, air conditioners and mechanical components in general).

**Scope of solution:**

2 Circular feeders customized on the type of stud bolt; they assure high supply and capacity without using hoppers

2 Linear feeders customized to convey the stud bolts

2 Stud bolt selectors:
The system to process asymmetric stud bolts is equipped with a camera that detects the direction of the stud and a special rotating device that oriented the stud in the right direction before conveying it to the nosepiece for the automatic tightening.
Screw selector for asymmetric stud bolt with camera that detects direction of the stud and rotating device for automatic rotation of stud.

Screw selector for symmetric stud bolt

A single stroke fastening slide with:

- Special ANALOG TRANSDUCER recognizing different fastening depth according to the type of stud and the workpiece to be processed

- Air nutrunner motor with air shut off that ensures the assembly to 4 Nm torque

- Special screw head that can receive and hold both types of stud bolts