



The EVT_COIL system, in its basic version, consists of:

- Bluetooth Control Unit
- EVT_COIL tool with traffic light at 360 degrees
- No 2 batteries
- Battery-charger
- EVT_COIL containment support

On demand Sofca can provide the EVT_COIL system arranged as "operating station" and configured according to the customer needs; the station, in its typical configuration, consists of:

- Bench with anodized aluminum frame
- Tool with the traffic light for successful operation and warnings
- Control Unit with optional 360 degree lights
- Dedicated printer for timely report of the operations
- Barcode device to select the appropriate control parameters (the programs can be selected via barcode and taken in charge by the system automatically).
- Program selector GPBOX



EVT_COIL Electronic System for tightening VISA® clamps

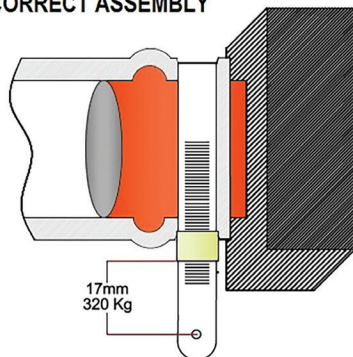


The Bluetooth system EVT_COIL (Electrical Visa Tool Control Objectification Integration Line) was designed and built by SOECA s.r.l. to objectify and control the tightening of the **VISA®** clamps produced by company CAILLAU.

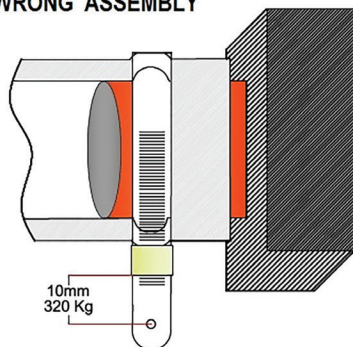
The system is able to check the proper tightening, count the number of clamps that perform the assembly cycle, transfer the data to a storage system based on the use of a PLC, PC, or ETHERNET interacting on an information technology level and in real time with the control systems that contribute to the complex vertical supervision activity according to various types of networks and protocols including PFCS / MES.

Use of the Bluetooth system offers the advantage of eliminating the wiring for transferring the information between the tool and the control system when the tool is used at a distance from the control unit no longer than 25 meters. The use of a system with Bluetooth technology allows the operator to easily handle the tool during the tightening operations.

CORRECT ASSEMBLY



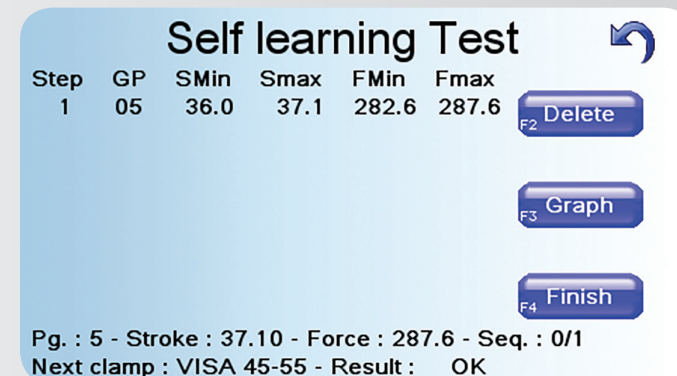
WRONG ASSEMBLY



On the EVT electrical tool there is a ring-shaped light where LEDs are placed to visualize the result of the operation according to the computation of the system EVT_COIL.

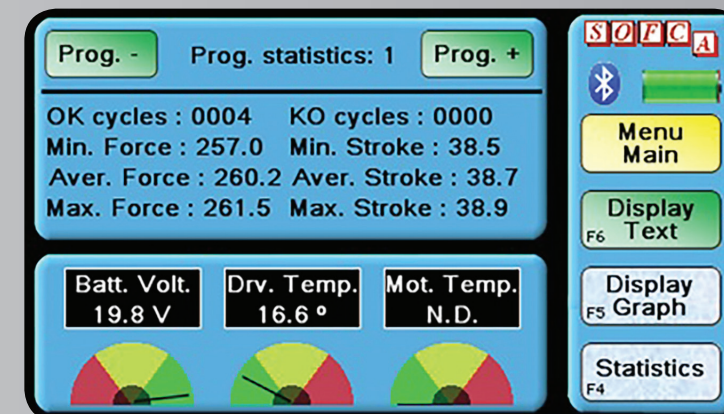


The "objectification" term refers to the process by which an intelligent equipment is programmed to monitor the activities of an operator while performing a sequence of assembly; the intelligence of the equipment lies in its ability to control and verify the same sequence during the production. The objectification of the tightening is optimized with the self-learning procedure, which determines the values of the parameters related to the control of the clamp tightening while leaving the technologist the possibility to analyze and correct these values.



The EVT_COIL system gives the best guarantee on the **VISA®** clamp tightness by applying the following strategies:

- Self-learning for setting parameters that ensure a good tightening
- Detection of the parameter values is in real time, during the tightening process, by reading the sensors
- Data processing and decision based on the outcome of the tightening
- Event outcome as a graphic on the control unit, switching-on of the light on the tool, print out of the results, release of the data on PLC/PC or remotely on Ethernet when required
- Scheduled maintenance borne by the control unit which, on the basis of the number of cycles implemented, will warn the operator
- Certification release with ACCREDIA reference.

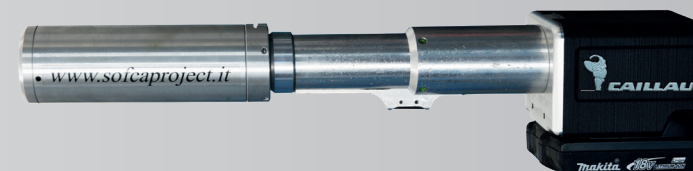


Characteristics of the EVT_COIL system:

- Practical system, since there are no cables and hoses to drag
- Reduced tool weight, about 2 kg
- Maintenance limited to the replacement of the cutter and socket
- Long autonomy of the battery, on average you get about 1400 tightenings of the larger **VISA®**, those employing more power
- Battery replacement in about 4-5 seconds
- About one hour time to charge the 18 VDC lithium battery with the convenience of having the second battery in charge
- Graph of Force/Stroke with indications of their acceptability thresholds after cycle performed
- Flexible interface for monitoring, remote control, uni and bi-directional data exchange
- Availability of an on-site bench for the verification of the tightening force through the use of a load cell with ACCREDIA reference



The EVT_COIL products are controlled and qualified in the factory on test benches which are operated:



- Manually, with an instrumented bench for the characterization of the physical magnitudes operating in the tool
- Automatically, by a device slaved to the control unit, which provides the mechanical reaction to the tractor, for the running-in tests.