

ITEQ - Comprehensive solutions for the inspection of sprayers

Mostade, O.; Briffeuil, P.

ITEQ, Chemin des artisans 3c, 5150 Floreffe, Belgium

Summary

ITEQ is a Belgian company developing and manufacturing measurement equipments and associated innovative software solutions.

ITEQ has a huge experience in the field of sprayers inspection. Its products are professional equipments of the highest quality and have demonstrated accuracy and robustness.

ITEQ proposes a range of equipments to control ALL types of sprayers (field, bush and tree crops).

All ITEQ products fully comply with European requirements.

Purchasing ITEQ products will give you a high return on investment due to their reliability and ergonomomy.

ITEQ is committed to continuously improve their products to meet customers' needs and evolving regulatory requirements.

Localization of ITEQ products

France: Inspection of sprayers has become compulsory since 1st January 2009. Ten equipments have been purchased on a voluntary basis before the enforcement of the law. As of November 2009, thirty-six full equipments have been sold throughout France. ITEQ offers quality and compliant products coupled with professional training and support. As a consequence ALL the ITEQ customers have been accredited by the GIP (official body coordinating the inspection of sprayers). ITEQ is the leader on the French market.

Belgium: Inspection of sprayers is mandatory since 1995. seven equipments are used throughout Belgium by the Ministry of Agriculture. More than 15000 sprayers have been inspected with each test bench since 1995! ITEQ is now selling improved models of these equipments.

Poland: Two equipments are used: University of Lublin and Ministry of Agriculture of Warsaw.

Spain: Seven equipments in Spain: Universitat Politècnica of Catalonia in Barcelona, Research Center – CMA in Lleida, Plant Protection Unit in Galice and 4 units at DAP of Andalusia in Seville.

Morocco: The Ministry of Agriculture has chosen ITEQ products to initiate inspection of sprayers. One equipment used in Rabat since May 2008.

ITEQ – A wide range of equipments to fit customers' needs

Inspection of sprayers (field, bush and tree crops) is performed through:

- overall visual inspection
- simple measurements (height, distance between nozzles, ...)
- checking spraying flowrate and pressures.

ITEQ is providing professional equipments that fully comply with the EU regulations to:

- measure the flow rate of nozzles removed from the sprayer
- measure pressures on the spray boom
- control the working pressure gauge

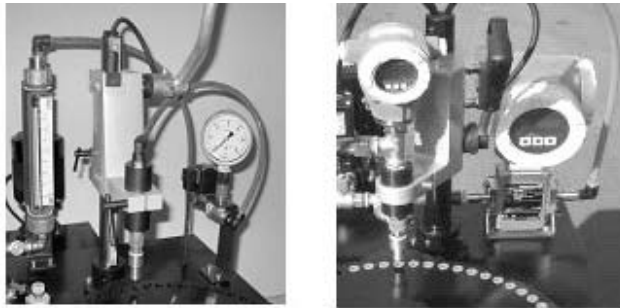
Flow rate test benches

Two mobile models of nozzles flowrate test benches: pallet and compact



Two different types of sensors

Analogue sensors - Manual data acquisition of flow rate and pressure with the ITEQ software or **digital sensors** - with automatic data acquisition of flow rate AND pressure by ITEQ software (with double adjustment: calibration and pressure).



Multi-purpose test bench - to measure the flow rate AND pressure of ANY type of nozzles removed from the spray boom: the perfect combination of speed and accuracy



Pressure equipment for field crop sprayers - Analogue pressure gauges/0–6 bar/class 1/Ø 100 mm. Sets of fast coupling connections specific for any make of sprayers



Pressure equipment for air-assisted sprayers - bush and tree crops - Foldable aluminium frames for easy set-up and transportation/fast coupling connections/spiral pressure gauges/0-20 bar/class 1/∅ 100 mm,



Calibration equipments - Reference nozzles to calibrate the flow rate test bench and Reference digital pressure gauge to calibrate the manometers used during inspection. Rem: All calibration equipments are certified by an accredited laboratory ISO 17025 (BELAC – Belgian Accreditation Body)

| Données (pression à 0,500 bar) | | |
|--------------------------------|--------|-------------|
| | mesure | incertitude |
| Trouer XR 9001 | 0,398 | 0,003 |
| Trouer XR 9002 | 0,508 | 0,003 |
| Trouer XR 9003 | 1,542 | 0,003 |
| Trouer XR 9004 | 2,343 | 0,004 |
| Trouer XR 9013 | 3,941 | 0,003 |



ITEQ – Software and services to fit customers’ needs

SDSoft (Sprayer Diagnostic Software) has been developed to complement ITEQ equipments and to greatly facilitate the control of sprayers on the field. SDSoft complies to the European regulation and can be easily customized to your specific needs - country specific protocols and languages. Alongside the wide range of equipments and software solutions, ITEQ team is also committed to provide top level training and support services to public or private operators for the management of any activity linked to the inspection of sprayers.

Conclusions - Integration and reliability demonstrated



As the best demonstration of the reliability and integration of the test bench and software solution, a live exhibition was performed by the ITEQ team during the SPISE conference in Brno, September 2009.