

Inspection of New Sprayers before their Delivery - The position of CEMA

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In the harmonisation process it is important to reach a point of common understanding and acceptance among different stakeholder. In the sprayer inspection process it is important to get an overall European wide level which allows manufactures of spraying equipment to deliver products direct to the end users without specific local testing. The CEMA members define their position by clarifying what is done anyhow in the production process.

CEMA as THE EUROPEAN AGRICULTURAL MACHINERY INDUSTRY

The development and production of agricultural machinery is among the most dynamic and innovative industry sectors in Europe. Over 50 years CEMA has been providing an interactive platform to manufacturers of agricultural machinery to formulate common industry positions and work towards a higher degree of European harmonization in the sector. In CEMA are approx. 4500 manufacturers of agricultural equipment consisting of large multinational companies as well as numerous small and medium-sized enterprises. CEMA members produce more than 90 % of the new sprayers in EU.

Cooperation between CEMA and SPISE

CEMA supports the current practice for the standardized inspection of sprayers in use according to the requirements of EN ISO 16122, overseen by Member State authorities and undertaken by certified testers.

CEMA members work active in the SPISE community. It is not only considered the original performance of the spraying equipment, we also support its use, care and maintenance. Also the daily contact to the dealer network is an important issue, as farm machinery dealers are offering the test to the end-users in most member states today.

It is important to have clear definitions to clarify the difference between in-factory testing and the In-factory inspection.

In-factory testing

- Quality, performance, compliance related tests, checks and controls conducted during the whole production process (incl. final test) to ensure the requirements given by Machinery Directive (EN ISO 16119)
- Organized by quality management & manufacturing
- Defined by production engineering and compliance

In-factory inspection

- Inspection of finalized sprayer according EN ISO 16122
- Certified personal
- Certified measurement tools
- Decal is placed on sprayer
- Test report is accompany the sprayer and copy is filed

New sprayers have to fulfill EN ISO 16119 (2006/42/EC). The EN ISO 16119 ensures a higher level of performance than required by sprayer testing standard EN ISO 16122. In the production process are already in-factory tests done. It must be cleared as well that the self-certification process including the Declaration of Conformity which has to be provided with the machine is not a type approval, but it means that the sprayer delivered complies with the Machinery Directive 2006/42/EC.

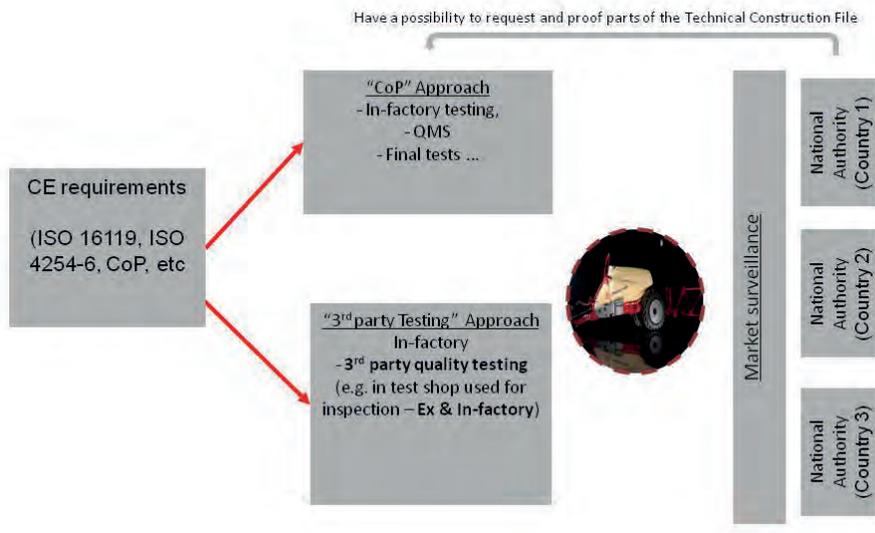
Sprayers in use test – EN ISO 16122

The In-factory inspection is not new in the past SPISE workshops have been several examples presented, there had been also visits to manufactures, showing the inspection process. Some manufacturers have their factory approved by D, NL authorities and do in-factory inspection of sprayers; this process is running since more than 20 years. There is a long time experience with the test of new sprayers, which is sometimes a reduced test. Somehow is this situation history, as we have now the amendment of the Machinery Directive (MD) and Sustainable Use Directive (SUD) in force which means a self-certification process which forced the manufacturers to do a big work to run this process. Today we have far more environmental requirements for new sprayers, which are more demanding than those of the inspection of sprayers in use.

A comparison of the testing requirements of EN ISO 16122 and requirements for new sprayers to meet EN ISO 16119 can be done step by step to find an agreement if the conformity of production (CoP) is dealing with the EN ISO 16119 standard. This table gives a few examples how a list from a manufacturer could look.

Requirements of EN ISO 16122-2	Visual check / Function test	Measurement	Factory Testing to meet CoP (EN ISO 16119)
Static leaks	x		During the tank sensor calibration. During the Pressure regulator set up.
Pump capacity		x	New pump (not wear out) - supplier quality declaration, check quality statistics from supplier. Or internal check with flow meter - selectively every X machine from Y, if internally produced pumps. - Provide information from pump supplier. - Ensure correct pump / machine configuration. (BOM list) Pump capacity on the type plate.
Nozzle spacing/orientation	x	x	Drill fixtures (Quality control), Final test area measurement, visual check, or Patternator test
Pressure drop		x	Per design, - provide Technical Construction File results discuss if measurement is needed.
...

There shall be an insurance the same level of quality can be reached in this process. And the CE mark shall be seen as an indication of this. Of course there is control by the market surveillance in the different member states.



The CEMA proposal

The CEMA makes a proposal how the EN ISO 16122 inspection scheme could be used to have procedure how to do inspection of new sprayers. Manufacturers will provide a 'Certificate of Inspection' (Col) identifying the conformity with EN ISO 16122 for the serial number machine with which the Col is being shipped. The customer could use this certificate to obtain the appropriate certification label by the local authority for the purpose of certifying the machine to the appropriate sections of Directive 2009/128/EC. (This will allow keeping the national registers). The Technical Construction File (TCF) based on the application of Machinery Directive (2006/42/EC) and the European Directive (2009/127/EC), which is done by the manufacturer during the design and manufacturing process indicates that the sprayer complies with EN ISO 16122.

Another option is an In-factory Inspection as it has been done in some member states since a long time. Because there is a certain market demand for users to have new sprayers certified as complying with the requirements of EN ISO 16122 e.g. to comply with crop assurance schemes or food supply chains. Also in the case of "3rd party testing" approach for new sprayers, some manufacturers would like to continue to offer "in-factory inspection" to fulfil CE requirements (no decal). The In-factory inspection is not applicable at the whole scale of the EU market if there is no common and harmonized process. It would be very difficult for manufacturers, if we have to get approved by all member states. Including documentation of stickers and test certificates in 30 different versions! CEMA feels that this would not be in line with the idea of free trade inside the EU. A new approach for a simplified process is needed.

Harmonized procedures

CEMA would like to have a clearly defined harmonized test procedure across all EU member states - based on the requirements on EN ISO 16119 which also fulfils the EN ISO 16122. There should be one simple format of the test report which can be mutually recognized by all Member States. A Certificate of Inspection (Col) would help to get a more harmonized

procedure to bring sprayers into different Member States. Further there is a need of a local transfer procedure – registration demands have to be organized. There is also the difficulty with different time interval before the first mandatory inspection, after the first use. This leads to difficulties in understanding the procedure and the quality of delivered sprayers. The time period should comply with the current European legislation (Sustainable use of pesticides (SUD) – 2009/128/EC)

Mutual Recognition

The harmonization of the testing procedure and intervals are essential pre-requisites for the mutual recognition of the test reports and certificates / stickers between Member States. Mutual recognition and general harmonization will make the whole testing and inspection framework clearer and more understandable for all stakeholders (authorities, testers, manufacturers, dealers and farmers). An acceptance of a certificate/sticker which has been obtained in another Member State than the country where the sprayer is finally used is demanded, manufacturers would like to work only with one certificate/sticker. As a registration of sprayers is demanded in some countries a system must be developed so the end-user / farmer get his local approval. This shall be the task for the end-user.

Challenges – jobs to do – conclusions

CEMA would like to implement a Certificate of Inspection, but also other options as in-factory inspection must be still possible, so also smaller producers and self-made sprayers could still be inspected. A harmonized certification document / sticker as a type of test report for new sprayers must be developed here SPISE is needed to coordinate this process to reach a maximum of acceptance.

A mutual recognition document is need, but who can do this? As there is no official mandate!

National agreements regarding – factory certification are needed as this seems to be the only way to get progress. Also the question how does the farmer / machine owner gets a local certification if needed and how the sprayer will be registered in different national schemes? Here the farmer association needs to be involved – approach the end-user needs a machine which is proofed and fulfilling EN ISO 16119 and EN ISO 16122 – this is needed to fulfil cross compliance and different certification schemes - this cost money!

There are also challenges in the communication to the market, how can common understandings of the procedure be reached. In the optimum case all Member States would be involved and accept the system.

We need SPISE as a platform to move forward on these issues!