



# **Better Training for Safer Food** *Initiative*

**Methodologies applied  
in Member States for  
complying with ISO**

***National standards for  
inspection of PAE***

## Outline of the content:

- Introduction
- Requirements in EN-ISO 16122
  - Part 1: General
  - Part 2: Horizontal boom sprayers
  - Part 3: Sprayers for bush and tree crops
  - Part 4: Fixed and semi-mobile sprayers
- Registration of the results
- Use of software tools for registration
- Certificate/sticker
- Final remarks

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# Introduction:

## Annex 2 SUD

## EN-ISO 16122

24.11.2009 EN Official Journal of the European Union L 305/13

### ANNEX II

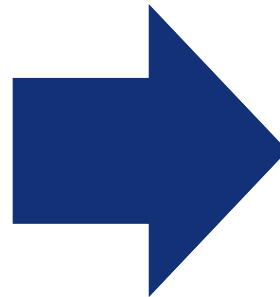
#### Health and safety and environmental requirements relating to the inspection of pesticide application equipment

The inspection of pesticide application equipment shall cover all aspects important to achieve a high level of safety and protection of human health and the environment. Full effectiveness of the application operation should be ensured by proper performance of devices and functions of the equipment to guarantee the following objectives are met.

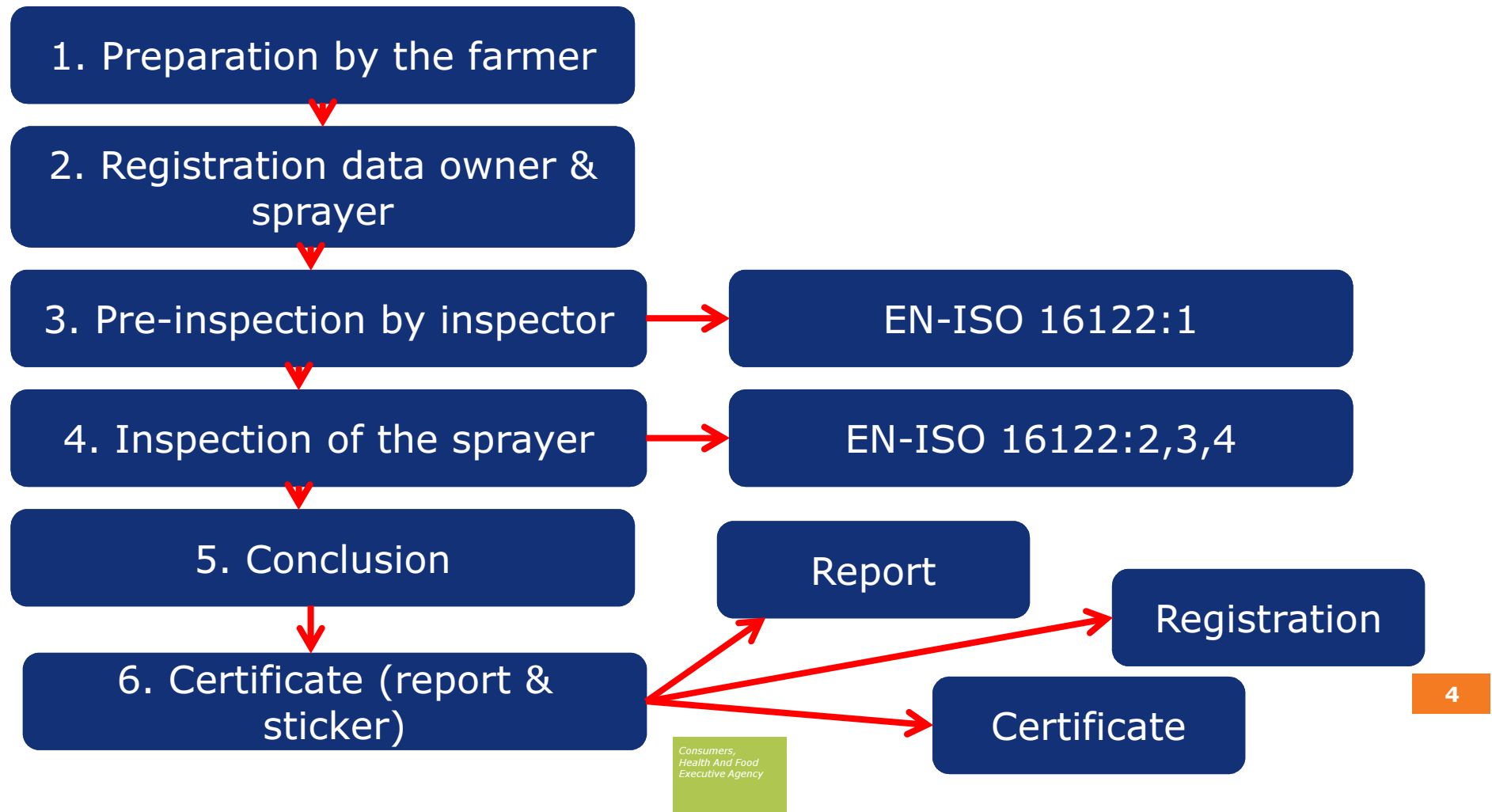
The pesticide application equipment must function reliably and be used properly for its intended purpose ensuring that pesticides can be accurately dosed and distributed. The equipment must be in such a condition as to be filled and emptied safely, easily and completely and prevent leakage of pesticides. It must permit easy and thorough cleaning. It must also ensure safe operation, and be controlled and capable of being temporarily stopped from the operator's seat. When necessary, adjustments must be simple, accurate and capable of being reproduced.

Particular attention should be paid to:

1. **Power transmission parts**  
The power take-off, drive shaft guard and the guard of the power input connection shall be fitted and in good condition and the protective devices and any moving or rotating power transmission parts shall not be affected in their function so as to ensure protection of the operator.
2. **Pump**  
The pump capacity shall be suited to the needs of the equipment and the pump must function properly in order to ensure a stable and reliable application rate. There shall be no leakage from the pump.
3. **Agitation**  
Agitation devices must ensure a proper recirculation in order to achieve an even concentration of the whole volume of the liquid spray mixture in the tank.
4. **Spray liquid tank**  
Spray tanks including indicators of tank content, filling devices, manure and filters, emptying and rinsing systems, and mixing devices shall operate in such a way as to minimise accidental spillage, uneven concentration distribution, operator exposure and residual content.
5. **Measuring systems, control and regulation systems**  
All devices for measuring, switching on and off and adjusting pressure and/or flow rate shall be properly calibrated and work correctly and there shall be no leakage. Control of pressure and operation of pressure adjustment devices shall be easily possible during application. Pressure adjustment devices shall maintain a constant working pressure at constant revolutions of the pump, in order to ensure that a stable volume application rate is applied.
6. **Pipes and hoses**  
Pipes and hoses shall be in proper condition to avoid disturbance of liquid flow or accidental spillage in case of failure. There shall be no leakage from pipes or hoses when run with the maximum allowable pressure for the system.
7. **Filtering**  
In order to avoid stratification and heterogeneity in spray patterns, filters shall be in good condition and the mesh size of the filter shall correspond to the size of nozzles fitted on the sprayer. Where applicable the filter blockage indication system shall operate correctly.
8. **Spray boom (for equipment spraying pesticides by means of a horizontally positioned boom, located close to the crop or the material to be treated)**  
The spray boom must be in good condition and stable in all directions. The fixation and adjustment systems and the device for detecting unwanted movements and slope compensation must work correctly.
9. **Nozzles**  
Nozzles must work properly to control dripping when spraying stops. To ensure homogeneity of the spray pattern, the flow rate of each individual nozzle shall not deviate significantly from the data of the flow rate tables provided by the manufacturer.



## Inspection procedure



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# EN-ISO 16122:1 Pre-inspection

## Clean

Outside  
Inside

## Safe

Power transmission parts  
Moving parts  
Pipes and hoses hydraulic (oil) system  
Structural parts and framework  
Lockable foldable parts  
Blower



# EN-ISO 16122:2 Field-crop sprayers

## Definition:

### horizontal boom sprayer

machine for spraying plant protection products, along a boom or in bands, with a spray generally directed downwards onto/into the target

Boom sprayer



Band sprayer:





# EN-ISO 16122:2 Field-crop sprayers

## Requirements:

1. Leaks and dripping
2. Pump(s)
3. Spray-mix agitation
4. Spray-tank
5. Measuring systems, controls and regulation systems
6. Lines (pipes and hoses)
7. Filters
8. Spray-boom
9. Nozzles
10. Blower
11. Spray-guns and lances

# 1. Leaks and dripping

- ✓ No static leaks
- ✓ No leaking with system under max. pressure
- ✓ No leaking while spraying
- ✓ No spraying on parts of the sprayer



## 2. Pump(s)

- ✓ Capacity of the pump suits to the need of the sprayer:
  - ❑ Enough capacity for spraying and agitation
- ✓ No pulsations
- ✓ Air-chamber in good condition



### 3. Spray-mix agitation

- ✓ While spraying at maximum capacity, there shall be enough agitation in the spray-tank



## 4. Spray liquid tank



- ✓ Lid
- ✓ Strainer
- ✓ Induction hopper
- ✓ Pressure compensation
- ✓ Content indicator
- ✓ Tank emptying
- ✓ Tank filling
- ✓ Cleaning equipment

## 5. Measuring systems, controls and regulation systems

- ✓ All visible and reachable from operators position
- ✓ Pressure indicator present and:
  - ✓ Readable (diameter min 63mm)
  - ✓ Accurate (max. 10% deviation)
- ✓ Flowmeters and other measuring devices accurate (max 5% deviation)

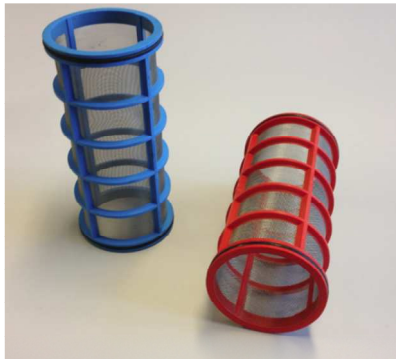


## 6. Lines (pipes and hoses)



- ✓ All pipes and hoses in good condition
- ✓ No cracks, extreme bending, cuts, etc.

## 7. Filters



- ✓ Suction and pressure filter present
- ✓ Insert clean and in good condition
- ✓ Sizes fitting to the nozzle sizes
- ✓ Isolating device



# Bad examples



## 8. Spray-boom



- ✓ Stable
- ✓ Automatic resetting
- ✓ Nozzle spacing/orientation
- ✓ Boom deformation (vertical and horizontal)
- ✓ Height adjustment
- ✓ Damping/stabilisation
- ✓ Compensative returns
- ✓ Pressure drop

## 9. Nozzles



- ✓ Identical (type, size, material)
- ✓ No dripping after stopping spraying
- ✓ Transverse distribution

# Measuring transversal distribution





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# Measuring nozzle flow and pressure distribution

Nozzles demounted from the boom



Nozzles mounted on the boom



Measuring pressure distribution



## 10. Blower



- ✓ Switching off
- ✓ Adjustable

## 11. Spray-gun / lance



- ✓ Trigger
- ✓ No dripping after stopping spraying
- ✓ Adjustment



# EN-ISO 16122:3 Sprayers for bush and tree crops

## Definition:

### **sprayer for bush and tree crops**

machine for spraying plant protection products on bush and tree crops such as grapes, fruits or hops (including annual plants/crops), the application being mostly directed sideways and/or upwards to the target



# EN-ISO 16122:3 Sprayers for bush and tree crops

## Requirements:

1. Leaks and dripping
2. Pump(s)
3. Spray-mix agitation
4. Spray-tank
5. Measuring systems, controls and regulation systems
6. Lines (pipes and hoses)
7. Filters
- 8. Nozzles**
- 9. Pressure drop**
10. Blower
11. Spray-guns and lances



## 8. Nozzles

- ✓ Symmetry (left and right)
- ✓ No dripping after stopping spraying
- ✓ Switching off
- ✓ Adjustment

## 9. Pressure drop



- ✓ Pressure drop between manometer and back max. 15%
- ✓ Compensative returns
- ✓ Height distribution (optional)



# EN-ISO 16122:4 Fixed and semi-mobile sprayers

## Definition:

### 3.1

#### **fixed sprayer**

machine primarily for spraying plant protection products in covered structures, and where the pump/tank unit (3.3) and/or application unit (3.4) do not move

### 3.2

#### **semi-mobile sprayer**

machine primarily for spraying plant protection products on crops grown in covered structures, and where the pump/tank unit (3.3) and application unit (3.4) are moveable

### 3.3

#### **pump/tank unit**

device made at least by the pump and the spray liquid tank

Note 1 to entry They can be built together as one unit or separate units.

### 3.4

#### **application unit**

device consisting of one or more nozzles/spray generators with or without air-assistance, and used with a separate pump/tank unit to which it is connected by a pipeline



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# Outline of spraying equipment covered by standards ISO 16119-4 and ISO 16122-4 Fixed and semi-mobile spraying equipment:

Pump/tank unit:

Fixed



Semi-Mobile



Transport application unit in/over the crop  
Manual



Motorized Monorail (hor. boom)



Transport of liquid to application unit:

Manual operated reel:



Spring operated reels



Electric operated reels + hose



Self-propelled



Application unit:  
Spray gun / lance



Horizontal spray boom



Vertical spray boom



Optional  
With air-assistance



With dosing unit  
for pesticides



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## Registration of inspection

- Report with results for owner of sprayer
- In EN-ISO 16122 no standard lay-out, but minimum requirements content:
  - Test station;
  - Reference to EN ISO 16122 and deviations, if any;
  - Owner's identity and address;
  - Sprayer data:
    - manufacturer;
    - Type;
    - Serial number or other identification;
    - Year of construction;
    - Drive (i.e. Mounted/trailed /self-propelled);
  - Name and contact details of the inspector and Signature;
  - Date of inspection;
  - Any malfunction of the sprayer. If the malfunction is a result of sprayer design this should be noted;
  - Any information on malfunctions of the sprayer useful to identify the corrective work required;
  - Results of measurements





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Official body

Name and address of the workshop that performed the inspection

Owner of the sprayer

Identification of the sprayer

Results of the inspection

Conclusion of the inspection

Unique label

Date of the inspection

Signature

Detected defects

Ev. remarks

Explanation about how to complain

Opleiding Kwaliteitseisen Landbouwtechniek (SKL) te Wageningen  
 P.O. Box 407 NL-6700 AK Wageningen Tel: +31317-479706 Fax: +31317-479666 E-mail: info@sklwagening.nl Internet: www.sklwagening.nl

### Test report Field crop sprayers

**Inspection workshop:**  
 Number: 999  
 Name: Opleiding keurmeesters PTC+ Ede  
 Address: Postbus 32, 6710AA EDE  
 Phone: 0318-697111

**Sticker:** 1000106  
**Date of inspection:** 18-04-2012  
The expiry date of this test may vary, depending on national legislation.

**SKL inspection on behalf of:**  
 Name: mohammed ali  
 Address: achterweg 1  
 ZIP code / Place: 1111 ab ede

**Test operator:** S. Posthuma  
**Signature:**

**Technical data sprayer:**  
 Manufacturer: Hard Type: 361m8001c12hal Capacity pump: 171 liter/min  
 Year of construction: 1997 Serial nr.: 80002 Max. pressure system: 15 bar  
 Working width: 12 meter  
 Spray tank: 800 liter  
 Agitation system: Hydraulic and injector  
 Minimal needed agitation: 20.0 liter/min

Results inspection	Result	Defects
A Inspection of Spray boom: In- and out folding, locking	Repaired	<input type="checkbox"/> 1. Excessive force / tools needed <input checked="" type="checkbox"/> 2. Irregular
B Height adjustment	Good	<input checked="" type="checkbox"/> 3. Locking <input type="checkbox"/> 4. Clamping of hoses <input type="checkbox"/> 1. Breaks / frays cable <input type="checkbox"/> 2. Unsafe <input type="checkbox"/> 3. Height unstable
C Minimum spray height: 65 cm	Good	<input type="checkbox"/> 1. Slope compensation system defect <input type="checkbox"/> 2. Too stiff
D Clamping / slope compensation	Repaired	<input checked="" type="checkbox"/> 1. Overlighten <input type="checkbox"/> 2. Return
E Automatic resetting	Repaired	<input checked="" type="checkbox"/> 1. Bending/loose in joints <input type="checkbox"/> 2. Drive system
F Quality of the construction	Repaired	<input type="checkbox"/> 3. Sewing <input type="checkbox"/> 2. Bent pipe
G Spray lines	Repaired	<input type="checkbox"/> 1. Leakages <input type="checkbox"/> 3. Nozzle fastening / height <input type="checkbox"/> 4. Tank emptying device <input type="checkbox"/> 5. Inclusion hoses <input type="checkbox"/> 6. Non-return device <input type="checkbox"/> 2. Lid <input type="checkbox"/> 3. Pressure compensation <input type="checkbox"/> 4. Tank emptying device <input type="checkbox"/> 5. Strainer <input type="checkbox"/> 6. Non-return device <input type="checkbox"/> 1. Inverted <input type="checkbox"/> 2. Poor
H Filtering	Repaired	

**Measurements of the manometer / Pressure sensor:**  
 Nr. 1 Feature: Fluid Manometer  
 Reading on spray manometer: 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 bar  
 Reading on reference manometer: 1.0 1.9 3.0 4.0 5.0 6.1 7.2 8.3 bar  
 0.0 0.1 0.0 0.0 0.0 -0.1 -0.2 -0.3 bar  
 Nr. 2 Feature: Fluid Manometer  
 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 bar  
 1.1 2.2 3.2 4.3 5.3 6.3 7.4 8.5 bar  
 -0.1 -0.2 -0.2 -0.3 -0.3 -0.3 -0.4 -0.5 bar

Inspection of	Result	Defects
I Spray manometer(s)	Good	<input type="checkbox"/> 1. Diameter <input type="checkbox"/> 2. Scale <input type="checkbox"/> 3. Accuracy <input type="checkbox"/> 4. -
J Flowmeter / speedometer	N/A	<input type="checkbox"/> 1. Accuracy flowmeter <input type="checkbox"/> 2. Accuracy speedometer
K Pump / pressure test	Repaired	<input checked="" type="checkbox"/> 1. Leakages (not spraying) <input type="checkbox"/> 2. Overpressure protection <input type="checkbox"/> 3. Hoses swollen <input checked="" type="checkbox"/> 4. Leakages (while spraying) <input type="checkbox"/> 5. Anti-drip system <input type="checkbox"/> 6. Obstacles in Spray pattern
L Pressure regulator	Good	<input type="checkbox"/> 1. Inaccurate <input type="checkbox"/> 2. Reproducibility <input type="checkbox"/> 2. Functioning
M Minimal needed agitation	Good	

Measured agitation: 76 liter/min, Measured capacity of the pump: 134 liter/min

**N Cross distribution spray nozzles**  
 Nozzles:  

Nr.	Description	Result	Brand, type, spray angle / size	Test height (cm)	Test pressure (bar)
1	Venturi flat fan nozzle	Good	Lechler IDKN 120 - 04	50	5
2	Anvil nozzle	null	Teejet TTJ80 110 - 025	55	
3	Venturi flat fan nozzle	Good	Lechler IDN 120 - 03	50	
4	Venturi flat fan nozzle	Good	Agrotop Airmix 110 - 04	55	
5	Venturi flat fan nozzle	Repaired	Agrotop TurboDrop HiSpeed 110 - 02	55	6

**Border nozzles**  
 None.

Inspection of	Result	Defects
O Pressure accumulator	N/A	<input type="checkbox"/> 1. Leakage <input type="checkbox"/> 2. Setup <input type="checkbox"/> 3. Man. needle not stuck
P Reduction hopper	Good	<input type="checkbox"/> 1. Damage <input type="checkbox"/> 2. Blockage swirl <input type="checkbox"/> 1. Leakage <input type="checkbox"/> 2. Thoroughness
Q	Good	

**Conclusion:** Sprayer approved after repair.

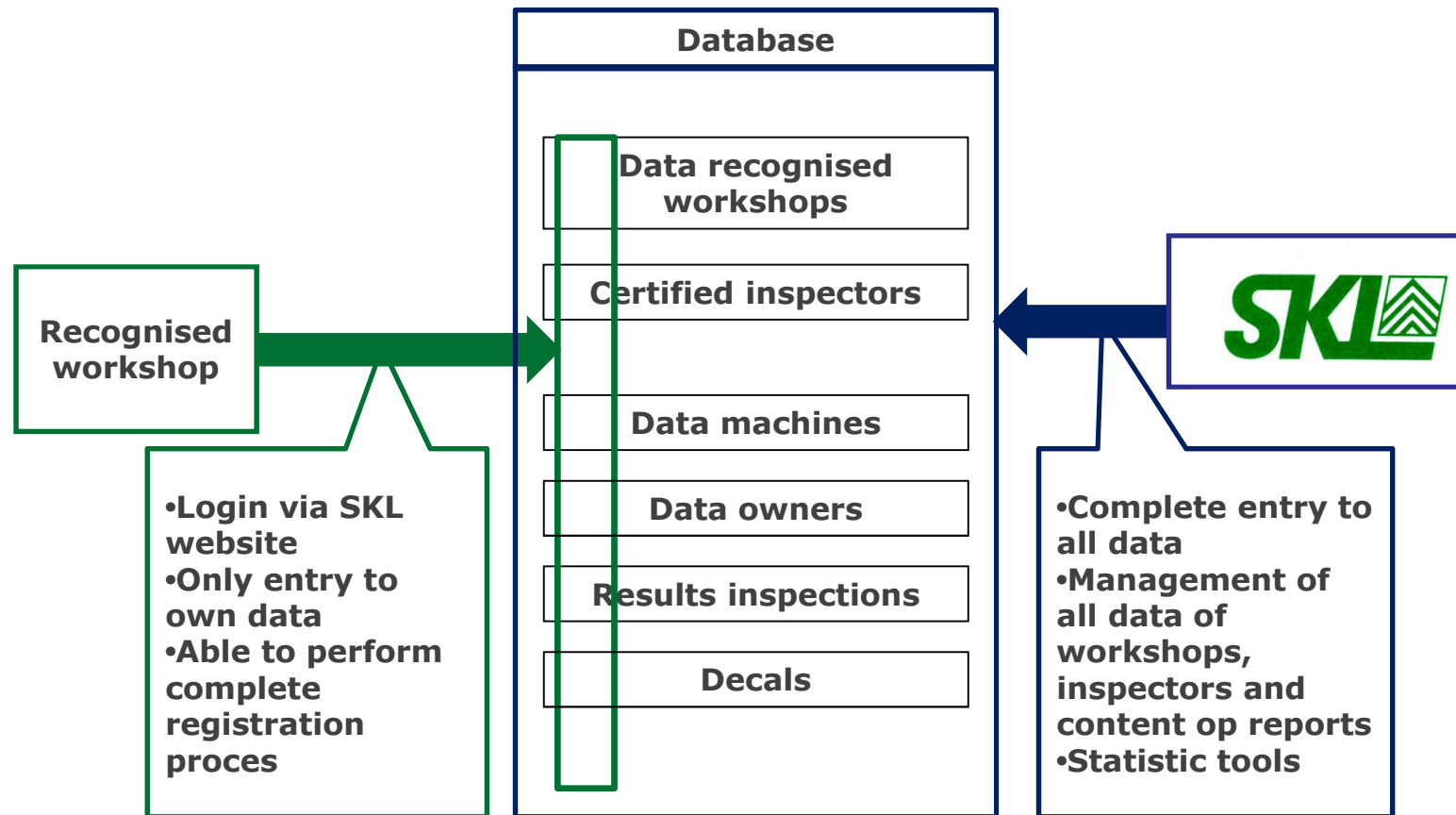
Page 1 of 1  
 This inspection is conducted in accordance with applicable SKL inspection provisions. These provisions are available at the SKL recognized inspection workshops.  
 The decision on approval or disapproval can be regarded as a decision on behalf of the President of a (main) commodity boards.  
 Against this decision an appeal can be made within six weeks after the date of the inspection to them via SKL, P.O. Box 407, NL-6700AK Wageningen, the Netherlands.

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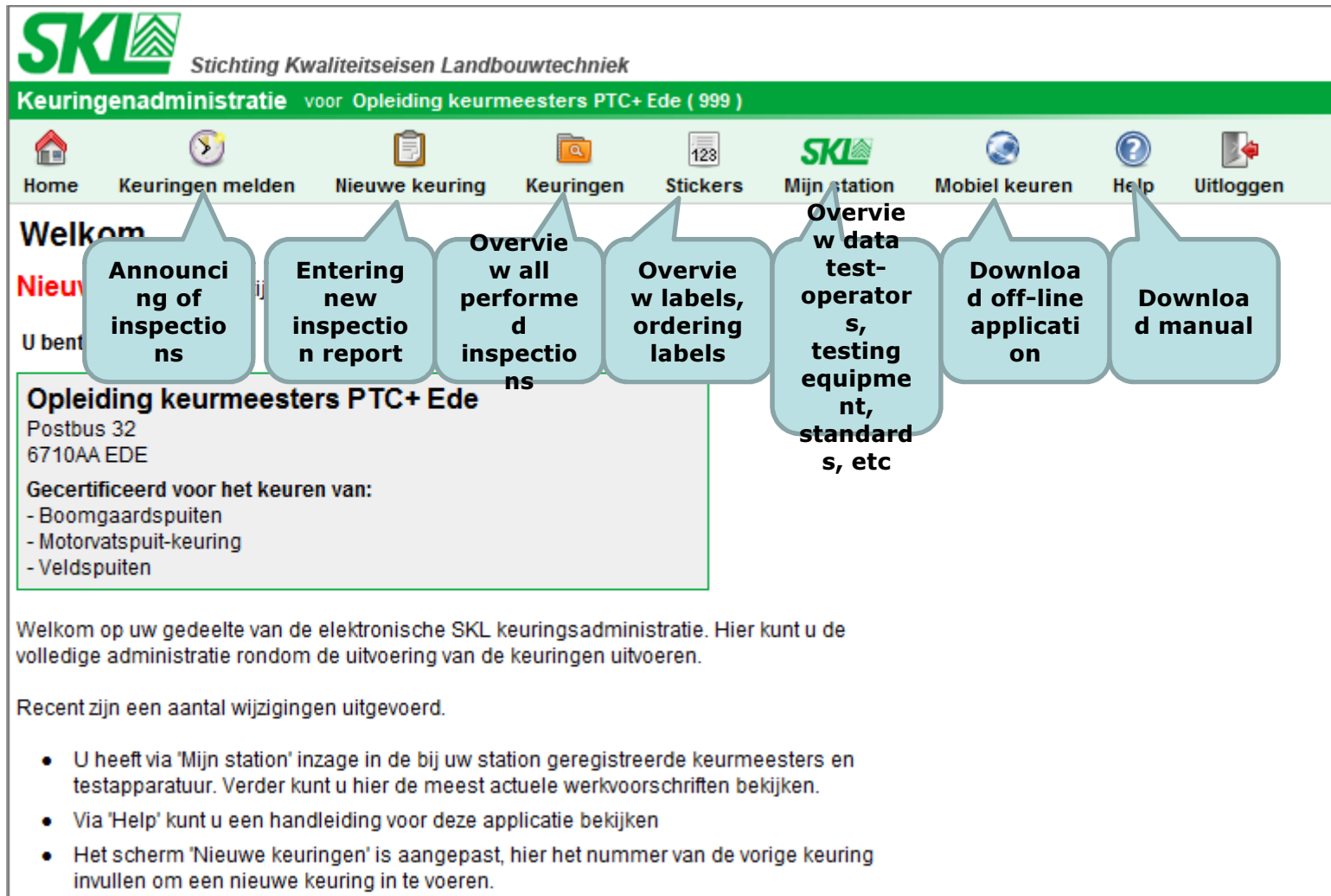
## Registration of inspection

- No standard software tools
- In different countries different solution:
  - Stand-alone system with paper transfer to central organization
  - Stand-alone system with electronic transfer to central organization
  - Web-based solution
- Developed by national organization or other (suppliers testing equipment)

# Example of webbased registration tool in Netherlands



## Registration part for workshops



**SKL** Stichting Kwaliteitseisen Landbouwtechniek

**Keuringenadministratie** voor Opleiding keurmeesters PTC+ Ede ( 999 )

Home Keuringen melden Nieuwe keuring Keuringen Stickers 123 SKL Mijn station Mobiel keuren Help Uitloggen

**Welkom**

**Nieuw**

U bent

**Opleiding keurmeesters PTC+ Ede**  
Postbus 32  
6710AA EDE  
Gecertificeerd voor het keuren van:  
- Boomgaardspuiten  
- Motorvatspuit-keuring  
- Veldspuiten

**Announcing of inspections**

**Entering new inspection report**

**Overview all performed inspections**

**Overview labels, ordering labels**

**Overview data test-operators, testing equipment, standards, etc**

**Download off-line application**

**Download manual**

Welkom op uw gedeelte van de elektronische SKL keuringsadministratie. Hier kunt u de volledige administratie rondom de uitvoering van de keuringen uitvoeren.

Recent zijn een aantal wijzigingen uitgevoerd.

- U heeft via 'Mijn station' inzage in de bij uw station geregistreerde keurmeesters en testapparatuur. Verder kunt u hier de meest actuele werkvoorschriften bekijken.
- Via 'Help' kunt u een handleiding voor deze applicatie bekijken
- Het scherm 'Nieuwe keuringen' is aangepast, hier het nummer van de vorige keuring invullen om een nieuwe keuring in te voeren.



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# Filling in the results of inspection on- line

**SKL** Stichting Kwaliteitsreizen Landbouwtechniek  
Keuringenadministratie voor Opleiding keurmeesters PTC- Bde ( BBS )

Home Keuringen melden Nieuwe keuring Keuringen Stickers Mijn station Communicatie Mobiel keuren Help Uitloggen

### Keuringsformulier veldspuit

**Algemene gegevens**

Keuringstation / Stationnummer:  Opleiding keurmeesters PTC- Bde ( BBS )  
Adres:  Postbus 30, Bde Keurmeester:  Selecteer keurmeester  
Datum opdracht:  01-05-2015 dd-mm-jj  
Datum keuring:  01-05-2015 dd-mm-jj Tijdstip:  Selecteer tijd

SKL keuring in opdracht van:  
Naam:   
Adres:   
Postcode + plaats:

**1. SKL keuring niet uitgevoerd omdat:**

Spuit ontstonds was gerept  Aansluiting niet aanwezig was  
 Lekkage van water of olie bij sluitend  Spuit onveilig was voor keuring  
 Niet alle slippers zijn aangeboord  Keuringopdracht ontbreekt

**2. Technische gegevens van de te keuren veldspuit:**

Merk:  Selecteer merk Type:   
Bouwjaar:  Serienummer:   
Nominale tankinhoud:  liter Spuitboombreedte:  meter  
Volgens het identiteitsplaatje is de:  
Pompopbrengst:  liter/min Max. spuitendruk:  bar  
Soort roermechaniek:  Selecteer roermechaniek Storing moet voldoen aan:  liter

**3. Resultaten keuring:**

	B	S	L	C	O	C	H	T	N	V	T
A Spuitaan- en afkleppen, verspreiding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B Hoopverspreiding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C Minimale spuitboombreedte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D Obstruktievrijheid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1. gewild/gewenst  
2. ongewild  
3. vergrendeld  
4. afklemmen slangen  
1. trukschakel  
2. onveilig  
3. hoopje instabiel  
1. complete defect  
2. smal  
1. te veel  
2. terugveert

# Registration part for official organisation

## Interne administratie

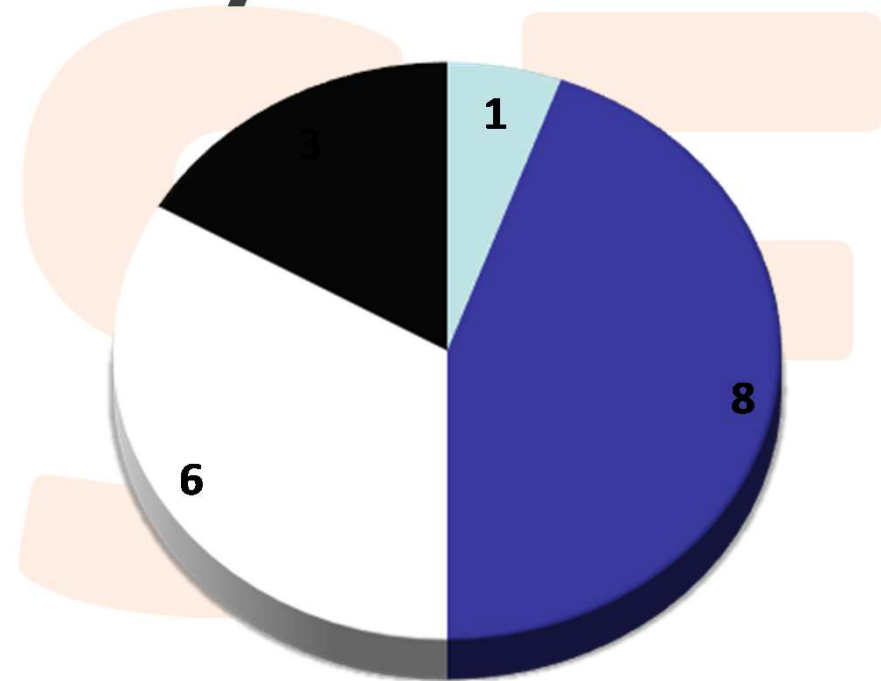
Home [Relatiebeheer](#) [Orderbeheer](#) [Financieel](#) [Inspectiebeheer](#) [Keuringen](#) [Keuringsformulier](#) [Stickers](#) [Correspondentie](#) [Statistieken](#) [Documentatie](#) [Overige](#)

Keuring	Gegevens eigen	Overige
<b>CRM part</b>	<b>Registration tool Inspection of workshops</b>	<b>Overview all performed inspections</b>
<b>Financial part</b>	<b>Management content reports</b>	<b>Statistics</b>
	<b>Management Workshop site</b>	<b>Reports for internal performance</b>

Data-Id	Keuringtype	Station	Keuringsdatum	Suiker nr	naam eigenaar	Plaats	Merk spuit	Bouwjaar	Serienummer	Gemeld
0_-2140955606	Veldspuiten	DUBEX B.V.	31-05-2012	78605	Dhr. G. Kets	Biddinghuizen	Dubex	2012	114241	Nee
0_-2140955572	Veldspuiten	P. Kriesels Landbouwtechniek B.V.	31-05-2012	81080	Van Hassel	wouw	Dubex	1984	2683	Nee
0_-2140955538	Veldspuiten	Bruggers Mechanisatie	31-05-2012	80426	Kruize	Bourtange	Dubex	2000	62198	Ja
0_-2140955503	Veldspuiten	DMS Rutten	31-05-2012	81724	Mts Rodenburg	Ens	Douven	1992	9022178	Ja
0_-2140955361	Veldspuiten	AGCO Netherlands B.V.	31-05-2012	78463	Agco Netherlands BV	Grubbenvorst	Challenger	2012	agcco635ecwoo1018	Nee
0_-2140955288	Veldspuiten	BUTS-MEULEPAS BV	31-05-2012	81441	V Gogh	Vinkel	Douven	1986	-	Ja
0_-2140955466	Veldspuiten	Weevers Swifterbant / Zeewolde	31-05-2012	82108	Geerling, E.	Ielystad	Sieger	2002	834022004	Nee
0_-2140955246	Veldspuiten	LMB NABER Vof	31-05-2012	81890	Mts Gommers	Stieltjeskanaal	Dubex	1997	49398	Ja
0_-2140955193	Veldspuiten	ABEMEC Sevenum	31-05-2012	82203	Sterren, Mts. Van de	America	Dubex	1987	14168	Ja
0_-2140955684	Veldspuiten	Mechanisatie Centrum Valthermond B.V.	31-05-2012	82267	Dijks, H	Valthermond	Sieger	1995	3732	Ja
0_-2140955614	Veldspuiten	MENNINK Mechanisatie	31-05-2012	82406	Kiers, H.	geesbrug	Sieger	1992	3495	Ja
0_-2140955083	Veldspuiten	MENNINK Mechanisatie	31-05-2012	82408	WP SCHEPER	FLUITENBERG	Cebeco	1992	71792141	Ja
0_-2140955029	Veldspuiten	Kersten en Voeten BV	31-05-2012	81713	R Goderie	Achtmaal	Douven	1984	8054277	Ja
0_-2140954984	Veldspuiten	Dijkstra & Langeweg B.V.	31-05-2012	81694	De Groene	Rutten	Agrifac	1998	79198503	Ja
0_-2140954932	Veldspuiten	HEERES Mechanisatie	31-05-2012	81946	Maatschap Meijer	Blijham	CHD	1998	198	Ja
0_-2140956269	Veldspuiten	MENNINK Mechanisatie	31-05-2012	82407	mts I STIGTER - T.C.STIGTER-KLOOT	DWINGELOO	Dubex	1992	33664	Ja
0_-2140955116	Veldspuiten	Landbouwmechanisatie J. LORIER	31-05-2012	79685	J&K de Witte	Zoutelande	Agrifac	2002	742.02.304	Nee
0_-2140956772	Veldspuiten	Coenders Lottum B.V.	30-05-2012	81361	SEELLEN loonbedrijf	MAASBREE	Coenders	2012	5117	Ja
0_-2140957043	Veldspuiten	Coenders Lottum B.V.	30-05-2012	81360	WILLEMS M. en J. MTS	OIRLO	Hardi	2009	0008013216	Ja
0_-2140956734	Veldspuiten	Agricenter Middelkoop B.V.	30-05-2012	80105	mts Zevenbergen-Walraven	Oud-Beijerland	Dubex	2003	73996	Ja

# What is the advantage of the use of a software system?

- A. Easy for workshop/inspector
- B. Improving quality reports (complete and readable)
- C. Decrease workload both for workshop and central organisation
- D. Easy transfer of the data



 A    B    C    D



- Introduction
- Requirements in EN-ISO 16122
  - Part 1: General
  - Part 2: Horizontal boom sprayers
  - Part 3: Sprayers for bush and tree crops
  - Part 4: Fixed and semi-mobile sprayers
- Registration of the results
- Use of software tools for registration
- Certificate/sticker**
- Final remarks

## Certificate/sticker

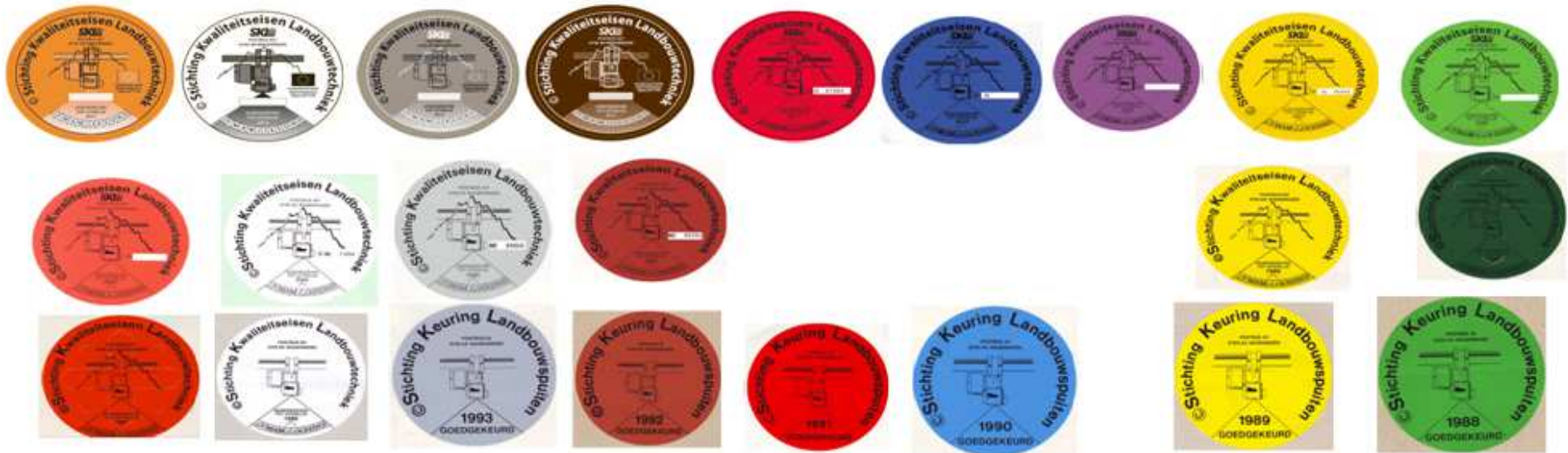
- Test-report + sticker on the approved machine
- Clear for owner + authorities
- Sticker not mandatory because of EN-ISO16122
- All countries have unique stickers





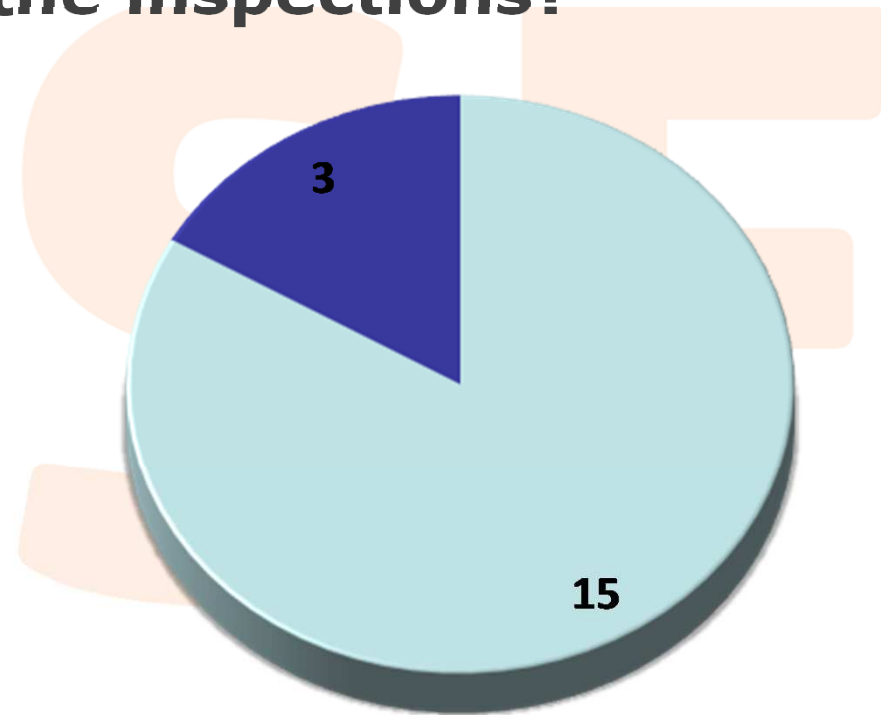
European Commission

# Example of decal (NL)



## Would a uniform (European) sticker and test-report be useful for mutual recognition of the inspections?

- A) Yes
- B) No



- Introduction
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# Final remarks

**EN-ISO 16122 covers all relevant parts of the  
sprayer**

**Harmonisation of the organization is not included in  
the standard**

**EN-ISO 16122 is the basis for uniform execution of  
the inspection**

**EN-ISO 16122 is the basis for mutual recognition of  
the inspections**



*Thank you for your attention.*

**Better Training for Safer Food**  
**BTSF**

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Consumers, Health and Food Executive Agency  
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L-2920 Luxembourg*

*Consumers,  
Health And Food  
Executive Agency*