

# **TÜV Nederland QA B.V. report**

**NEN-EN 131-4:2007**

**2400-B-754-2 Wing Enterprises**

**31-04-2019**

---

# Summary

The original report remains property of TÜV Nederland QA B.V.

---

Assignor	Wing Enterprises W. Industrial Circle 1325 84663 3100 SPRINGVILLE UTAH U.S.A.
Contact person(s)	Mr Scott Patton

---

Description of the test	EN 131-4:2007
Description of product(s)	Black Pro Leveler series (4x4*, 4x5, 4x6) Leveler series (4x4, 4x5, 4x6) Velocity series (4x4, 4x5, 4x6)



---


Remarks	* Black Pro Leveler 4x4 not pictured
---------	--------------------------------------

---

Conclusion	ITT: Pass FPC: Not performed
------------	---------------------------------

---

Executed by	Martijn Otten
Period of execution	Q1, 2019
Report date	31-4-2019

Reported by	Martijn Otten 
-------------	--

Reviewed by	André Piers 
-------------	---

# Content

<b>Summary .....</b>	<b>1</b>
<b>1. Introduction .....</b>	<b>3</b>
<b>2. Description &amp; Results .....</b>	<b>4</b>
2.1 Description of the test & results .....	4
<b>3. Factory inspection production consistency .....</b>	<b>12</b>
3.1 Type of inspection and history .....	12
3.2 Status report.....	12
3.3 Non-conformities .....	13
3.4 Report of findings of the factory inspection .....	14
<b>4. Conclusion / Discussion .....</b>	<b>16</b>

# 1. Introduction

Wing Enterprises, based in Springville, Utah, Usa, has commissioned TÜV Nederland QA B.V. with the testing of ladders by means of “Opdrachtbevestiging 2400-B-754-3” (21-01-2019).

Purpose of the testing was to determine whether or not the ladders comply with the requirements of the European product standards of the EN 131-series.

On in week 4 of 2019 the following ladders were send in by the assignor:

- Black Pro Leveler series (4x4, 4x5, 4x6)
- Leveler series (4x4, 4x5, 4x6)
- Velocity series (4x4, 4x5, 4x6)

TÜV Nederland QA was not involved in the sampling of the test specimen.

This report details the tests as executed by TÜV Nederland inspectors, and contains the results of the tests.

This report does not allow you to use TÜV labels and/or company logo's for the tested products.

The report reflects the test results for the tested product(s) only.

In case a TÜV logo is wished based on the test results TÜV must perform Factory Production Inspections to prove the consistency of production and performances to the results obtained in this test report.

Chapter two is related only to the testing of the product.

Chapter three is related to the Factory Inspection to prove the consistency of production that can entitle a manufacturer to carry a TÜV product label on the products self, website and other means of marketing.

The proof of product consistency is then reported in that chapter.

In case this activity is not a part of the work assigned to TÜV, then this chapter is left empty for a possible future expansion of the activities.

In the conclusion the entitlement to allow or not allow a TÜV Product label is explicitly declared.

## 2. Description & Results

### 2.1 Description of the test & results, initial type testing (ITT)

Relevant clauses are tested of:

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> EN 131-1:2015         | Ladders - Part 1: Terms, types, functional sizes         |
| <input checked="" type="checkbox"/> EN 131-2:2010+A2:2017 | Ladders - Part 2: Requirements, testing, marking         |
| <input checked="" type="checkbox"/> EN 131-3:2018         | Ladders - Part 3: Marking and user instructions          |
| <input checked="" type="checkbox"/> EN 131-4:2007         | Ladders - Part 4: Single or multiple hinge-joint ladders |




EN 131-1:2015 Ladders - Part 1: Terms, types, functional sizes	Pass / Fail / Not applicable (Optional: Measurement)
<p>4.2 Leaning rung ladders Functional sizes are given in Table 2 of EN131-1. Special requirements for</p> <ul style="list-style-type: none"> <li>- one-piece leaning rung ladders,</li> <li>- sectional ladders,</li> <li>- extending ladders.</li> </ul>	<p>PASS  With exception of top width b2.</p>
<p>4.3 Standing rung ladders Functional sizes are given in Table 3 of EN131-1. Special requirements for</p> <ul style="list-style-type: none"> <li>- one-piece leaning rung ladders,</li> <li>- sectional ladders,</li> <li>- extending ladders.</li> </ul>	<p>PASS</p>
<p>4.4 Combination ladders Functional sizes for two piece combination ladders are given in Table 4 of EN131-1. Functional sizes for three piece combination ladders are given in Table 5 of EN131-1.</p>	<p>NOT APPLICABLE</p>
<p>4.5 Leaning step ladders Functional sizes are given in Table 6 of EN131-1.</p>	<p>NOT APPLICABLE</p>
<p>4.6 Standing step ladders Functional sizes are given in Table 7 of EN131-1.</p>	<p>PASS</p>
<p>4.7 Standing rung and step ladder According 4.3 for rung section and 4.6 for step section.</p>	<p>PASS</p>

Functional sizes reported in separate report ID 19-005, ID 19-006, ID 19-007, ID 19-008, and ID 19-016.

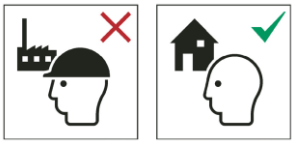

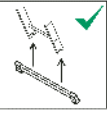





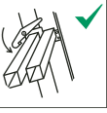
EN 131-2:2010+A2:2017 Ladders - Part 2: Requirements, testing, marking	Pass / Fail / Not applicable (Optional: Measurement)
4.2.1 Aluminium — alloy Elongation A5 > 5% according EN ISO 6892-1. Thickness > 1,2 mm.	PASS
4.2.2 Steel R <sub>p0,2</sub> /R <sub>m</sub> > 0,92. Thickness > 1,0 mm.	PASS
4.2.3 Plastics Smooth surface, fibres shall be embedded, Thermoplastic without reinforcements are not allowed. Barcol hardness > 35. Thickness > 2,0 mm.	NOT APPLICABLE
4.2.4 Timber	NOT APPLICABLE
4.3 Design Minimized shearing and squeeze points. Durable connections. Screws and nuts shall be secured. Nails are not allowed (temporarily allowed the production process). Welding of joints is permitted if ISO 14731 and ISO 3834 is observed.	PASS
4.4 Surface finish	PASS
4.5 Hinges (turning points) Pins shall have the same strength as M6 (ø5,3) pins of steel 8.8.	PASS
4.6 Opening restraints	PASS
4.7 Rungs/steps/platforms Round rungs shall have a diameter greater than or equal to 25 mm. The top surface of flat standing surfaces shall have an angle less than or equal to 25° to the horizontal. For leaning ladders the angle related to the stile shall be 65° to 90° for rungs and 60° to 70° for steps.	PASS
4.8 Platform If the topmost walking surface of a standing ladder is designed as a foldable platform, the latter shall be lifted up by a device when the ladder is folded.	NOT APPLICABLE
4.9 Ladder feet and anti-skid devices	PASS
4.10 Extending and sectional ladders unintentional closing and separation of push-up extensions, safe catch by locking devices on rope-operated extending ladders, rope strength > 4 kN and > ø8mm and UV stabilized.	PASS
5 Testing 5.1 General For all tests, unless otherwise stated in the particular test, the following tolerances apply: - ± 1 mm for longitudinal measurements; - ± 5 mm for measurement of the distance between the supports / overhanging length; - ± 1° for the measurement of angles; - ± 1% for static forces and torque.	
5.2 Strength test for all ladders ( <i>No. in test order sequence: 11</i> ) Non-professional 2.250 N Professional 2.700 N <i>Note: this test will be replaced by test EN131-4 :2007 §6.2.2 for hinged ladders.</i>	NOT APPLICABLE


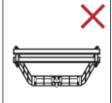


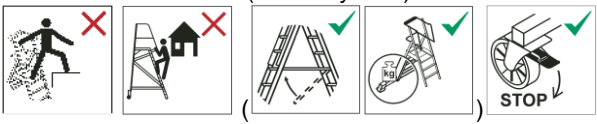

5.3 Bending test of the stiles ( <i>No. in test order sequence: 10</i> )	PASS
5.4 Lateral deflection test of the ladder ( <i>No. in test order sequence: 9</i> )	PASS
5.5 Bottom stile ends test ( <i>No. in test order sequence: 20</i> )	PASS
5.6 Vertical load on rungs, steps and platforms ( <i>No. in test order sequence: 13</i> )	PASS
5.7 Torsion test of rungs and steps ( <i>No. in test order sequence: 12</i> )	PASS
5.8 Test of opening restraints and hinges of standing ladders ( <i>No. in test order sequence: 18</i> )	PASS
5.9 Test for ladder rung/step hooks of extending ladders and combination ladders ( <i>No. in test order sequence: 14</i> )	PASS
5.10 Kick-up test of the platform of standing ladders ( <i>No. in test order sequence: 5</i> )	NOT APPLICABLE
5.11 Feet pull test ( <i>No. in test order sequence: 19</i> )	PASS
5.12 Test on hand-/kneerails ( <i>No. in test order sequence: top:7 / side:8</i> )	FAIL
5.13 Maximum extension of ladder ( <i>No. in test order sequence: 1</i> )	PASS
5.14 3-part combination ladder in A-position test ( <i>No. in test order sequence: 6</i> )	NOT APPLICABLE
5.15 Torsion test for standing ladders ( <i>No. in test order sequence: 15</i> )	PASS
5.16.1 Test for thermoset plastics and composite materials	NOT APPLICABLE
5.16.2 Test for reinforced thermoplastics	NOT APPLICABLE
5.16.3 Dielectric test	NOT APPLICABLE
5.17 Durability test for standing ladders ( <i>No. in test order sequence: 17</i> )	PASS
5.18 Base slip test for leaning ladders ( <i>No. in test order sequence: 2</i> )	PASS
5.19 Strength test for lateral type stabilizers on leaning ladders which are in the plane of the ladder ( <i>No. in test order sequence: 3</i> )	NOT APPLICABLE
5.20 Strength test for pole type stabilizers on leaning ladders which are not in the plane of the ladder ( <i>No. in test order sequence: 4</i> )	NOT APPLICABLE
5.21 Torsion test for leaning ladders ( <i>No. in test order sequence: 16</i> )	PASS
6 Marking and user instructions – see EN 131-3 Ladders should be marked with - the relevant parts of EN 131 to which they fully comply and - the year of revision(s). - Marking shall be durable.	PASS

Test values reported in separate report ID 19-005, ID 19-006, ID 19-007, ID 19-008, and ID 19-016.

EN 131-3:2018 Ladders - Part 3: Marking and user instructions	Pass / Fail / Not applicable (Optional: Measurement)
4 Provision of safety marking and user instructions	PASS
5 Reasons for accidents Loss of stability, handling, slip/trip/fall of user, structural failure, electric hazards	PASS
6.1 General marking and user instructions Inspection requirements, user instruction shall be available and downloadable, identity and address shall be mentioned, user manual repeats markings.	PASS
6.2.a – Identity and address of manufacturer and distributor incl. website	PASS
6.2.b – type of ladder and possible use modes	PASS
6.2.c – classification pro / non-pro	PASS
6.2.d – reference to applicable standard	PASS
6.2.e – reference to month and year of production	PASS
6.2.f – weight of ladder	PASS
6.2.g – insulation, if applicable	PASS
6.3.2 Safety signs (according ISO 3864-1, ISO 3864-3 and based upon the EN ISO 7010)	PASS
6.3.3 Supplementary safety information symbols for all ladders (min. height 15 mm) As safety marking (symbol) and in the user information (text or symbol): 	PASS
In the user information (text or symbol): 	PASS
In the user information (text): <ul style="list-style-type: none"> <li>- Prevent damage of the ladder when transporting</li> <li>- Ensure the ladder is suitable for the task.</li> <li>- Do not use the ladder if contaminated,</li> <li>- Do not use the ladder outside in adverse weather conditions,</li> <li>- For professional use a risk assessment shall be carried out respecting the legislation in the country of use</li> <li>- When positioning the ladder take into account risk of collision with the ladder</li> <li>- Do not modify the ladder design.</li> <li>- Do not move a ladder while standing on it.</li> <li>- For outdoor use caution to the wind.</li> </ul>	PASS
Warning for electricity, in the user information (text or symbol): 	PASS



 <p>Ladder for domestic use</p>	 <p>Ladder for professional use</p>	<p>PASS</p>
 <p>Only in case a ladder is delevered with stabilizer bar which should be fixed by the user.</p>		<p>PASS</p>
<p>6.3.4 Supplementary safety information symbols for leaning ladders (min. height 15 mm)                  As safety marking (symbol) and in the user information (text or symbol):</p> 		<p>PASS</p>
<p>In the user information (text):                  - Ladder shall never be moved from the top.</p>		<p>PASS</p>
<p>6.3.5 Supplementary safety information symbols for standing ladders (min. height 15 mm)                  As safety marking (symbol) and in the user information (text or symbol):</p> 		<p>PASS</p>
<p>In the user information (text or symbol):</p> 		<p>PASS</p>
<p>Symbol designed for surfaces not designed to stand on</p> 		<p>PASS</p>
<p>6.3.6 Supplementary safety inf. symbols for combination ladders (min. height 15 mm)                  As safety marking (symbol) and in the user information (text or symbol):</p> 		<p>PASS</p>
<p>6.3.7 Supplementary safety inf. symbols for extending ladders (min. height 15 mm)                  As safety marking (symbol) and in the user information (text or symbol):</p> 		<p>PASS</p>
<p>In the user information (text):                  - The loose end of the rope shall be tied to the ladder (only if necessary).</p>		<p>PASS</p>

<p>6.3.8 Supplementary safety inf. symbols for hinge joint ladders (min. height 15 mm)</p> <p>As safety marking (symbol) and in the user information (text or symbol):</p> 	<p>PASS</p>
<p>In the user information (text or symbol):</p> 	<p>PASS</p>
<p>In the user information (text):</p> <ul style="list-style-type: none"> <li>- Single or multiple joint ladders should be unfolded/folded when lying on the ground and not in its use position.</li> </ul>	<p>PASS</p>
<p>6.3.9 Supplementary safety inf. symbols for telescopic ladders (min. height 15 mm)</p> <p>As safety marking (symbol) and in the user information (text or symbol):</p> 	<p>PASS</p>
<p>In the user information (text):</p> <ul style="list-style-type: none"> <li>- Instruction for handling of locking mechanisms including indication of locked or unlocked position.</li> </ul>	<p>PASS</p>
<p>6.3.10 Supplementary safety symbols for mobile ladders with platform (min. height 15 mm)</p> <p>As safety marking (symbol) and in the user information (text or symbol):</p> 	<p>PASS</p>
<p>In the user information (text or symbol):</p> 	<p>PASS</p>
<p>Symbol designed for surfaces not designed to stand on</p> 	<p>PASS</p>
<p>7 Repair, maintenance and storage</p>	<p>PASS</p>
<p>Annex A (normative) - List of items to be inspected</p> <p>For regular inspection, the following items shall be taken into account:</p> <ul style="list-style-type: none"> <li>- check that the stiles/legs (uprights) are not bent, bowed, twisted, dented, cracked, corroded or rotten;</li> <li>- check that the stiles/legs around the fixing points for other components are in good condition;</li> <li>- check that fixings (usually rivets, screws or bolts) are not missing, loose, or corroded;</li> <li>- check that rungs/steps are not missing, loose, excessively worn, corroded or damaged;</li> </ul>	<p>PASS</p>

<ul style="list-style-type: none"> <li>- check that the hinges between front and rear sections are not damaged, loose or corroded;</li> <li>- check that the locking stays horizontal, back rails and corner braces are not missing, bent, loose, corroded or damaged;</li> <li>- check that the rung hooks are not missing, damaged, loose or corroded and engage properly on the; rungs;</li> <li>- check that guide brackets are not missing, damaged, loose or corroded and engage properly on the mating stile;</li> <li>- check that ladder feet / end caps are not missing, loose, excessively worn, corroded or damaged;</li> <li>- check that the entire ladder is free from contaminants (e.g. dirt, mud, paint, oil or grease);</li> <li>- check that locking catches (if fitted) are not damaged or corroded and function correctly;</li> <li>- check that the platform (if fitted) has no missing parts or fixings and is not damaged or corroded.</li> <li>- If any of the above checks cannot be fully satisfied, you should NOT use the ladder.</li> <li>- For special ladder types, further items identified by the manufacturer shall be taken into account.</li> </ul>	
---	--

Manual version 82609 v0 2.18

EN 131-4:2007 Additional / Changed requirements for hinged ladders	Pass / Fail / Not applicable (Optional: Measurement)
4.1 Ladders in single, standing and transformable position: dimensions according EN131-1.	PASS
4.2 Ladders hinged in "leaning ladder or standing ladder" positions	PASS
4.3 Hinged ladders in "platform" position	NOT APPLICABLE
4.4 Hinged ladders in "stand-off" position	NOT APPLICABLE
5.1 General requirements: max. load = 150 kg	PASS
5.2 Decking component	NOT APPLICABLE
6.2.2 Ladder strength test for ladders hinged in the longitudinal direction <i>Note: replacement of test of EN131-2 §5.2</i>	PASS
6.2.3 Cyclic test of hinge joint	PASS
6.2.4.2 Strength test of the decking component	NOT APPLICABLE
6.2.4.3 Safety test of the ladder (in platform position)	NOT APPLICABLE
6.2.4.4 Stability test of the ladder (in platform position)	NOT APPLICABLE
6.2.4.5 Test of decking component sliding	NOT APPLICABLE
6.3.2 Cyclic test of (lateral) hinge joints	NOT APPLICABLE
6.3.3 Capacity to pass from storage positions to working position	PASS
<b>7 Marking</b> Ladders shall meet the marking requirements of EN 131-2 with the following additional text: <ul style="list-style-type: none"> <li>- Prohibited positions shall be shown with a visually attached pictogram or text.</li> <li>- Marking shall indicate the possible level adjust position(s).</li> <li>- Maximum platform weight to be specified.</li> </ul>	PASS

## 2.2 Description of non-conformities of ITT phase

Non-conformity 1				
Inspection	§	Type of non-conformity	Review date	Status
Type	***	A/B	dd-mm-yyyy	Open/Closed
Non-conformity				
Cause analysis		*		
Correction		*		
Corrective action		*		
Verification effectiveness				
Non-conformity 2				
Inspection	§	Type of non-conformity	Review date	Status
Type	***	A/B	dd-mm-yyyy	Open/Closed
Non-conformity				
Cause analysis		*		
Correction		*		
Corrective action		*		
Verification effectiveness				
No-conformity 3				
Inspection	§	Type of non-conformity	Review date	Status
Type	***	A/B	dd-mm-yyyy	Open/Closed
Non-conformity				
Cause analysis		*		
Correction		*		
Corrective action		*		
Verification effectiveness				

## 3. Factory inspection production consistency

### 3.1 Type of inspection and history

Type of inspection	Date	Time	Inspection-team
<input type="checkbox"/> Initial inspection	dd-mm-yyyy	hh:mm – hh:mm	Inspector
<input type="checkbox"/> Continuous surveillance			
<input type="checkbox"/> Continuous surveillance			
<input type="checkbox"/> Continuous surveillance			
<input type="checkbox"/> Other			

### 3.2 Status report

Status report
<input type="checkbox"/> Draft, no non-conformities
<input type="checkbox"/> Draft, non-conformities established, corrective actions open
<input type="checkbox"/> Draft, non-conformities established, corrective actions accepted
<input type="checkbox"/> Final, no non-conformities
<input type="checkbox"/> Final, non-conformities closed

**Disclaimer:**

The inspection results as stated in this report are based on samples of the available information. The reader should be aware of the fact that therefore the results will have a degree of uncertainty. This should be taken into account when using the results. Prior to the certification decision, the recommendations in this report will be reviewed internal and independent. The original report will remain property of TÜV Nederland QA BV.

### 3.3 Non-conformities of FPC phase

<input type="checkbox"/> No non-conformities were noticed		
<input type="checkbox"/> Corrective actions can be settled administratively	No later than:	
<input type="checkbox"/> Corrective action will be assessed by means of a re-inspection	No later than:	

Non-conformity 1				
Inspection	§	Type of non-conformity	Review date	Status
Type	***	A/B	dd-mm-yyyy	Open/Closed
Non-conformity				
Cause analysis		*		
Correction		*		
Corrective action		*		
Verification effectiveness				
Non-conformity 2				
Inspection	§	Type of non-conformity	Review date	Status
Type	***	A/B	dd-mm-yyyy	Open/Closed
Non-conformity				
Cause analysis		*		
Correction		*		
Corrective action		*		
Verification effectiveness				
Non-conformity 3				
Inspection	§	Type of non-conformity	Review date	Status
Type	***	A/B	dd-mm-yyyy	Open/Closed
Non-conformity				
Cause analysis		*		
Correction		*		
Corrective action		*		
Verification effectiveness				

### 3.4 Report of findings of the factory inspection

The manufacturer shall establish a factory production control system (FPC), documenting and maintaining it to ensure that products placed on the market comply with the stated performance characteristics. The FPC system shall consist of written procedures, regular inspections and tests and / or findings and shall apply the results to control the constituent products used to produce the component, the machinery and tools, the production process and the manufactured components. The results of inspections, tests and observations as specified in the FPC system of the manufacturer shall be recorded. The measures to be taken if values are not controlled or do not meet criteria must be recorded and kept during a period that shall make part of the FPC in the procedures of the manufacturer. The assessment of the FPC should be done in accordance with the relevant parts and check points of Annex A of this report as general outline.

**Evidence:**

This document is supported by sampling of documents during the inspection and both form part of the Initial Assessment file:

**Non-conformities:** see 3.3

Initial Inspection
.....

**Surveillance Inspection**





## 4. Conclusion / Discussion

The product has been tested and the results of the tests indicate that the tested products are meeting the requirements of the relevant clauses of:

- ~~— Besluit draagbaar klimmaterieel (Warenwet) — valid from 09-05-2012 (BDK)~~
- ~~— Regeling nadere Eisen draagbaar klimmateriaal (Warenwet) — valid from 1-1-2014 (RNEDK)~~
- ~~— Regeling methoden van onderzoek draagbaar klimmaterieel (Warenwet) — valid from 01-03-1987 (RMODK)~~
- NEN-EN 131-1:2015 - Ladders – Part 1: Terms, types, functional sizes
- NEN-EN 131-2:2010+A2:2017 - Ladders - Part 2: Requirements, testing, marking
- NEN-EN 131-3:2018 - Ladders - Part 3: Marking and user instructions
- NEN-EN 131-4:2007 - Ladders - Part 4: Single and multiple hinge-joint ladders

TÜV is not auditing the productions control to inspect the product consistency.

As a consequence, the factory is not entitled to use a TÜV logo on the products, website and other marketing means.

## Annex A (only used in case TÜV product logo is part of the contract)

		Yes	NA	No
<b>1</b>	<b>GENERAL INFORMATION</b>			
<b>2</b>	<b>Verification of purchased components and materials which have a safety implication on the certified product (Incoming Inspection)</b>			
2.1	Are materials, components and sub-assemblies verified by the Manufacturer as complying with appropriate specification?			
2.2	Does this verification also include the verification of the Certification Marks? <i>NOTE: There shall be instructions as to which Certification Marks have to appear on the components/products in order to accept them.</i>			
2.3	If the Manufacturer relies on Certificates of Conformity, do they clearly identify the product, quantity of items covered, the specification to which the products conform, the production date and are they properly issued?			
2.4	Is there a procedure covering the way to handle non-conforming components and materials? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
2.5	Is the procedure and the way in which it is applied satisfactory? (e.g.: components and materials clearly identified and/or segregated to prevent unauthorised use?)			
2.6	Are records of the incoming inspection maintained and satisfactory?			
2.7	Are records kept at least for the period between two inspection visits?			
<b>3</b>	<b>Production Control, Monitoring and Routine Tests</b>			
3.1	Are the Quality Assurance and manufacturing Personnel adequately briefed on their duties?			
3.2	Do they have readily available up-to-date documents, manufacturing and test instructions, photographs, drawings or samples on all those parts which have an impact on the safety of the finished products?			
3.3	Is there evidence that the production process ensures that the final product is identical to the certified version as described in the specification (see clause 15) ?			
3.4	Is there a procedure to ensure that all products will be tested or inspected according to the Manufacturer's requirements with defined regime and with pass/fail? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
3.5	Is the production process controlled at appropriate stages?			
3.6	Are products examined at appropriate stages of manufacture (Production Line Inspection)? <i>NOTE:</i> Give details of all tests and inspections performed by the Manufacturer and enter in a routine test table.			
3.7	Do the Routine Tests sufficiently cover all the Certification Bodies' requirements?			
3.8	Is there a procedure covering the way to handle non-conforming products? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
3.9	Is the procedure and the way in which it is applied satisfactory? (e.g. non-conforming products clearly identified or segregated to prevent unauthorised use?)			

3.10	Are repaired and reworked (corrected) items again subjected to appropriate tests/examinations in accordance with procedures? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
3.11	Are test records of the routine tests maintained and satisfactory?			
3.12	Are records kept at least for the period between two inspection visits?			
<b>4</b>	<b>Functional Check of Test and Measuring Equipment used for Tests</b>			
4.1	Is there evidence that the functional check of the equipment is conducted properly, even if certified products were not in production?			
4.2	Is there a procedure describing how the functional checks shall be conducted? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Please refer to attachment no.:			
4.3	Is a functional check conducted with intervals which will allow previous production to be retested if incorrect functioning is detected before it leaves the factory?			
4.4	Is the proper function of the test equipment verified with a simulated failure (dummy) or by other equivalent means?			
4.5	Is there evidence that the simulated failure represents the limits as required? Defined should be the pass/fail criteria			
4.6	Is there a procedure requiring appropriate actions to be taken by the operator if a functional check is found to be unsatisfactory? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
4.7	Is this procedure appropriate to ensure that improperly checked products are re-tested?			
4.8	Are subsequent corrective actions taken recorded in all cases?			
4.9	Are the test records of results of functioning checks of test and measuring equipment maintained and satisfactory?			
4.10	Are records kept at least for the period between two inspection visits?			
<b>5</b>	<b>Products seen in Production during visit</b>			
	Identify type number and the usage of any certification mark that appeared on products seen in production at the time of the visit. If no certified products were seen, indicate what kinds of products were manufactured at the time of visit (this is probably an initial inspection) The manufacturing process shall nevertheless be examined. At least one kind of product per product category shall be listed. Production seen for the following product: Kind of product: Product category: Certification Marks:			
<b>6</b>	<b>Calibration / Verification of Test and Measuring Equipment</b>			
6.1	Is test and measuring for equipment used calibrated or verified? Provide details for at least measuring equipment as verified: Kind of equipment: Type reference: Calibration reference number: Date of last calibration: Calibration due date:			
6.3	Is the equipment provided with a label or similar indicating the next 'calibration due' date or another method ensuring the valid calibration/verification status?			
6.4	Do the calibration/verification records indicate that calibration is traceable to national/international standards of measurement?			
6.5	Are the records for calibration/verification of test and measuring equipment maintained and satisfactory?			

6.6	Are records kept at least for the period between two inspection visits?			
<b>7</b>	<b>Handling and Storage</b>			
7.1	Are the components and materials to be used for production stored and handled in such a way as to ensure that they will continue to comply with the applicable standards?			
7.2	Are the finished products stored and handled in such a way as to ensure that they will continue to comply with the applicable standards?			
<b>8</b>	<b>Product Verification Tests / Periodic Tests (PVT)</b>			
8.1	Are required PVT conducted? NOTE: Describe which tests (required by the Certification Body/certification scheme) are conducted and at what sampling rate on TEST DATA SHEET – Product Verification Tests			
8.2	Are the tests conducted in accordance with procedures? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
8.3	Is appropriate equipment that is required for conducting tests available?			
8.4	Are the tests described in TEST DATA SHEET – Product Verification Tests in compliance with the requirements of the Certification Schemes and/or the requesting Certification Body?			
8.5	Is there a procedure requiring actions to be taken if PVT are found to be unsatisfactory? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
8.6	Are the records of product verification tests maintained and satisfactory?			
8.7	Are records kept at least for the period between two inspection visits?			
<b>10</b>	<b>Corrective actions in response to Inspector's evaluation</b>			
10.1	If there were any unsatisfactory findings entered in the previous inspection report, have these been corrected? Provide details of each unsatisfactory finding and how each has been resolved.			
<b>11</b>	<b>Quality Management System</b>			
	If the Manufacturer has a Quality Management System certified or assessed by an accredited Body, provide details of QMS standard, scope, name of certification body and certificate expiry date or provide copy of the certificate. 0 Quality Management System NOT certified 0 Quality Management System certified by an accredited Body 0 Quality Management System certified by a non-accredited Body 0 Copy of the certificate provided as appendix to this report			
<b>12</b>	<b>Manufacturer's self-assessment of the manufacturing and control process of certified products (Former: Audits of the Quality System)</b>			
12.1	Does the Manufacturer regularly check that all procedures as required by the Certification Body(is) and inspection scheme are followed?			
12.2	Are records regarding results and actions taken available? NOTE: The use of CIG 023 to document the results of the self-assessment is acceptable.			
12.3	Are the personnel carrying out above required checks appropriately trained and independent of the process being assessed?			
12.4	If there were any unsatisfactory findings identified from the Manufacturer's self-assessment of the manufacturing and control process of certified products, have these been corrected?			
<b>14</b>	<b>Technical Complaints</b>			
	The Manufacturer shall record any technical complaint regarding the certified product. The questions in this section shall be answered even if no customer complaints have been received. In this case the questions shall be applied to the process.			

14.1	Is there a procedure regarding how to handle customer complaints? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
14.2	Are the received complaints reviewed on a regular basis regarding whether they are related to single errors or system errors? Actual case checked / Procedure checked			
14.3	Are corrective actions and decisions regarding customer complaints recorded? Actual case checked / Procedure checked			
14.4	Is the originator of the complaint informed about the handling and the result of the complaint? Actual case checked / Procedure checked			
14.5	Are the records of customer complaints maintained and satisfactory?			
14.6	Are records kept at least for the period between two inspection visits?			
<b>15</b>	<b>Certified Products and Changes to Certified Products</b>			
15.1	Is reference about the certified products available? (one or more boxes may be ticked) 0 Set of drawings 0 Parts list 0 Product description 0 Reference sample 0 Photo-documentation 0 Other specification (provide details): 0 Details given on Inspector's Information page			
15.2	Is this reference under control of the Licence Holder?			
15.3	Is there a procedure ensuring that no changes to the construction of certified products will be implemented prior to acceptance by the Licence Holder? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
15.4	If the Manufacturer is also the Licence Holder: Is there a procedure ensuring that constructional changes of the certified product will be made only after approval by the Certification Body? Description of the procedure or ref. of documented procedure & revision or issue date: Details given on Inspector's Information page. Objective evidence is provided as an attachment to this Factory Inspection Report. Please refer to attachment no.:			
15.5.1	Have changes been made to the certified product since last inspection? If 'YES', answer the question below / If 'NO', tick 'N/A' below.			
15.5.2	Have these changes been made with the authorisation of the Licence Holder?			
<b>16</b>	<b>Selection and shipping of Examination (ITT) Sample(s) (if applicable)</b>			
16.1	If selection of samples for Examination (ITT) is required, have the required samples been selected?			
16.2	If the selected sample(s) do not bear the Certification Mark then provide the reason for selection in the table IDENTIFICATION OF SELECTED SAMPLES			
<b>17</b>	<b>Inspector's Evaluation</b>			
	See table in audit list			

This is the last page of the report.

---

**TÜV Nederland**  
Ekkersrijt 4401  
5692 DL Son en Breugel  
Nederland

T: +31 (0) 499 - 339 500  
F: +31 (0) 499 - 339 509  
E: [info@tuv.nl](mailto:info@tuv.nl)  
W: [www.tuv.nl](http://www.tuv.nl)

TÜV®



TÜV NORD GROUP