



Information on the 2018 update of “PIEK”

the national regulation in the Netherlands on delivery noise of trucks

Presentation for GRBP September 2018

Introducing informal document GRB-68-10

Under Agenda item 10. “Exchange of information on
national and international requirements on noise levels”

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Why do we share this information with GRB?

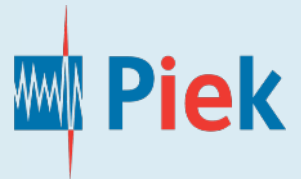
- Some parties in GRB are using the PIEK measurement method as a test institute
- Some parties (truck manufacturers) are applying for a PIEK certificate
- Delivery noise is on the long list of GRB and GRB may wish to take note what is going on in the Netherlands

What is PIEK?

- A national regulation in the Netherlands on maximum allowable Peak noise immission levels during loading and unloading of delivery trucks
 - Day: no limit
 - Evening: limit 65 dB(A)
 - Night: limit 60 dB(A)
- Problem-owner is the shop/supermarket:
 - delivery is forbidden during evening/night, unless noise limits are satisfied
- Immision: Evaluation point is closest home around the shop

What is PIEK?

- Huge interest of the branch and widely supported:
 - Most supermarkets set requirements towards their transport companies
 - Evening/night delivery has major benefits with respect to
 - Cost (time, fuel consumption),
 - CO2/tail pipe emission,
 - Safety
 - Liveability of urban centres
- In force since 1998, certification-scheme introduced in 2004











How does PIEK certification work?

- Immission levels are translated to 60/65 dB(A) emission levels on 7,5 m
- Driveline noise for truck is exempted: Limit for “Quiet Truck” = 72 dB(A)
- Measurement methods agreed for a variety of products (trucks, body/coachwork, truck refrigeration units, pallet trucks, dolly’s etc.)
- Stichting PIEK-Keur grants certificates; approved products are entered in online register
- Approved products are granted night time delivery status
- Individual products receive stickers
- <http://www.piek-international.com/english/>

Register / Suppliers /

Suppliers

Accessories	Body	Logistic stock	QuietTRUCK	Transport refrigeration	Shopping trolleys
Organisation	Country	City			
AIR LIQUIDE		Eindhoven			
allsafe JUNGFALK GmbH & Co. KG		Engen			
Anteo Holland		Zeewolde			
Anteo S.p.A.		Molinella (BO)			
ATC Houthandel BV		Almelo			
Autoclub BVBA		Antwerpen			
Gerd Bär GmbH		Heilbronn (D)			
BASF Polyurethanes Benelux B.V.					
Bostik B.V.					
Brightec					



PIEK products



National versus international

- PIEK system adopted in Belgium (Flemish law)
- Preparations going on in Denmark
- Various EU cities have adopted PIEK system on a voluntary base
- Recognized and adopted by various international parties
 - <http://piek.cemafroid.fr>
 - <http://noiseabatementociety.com/campaigns/nas-piek/>
 - etc
- Many international companies have applied products
 - Including most EU truck manufacturers



What is going to change in the 2018 version?

- Procedure update for the whole document
 - Clarification of general requirements, like applicable test methods, product family, COP etcetera's
 - Clarification of general requirements on measuring conditions and equipment
- Test method update for Quiet Truck
 - Clarify and repair ambiguities in the old text
 - Update to satisfy the latest stage of technology
 - Remove superfluous test methods (e.g. double tested noise sources)
 - and keep only the most representative and most demanding method
 - Use where possible the ECE R51 systematics and/or test methods

See text proposal in GRB-68-10
Changes are marked in yellow



Foreword

These are the concept 2018 PieK-Keur measurement methods for peak noise during loading and unloading, published by Stichting PieK-Keur. These measurement methods are an update to the 'Methods of measurement for peak noise during loading and unloading' of 2015 [8]. The measurement methods must be agreed by the PieK-Keur panel of experts.

These measurement methods are intended for everyone involved in producing and marketing new equipment and materials used in loading and unloading goods in the retail trade. In the future, the methodology may be able to be adapted for use in other fields like package delivery, quiet truck parkings etc.

A measurement and report in accordance with the 2018 PieK-Keur methods of measurement for peak noise during loading and unloading make it possible for participants of Stichting PieK-Keur to have their component certified under PieK-Keur.

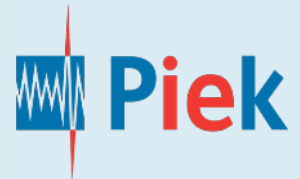
Changes to this version

Substantial changes to the protocol were made in 2018. These changes can be found in Chapters 1, 2, 3 and 4 amongst others. Parts of the text have been updated, elucidated and amended in order to reflect current understandings and standards. Part of the existing text has been moved and the order has been changed.

- The method's background has been clustered in Chapter 1 and a new Section with definitions has been added. These definitions are primarily based on the methods of measurement for QuietTrucks (chapter 4). Future updates to the protocol may be necessary if other products need to be added to the Section with definitions.
- The requirements for product certification have been clustered in Chapter 2 together with a more detailed description of the requirements for product conformity.
- Chapter 3 gives the general requirements for the measurements. The requirements have been upgraded and amended to reflect the latest (ISO and IEC) standards.
- The methods of measurement for the QuietTruck dealt with in Chapter 4 are now more in line with international type approval requirements for vehicles in accordance with UNECE Regulation R51. A number of measurements included in the 2015 version have been replaced with measurements from R51. Chapter 4 may be further adapted to reflect UNECE Regulations in the future. However, this depends on developments in UNECE GRBP. A number of "informative" measurements have been included in Chapter 4 in anticipation of these developments. These need to be executed and reported but the limit values do not need to be matched.

Chapters 5 up to and including 11 have barely changed.

- A small change has been made to Section 5.1 to help clarify the measurement distance.
- The Section which was part of Chapter 11 which related to product requirements using multiple methods of measurement has been moved to Chapter 2. The data which needs to be recorded for QuietTruck which was included in Chapter 11 has been amended.



What is going to change in the 2018 version?

Measurement methods for Quiet Truck

- Still in place:
 - acceleration 0-20 km/h; but procedure slightly changed
 - Compressed air noise; but adopted to ECE R51 procedure
 - Reversing alarm and blind spot warning (awaiting progress in GRB IG)
- Withdrawn:
 - Backwards driving 3 km/h
 - Cruise by 20 km/h
 - Braking 20-0 km/h
- Added:
 - Pass by noise conform ECE R51
 - @35 km/h, but PIEK mode engaged
 - Obligated, but only informative, not normative
 - Closing doors
 - Obligated, but only informative, not normative

Procedure and Planning

- Current proposal 2018 still to be confirmed by PIEK-Keur board
 - After consultation of the committee of experts
 - Expected: end of September 2018
- New procedures applicable as from January 2019
- It remains a national Netherlands procedure and document
 - But feedback from any expert or body is always welcome
- Future developments in GRBP will be followed closely
 - And, if applicable, incorporated in following version of the PIEK protocol

Questions to GRBP experts (especially truck manufacturers)

- Short term:
 - If you have any feedback on this 2018 proposal for update, please hand them over to your Netherlands representative in the PIEK-keur expert group
 - Deadline: 30 September
- Long term:
 - Consider introducing delivery noise standards in GRB
 - Consider PIEK-keur system as an example or starting point

Thank you for your attention