

Making less noise also means making greater savings

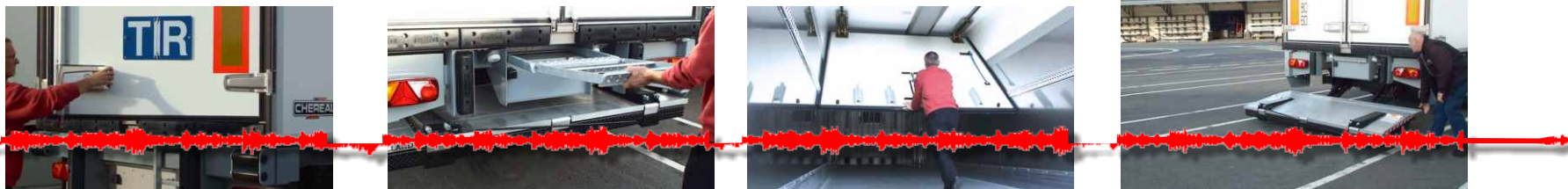
The finger is pointed at road transport by an ever greater number of detractors. The noise generated by vehicles has been steadily reduced, yet public opinion still perceives it as simply a noise nuisance.

In spite of the efforts of vehicle manufacturers and ever more stringent regulations, including standards such as **PIEK**, the noise produced by the operation of industrial vehicles has become an unavoidable subject; all the more so when it concerns **driving in towns, especially as this takes place during the night**.

Making less noise depends mainly on how vehicles are used and the way in which equipment and accessories are handled. In order to make **less noise**, greater care is needed during use.

Using such an approach also **extends equipment lifetimes**, as taking greater care involves more precise movements.

We should not consider noise limits as a constraint but as a way of **working better** with the vehicle. Silence is golden (or can be valued in euros).



Among the identified sources of noise, the following are operations for which it seems relatively easy to us to apply **precautions** which will reduce the decibels (dB(A)) to a state of almost silence:

- The opening and closing of doors
- The handling of ladders and steps
- The handling of insulated partitions
- The use of tail lifts

doors

stepladders

partitions

tailgates

video

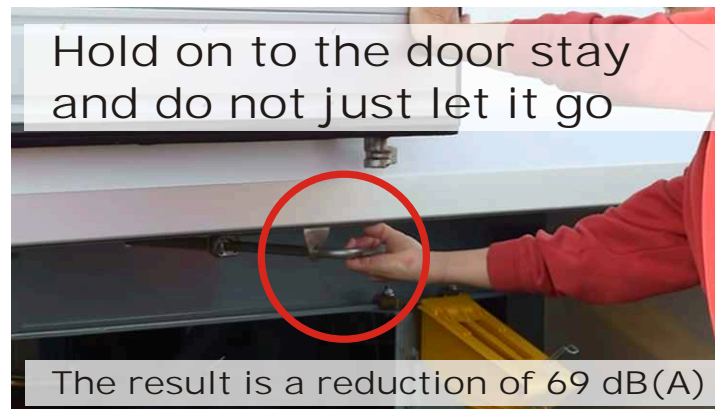
PIEK: an approval

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When opening a door:
A handle which is simply let go will bang against its base under the effect of its return spring.



For the same reason and with the same result, remove the door stay by holding on to it to reduce the effect of its return spring.



When closing a door:
Position the door with the handle open at 90° and take care not to slam it against the bolt..



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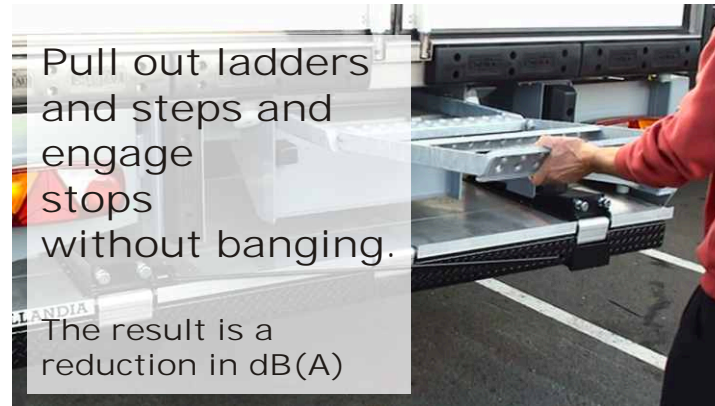
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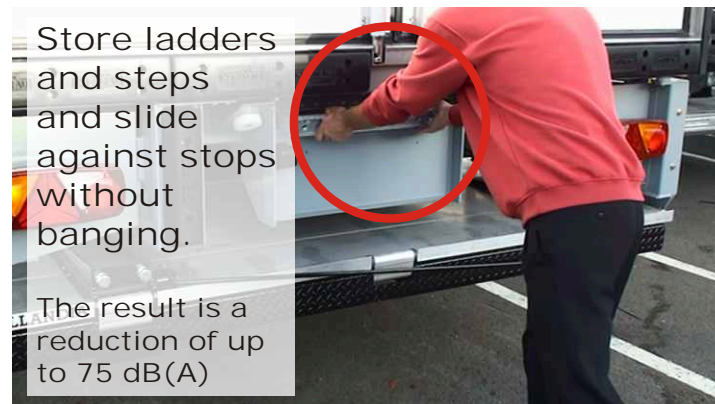
When being opened against their stops, ladders and steps can make a noise unless this is done with care



Some stepladders reach down to the ground. It is recommended that you place them and do not let them fall.



When being stowed against stops, ladders and steps can make a noise unless it is done with care



Faire moins de bruit, c'est aussi faire des économies

The interior of a vehicle body is like a resonance chamber; all noises are amplified.



When lifting a partition, hold on to it as high as possible and only release it after holding it back a moment to slow it down.



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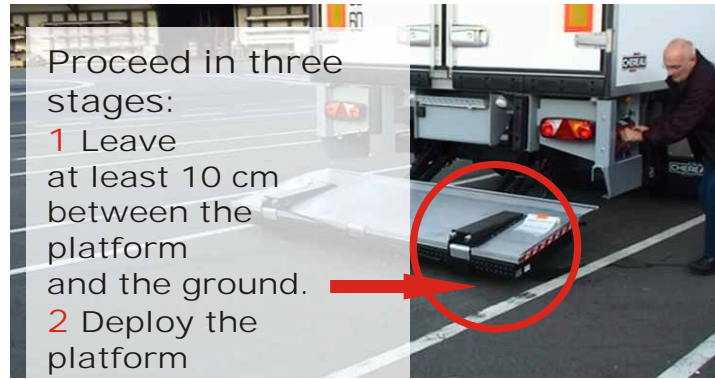
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The use of mobile tail lift platforms can be one of the main noise nuisances recorded around a vehicle.

Some care is required when opening and closing them.



Proceed in three stages:

1 Leave at least 10 cm between the platform and the ground.

2 Deploy the platform

3 Stop the descent of the tailgate when it reaches the ground.

The result is a reduction of 64 dB(A)



Use the stops on roll containers without banging against them and check the condition of noise dampers regularly.

The result is a reduction in dB(A).



When folding up a mobile platform, hold on to it and do not just let it go.

The result is a reduction of 63 dB(A)

Origins of the Piek (or Peak) standard:

In 1998 a Dutch decree determined noise emission standards for night deliveries of goods in Holland and more specifically in Amsterdam.

The aims:

- 1) To de-congest towns by encouraging night-time deliveries.
- 2) To reduce delivery costs, by reducing the number of vehicles required.

An assessment programme conducted between 1999 and 2005 concluded that the standard of 60 dBA was achievable (except for refrigerated units where it was 65 dBA).

Validation and application of noise levels when making deliveries in urban areas:

max. 65 dB(A) between 7 p.m. and 11 p.m. – max. 60 dB(A) between 11 p.m. and 7 a.m.

Noise measurement in decibels (dB(A))

0 to 10 dB(A): deserted area

20 to 30 dB(A): Conversation with lowered voices

50 to 60 dB(A): Washing machine – **Piek Standard**

60 to 70 dB(A): Normal conversation

80 to 90 dB(A): Car horn

90 à 100 dB(A): Train

100 à 110 dB(A): marteau-piqueur

120 dB(A): seuil de la douleur

180 dB(A): décollage de fusée



Today:

The PIEK standard is in use in Holland and assessments - based on the PIEK approval reference model - are in progress in cities such as Paris, London and even Madrid.

Performance conditions to meet the PIEK standard: PIEK applies to stationary industrial vehicles making deliveries and targets those specific parts of a vehicle likely to generate noise. Sound recordings are made by **a certified laboratory according to a test protocol (handling, impacts, etc.)** to validate the approval issued **to the body manufacturer** by PIEK. **Each vehicle subsequently made by the body manufacturer is then given a registration number by PIEK.**

The following items are checked:

The cab door - the rear exits - the side baseboards and rails on the inside of the side panels - the body floor - the tail lift.

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