



GENTLE FORCE

Crashes happen all too easily when docking to a ramp. Soft Docking automatically brings the trailer to a standstill.



▶ A LED LAMP PROVIDES A VISUAL WARNING TO THE DRIVER.

▶ THE LOUD AUDIBLE WARNING FROM SOFT DOCKING IS UNMISTAKABLE.

REVERSE GEAR is engaged. The clutch is gently released. A brief tap on the accelerator: the ramp gets closer. Three metres in front of the black buffers, Soft Docking kicks into action. A piercing 'beep beep' – unmistakable despite noise from the many trucks at this bustling place –

▶ HARD CONTACT LEAVES ITS MARK ON THE TRAILER AS WELL AS THE LOADING DOCK.



is heard from the trailer. And the rear running light begins to blink at a moderate frequency.

The frequency of both the audio and the visual warnings increases every handbreadth closer the juggernaut comes to the ramp. The fast staccato of the audio warning gives way to a continuous tone. The foot keeps gentle pressure on the accelerator. But the trailer brakes, brought to a standstill as though by an invisible hand. Soft Docking has done its job.

Quickly getting out to inspect the situation at the rear reveals the following scenario: about a metre remains between the trailer and the black rubber buffers of the ramp whose scarred profile bears witness to many a misjudged approach.

To avoid such rough contact with the ramp, Soft Docking starts to warn the driver of the ramp's proximity from a distance of three metres to the docking station. If the rear of the vehicle comes closer than one metre, the system applies the brakes with a force automatically adjusted for the speed of the vehicle and the weight of the load, so that the vehicle comes to a standstill.

The trailer's brakes remain applied for two seconds before Soft Docking releases them and gives the driver free reign for final docking to the ramp. 'It's a great device', says

driver Waldemar Hoffmann, who is at the wheel of this truck for the Nord-Süd haulage company. Hoffmann continues: 'It always keeps me right in the picture just at the critical moment'



▶ DRIVER WALDEMAR HOFFMANN: 'SOFT DOCKING IS A GREAT DEVICE'

Reversing these trucks does indeed have its particular pitfalls. According to statistics, about 35 percent of all incidents involving damage occur when reversing a truck. So the more often a truck approaches an unloading point, the greater the risk of damage to its rear. This is especially irksome for refrigerated vehicles whose van body is neither easy nor quick to repair and most definitely not cheap.

An analysis of French fleet and insurance data has revealed that, about every three months, a refrigerated vehicle takes a knock that results in damage costing, on average, EUR 300 to 700. On top of this, the cost of idleness, at EUR 250 to 600 per day, must also be taken into account. Assuming an annual kilometrage of 150,000 kilometres, it doesn't take long to reach EUR 2000 to 5000 that can be ascribed to over-enthusiastic docking. ▶▶



▶ SOFT DOCKING CAN ALSO BE RETROFITTED WITHOUT DIFFICULTY.



▶ TWO ULTRASOUND SENSORS DETECT THE CURRENT DISTANCE TO THE DOCK.

▶ Harder blows that require extensive repair of the rear of the trailer make even deeper dents in the wallet. If the doors or frames are affected, the total damage including loss of the vehicle (for about a week) can soon reach sums in the five figure euro range. And statistics show that incidents involving such serious damage occur every two years.

The purchase price of Soft Docking is, however, substantially less than EUR 1000 so the system soon pays for itself. Adam Purshall, fleet manager for the British haulage company TM Logistics (150 trucks, 260 trailers, 24 million kilometres per year), tested Soft Docking extensively and gave the following verdict: 'It brings more safety in general.' He goes on: 'In addition, I am convinced that this system will save us a considerable amount in costs.'

The consequence of this: Purshall has ordered twelve new trailers with Soft Docking from Haldex, which, from now on, will be part of the standard specification for all newly purchased trailers. 'Soft Docking functions perfectly, even if the trailer is driven at full tilt at the ramp,' was the conclusion of somewhat harsher testing, which is not recommended be repeated in daily practise. Purshall continues: 'What's more, the system is also extremely simple and straightforward to install.'

Soft Docking consists of two ADR ultrasound sensors mounted on the rear of the vehicle, two marker lights using robust LED technology and an acoustic warning speaker. The system functions as a stand-alone solution, and therefore does not require any connection to the tractor unit. EB+, however,

is necessary. Soft Docking is compatible with both first and second generation EB+; indeed, Soft Docking has already been integrated into current EB+ software. The software can be activated by the vehicle manufacturer during configuration of a new vehicle; alternatively, it can be deployed retroactively on vehicles that are already in service. Customers for whom automatic braking at a distance of one metre is sufficient can order, at an especially attractive price, a reduced version of Soft Docking that dispenses with visual and audio warnings. ■



▶ FLEET MANAGER ADAM PURSHALL: 'VERY EFFECTIVE SYSTEM.'

SILENT NIGHT

Although it may be practical that the audio warning from Soft Docking be heard unmistakably above the hectic turmoil at the gates, sometimes softer tones are desired. This could be, for example, when deliveries are made in residential areas at night or supplies are brought to a hospital. In such cases, Soft Docking can easily be switched to mute: engage reverse twice in quick succession and the audio warning will be immediately silenced.

▶ REVERSING TOO FAST TO THE LOADING DOCK QUICKLY LEADS TO EXPENSIVE DAMAGE.

