

# Novoferm buffer systems

The right solution for every loading frequency

The innovation  
made of Nytrex®

## Product benefits

- Optimal protection for buildings and lorries
- Robust and durable
- 100% recyclable material
- Made in Germany



# Buffer systems



## Rubber buffers

Rubber buffers are the most widespread types of buffer. They are used for the initial equipment of buildings, primarily for cost reasons. mydocking only uses high-quality rubber compounds, resulting in greater durability.

- High-quality new rubber compound
- Especially abrasive-resistant
- Spring deflection up to 20 mm
- Suitable for low to medium loading frequency

### Design (mm)

400 x 80 x 70

250 x 250 x 90

250 x 250 x 140

500 x 250 x 90

500 x 250 x 140

### Evaluation

Building protection	★ ★ ★ ★ ★
Durability	★ ★ ★ ★ ★
Spring deflection	★ ★ ★ ★ ★
Life Cycle Cost	★ ★ ★ ★ ★
Visibility	★ ★ ★ ★ ★

## Plastic buffers

The advantage of plastic buffers is that they can also be produced in a particularly flat design. The red colour makes it easier for the lorry driver to orientate himself when docking.

A design with protection buffer is especially well suited for swap trailers.

- Durable plastic compound
- Ultra-flat design
- Spring deflection up to 10 mm
- Suitable for low to medium loading frequency

### Design (mm)

500 x 250 x 60

500 x 250 x 90

500 x 250 x 140 with swap trailer 400 x 100

### Evaluation

Building protection	★ ★ ★ ★ ★
Durability	★ ★ ★ ★ ★
Spring deflection	★ ★ ★ ★ ★
Life Cycle Cost	★ ★ ★ ★ ★
Visibility	★ ★ ★ ★ ★

## Spring steel buffers

A bent spring steel plate absorbs the tractive forces of the docking lorry. One or two rubber buffer elements prevent possible destruction. Besides durability, an advantage of the spring steel buffer is the relatively long spring deflection. To prevent running over the loading dock, spring steel buffers are also used as a twin set. Installed on one side 200 mm above the dock (construction height: 800 mm) and on the other side at the dock level (construction height: 800 mm).

- Spring deflection up to 40 mm
- Wear-free
- One or two buffer elements
- Suitable for high loading frequency

### Design (mm)

600 x 160 x 100

600 x 160 x 160

800 x 160 x 160

Twin Set 800/600 x 160 x 160

### Evaluation

Building protection	★ ★ ★ ★ ★
Durability	★ ★ ★ ★ ★
Spring deflection	★ ★ ★ ★ ★
Life Cycle Cost	★ ★ ★ ★ ★
Visibility	★ ★ ★ ★ ★



## Steel buffers

Hard shell made of massive steel sheet and lightweight rubber soft core. These are the design characteristics of the steel buffers whose strengths are high wear resistance and long spring deflection. To prevent running over the loading dock, steel buffers are also used as a twin set. Installed on one side 350 mm above the dock (construction height: 800 mm) and on the other side at the dock level (construction height: 800 mm).

- Spring deflection up to 80 mm
- Wear-free
- Suitable for high loading frequency

### Design (mm)

500 x 250 x 140

800 x 250 x 140

Twin Set 800/500 x 250 x 140

500 x 250 x 210

800 x 250 x 210

Twin Set 800/500 x 250 x 210

### Evaluation

Building protection	★★★★★
Durability	★★★★★
Spring deflection	★★★★☆
Life Cycle Cost	★★★★★
Visibility	★★★☆☆

## Nytrex® buffers

Nytrex® is a high-strength plastic material which is also used in the construction of cranes. For buffers, the material has unique advantages. Besides its very good visibility for lorry drivers, the high strength combined with good sliding ability results in a very high durability of the buffer. Under the same conditions, Nytrex® lasts 7 times longer than rubber! The available dimensions are compatible with relevant mounting plates of the rubber buffers. Additionally, the version is reversible for a depth of 120 mm in cases where the surface is abraded. A rubber plate is used between steel plate and Nytrex® material for a better spring effect.

- Lasts 7x longer than rubber
- Suitable for high loading frequency

### Design (mm)

500 x 250 x 70 compatible with  
500 x 250 x 90 rubber buffers

500 x 250 x 120 compatible with  
500 x 250 x 140 rubber buffers

### Evaluation

Building protection	★★★★☆
Durability	★★★★★
Spring deflection	★★★☆☆
Life Cycle Cost	★★★★★
Visibility	★★★★★

## NovoSlider

The NovoSlider combines the excellent properties of the Nytrex® material with a long spring deflection and thus is very close to the ideal buffer. The steel body is galvanised and is thus permanently protected against rust. Due to the lightweight rubber mat, the floating Nytrex® material can safely absorb a maximum of 25 mm and can follow the height movements of the lorry.

- High-performance plastic in signal yellow
- Height-adjustable front part
- Spring deflection up to 25 mm
- Lasts 7x longer than rubber
- Suitable for high loading frequency

### Design (mm)

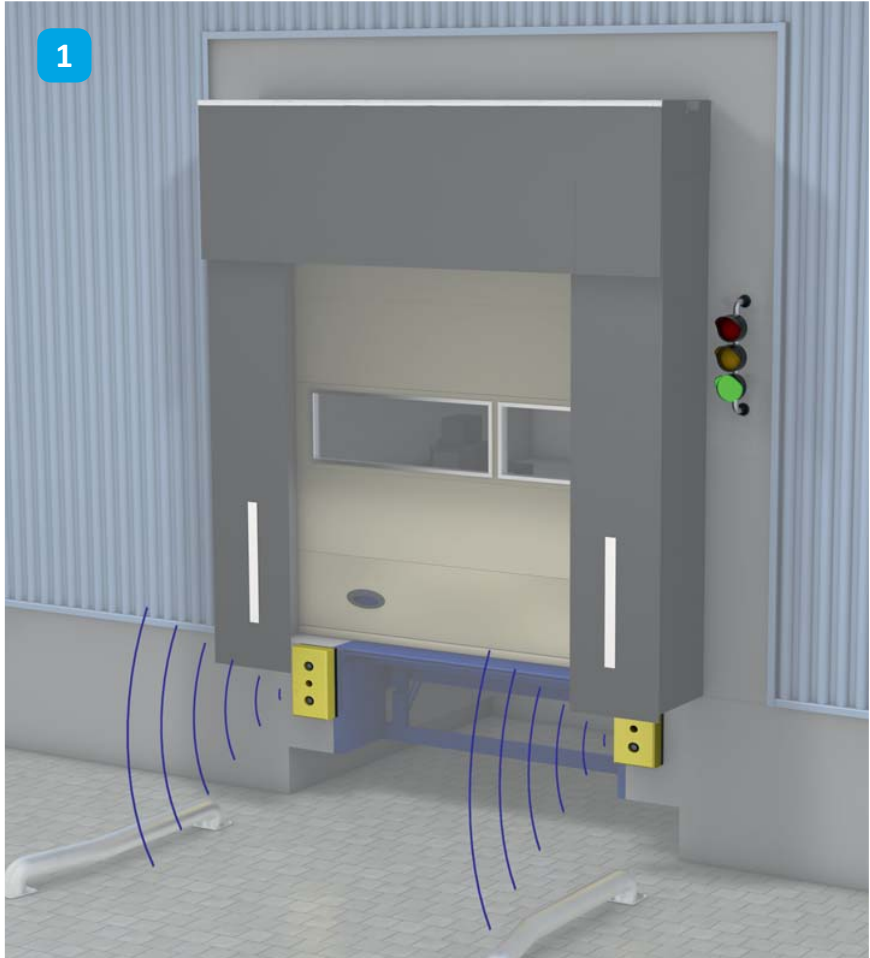
500 x 280 x 100

500 x 280 x 140

### Evaluation

Building protection	★★★★★
Durability	★★★★★
Spring deflection	★★★★☆
Life Cycle Cost	★★★★★
Visibility	★★★★★

# Novo EASY – Electronic Docking System



## Electronic Docking System with Sensor and Traffic Lights

The ideal drive protection ensures that the lorry already stops before the buffer. Thus damage to the building, the lorry, and even the drive buffer are prevented. The NovoEASY supports the lorry driver in the easiest way. The sensors, which are protected in a yellow drive buffer made of high-performance plastic, measure the interval between the lorry and the loading ramp and informs the driver via a display element (e. g. traffic lights).

### Product benefits

- High-performance plastic in signal yellow
- Distance measurement (Lorry – Building) with display via outside traffic lights

### Design (mm)

500 x 250 x 130
1 sensor, traffic lights red / green
1 sensor, LED traffic lights red / green
1 sensor, LED traffic lights red / yellow / green
2 sensors, traffic lights red / green
2 sensors, LED traffic lights red / green
2 sensors, LED traffic lights red / yellow / green

## Novo EASY facilitates loading in three steps

- Step 1**  
The lorry is still a distance away from the loading bay:  
The traffic light is green.
- Step 2**  
The lorry stands approx. 100 cm away from – right before – the loading bay:  
The traffic light switches to yellow. The driver shows an increased level of attentiveness.
- Step 3**  
The lorry is 20 cm away from the loading bay, just before the buffer:  
The traffic light switches to red.  
The driver stops the vehicle.

### Evaluation

Building protection	★★★★★
Durability	★★★★★
Spring deflection	★★★★★
Life Cycle Cost	★★★★★
Visibility	★★★★★

# Making the right decision.

## Planning costs in the long term

Costs play a major role when purchasing buffers. More often than not, mere product costs are used as a decision-making basis. The costs for the assembly and travel of an assembler are not taken into account.

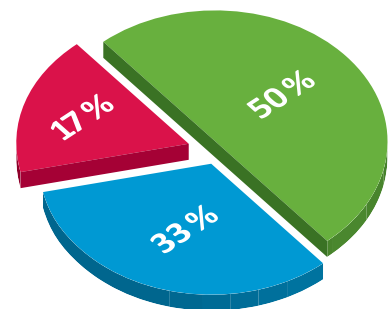
Our example shows that this can lead to fatally wrong decisions. When exchanging a rubber buffer, only approx. 1/3 of the total costs are attributable to mere production costs.

For a lower loading frequency, rubber buffer can be the right choice, however, for a higher frequency, other systems are much more cost-effective in the long term.

Thus, in many cases, e.g. a Nytrex® buffer is already more cost-effective than a rubber buffer in the second period of use. This does not take into account any costs for damage to buildings which may occur as a result of a damaged rubber buffer. At any rate, it makes sense to consider the Life Cycle Cost.

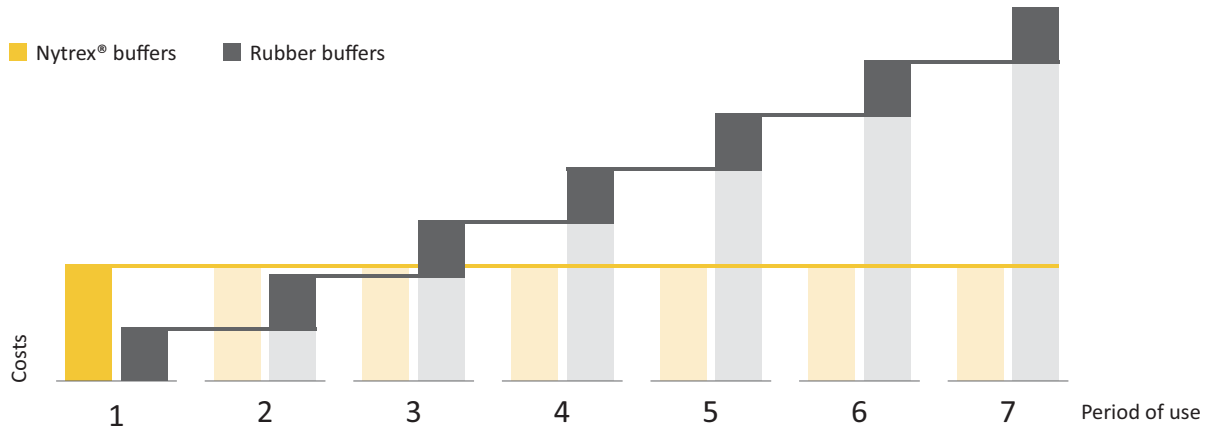
## Total costs per period of use

- Travel
- Rubber buffers
- Installation



## Life Cycle Cost Comparison

- Nytrex® buffers
- Rubber buffers



## Individual solutions

Besides the standard solutions presented herein, special solutions may be necessary in individual cases. Speak to our adviser. We are happy to provide you with the right solution tailored to your needs.

## Further options

- Other hot-dipped galvanised weld plates
- Hot-dipped galvanised front plates for rubber buffers
- Jacked-up buffers with back rest
- Height-adjustable buffers



# Product evaluation

Different loading situations necessitate different buffers. The right solution for the customer is the determining factor. For this purpose, mydocking provides a wide range of different systems. Four different criteria are used as a decision aid. As a matter of principle, the more stars a model achieves in one of the criteria, the higher the quality of the product will be.

**Building protection:** Indicates to what extent the respective solution protects the building from impact damage.

**Durability:** Information on relative durability when used correctly.

**Spring deflection:** The longer the spring deflection of the buffer is, the more likely damage to the vehicle and building can be prevented.

**Life Cycle Cost:** In addition to material expenses, the cost for the replacement of worn buffers and their durability is also included in the cost evaluation.

**Visibility:** The latest evaluation criterion is the visibility of the buffer for the lorry driver. Because the current products were almost always black, both rubbers and steel buffers, there was no differentiation criteria. This has changed with the development of the Nytrex® buffer. The yellow signal colour presents considerable advantages over the other systems; hence this criterion has now been included in the evaluation.

Item	Design (mm)	Recommended loading frequency	Building protection	Durability	Spring deflection	Life Cycle Cost	Visibility	
Rubber buffers	400 x 80 x 70	low	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
	250 x 250 x 90 or 250 x 250 x 140	low	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
	500 x 250 x 90 or 500 x 250 x 140	low to medium	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
Plastic buffers	500 x 250 x 60 or 500 x 250 x 90	low to medium	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
Spring steel buffers	Simplex, 1D 600 x 160 x 160 or 800 x 160 x 160	medium to high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
		medium to high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
	Premium, 2D 600 x 160 x 100	high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
		600 x 160 x 160 or 800 x 160 x 160	high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
		TwinSet 800/600 600 x 160 x 160 and 800 x 160 x 160	high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Steel buffers	AZPK 500 x 250 x 140 or 800 x 250 x 140	high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
		high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
	AZJ 500 x 250 x 210 or 800 x 250 x 210	high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
		high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
Nytrex® buffers	500 x 250 x 70 or 500 x 250 x 120	high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	
	NovoSlider 500 x 280 x 100 or 500 x 280 x 140	high	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	