

## Cost savings with Anti-Slip Mats

### Example (according to VDI 2700)

For a load of 7500 kg standing freely on the loading platform (chipboard floor, coefficient of sliding friction approx.  $\mu$  0.3) at 10 truckloads per work day and 240 work days per year.

For a pre-tension force of 500 daN per lashing strap, **14 lashing straps** are required when no anti-slip mats are used.

The use of anti-slip mats doubles the coefficient of sliding friction to  $\mu$  0.6 and reduces the number of straps required to **3**.

### Comparative calculations

Lashing strap: 10 €/pcs.

Edge protectors brackets: 1 €/pcs.

Salary costs: 35 €/h. = 0.58 €/min.

Pre-tensioning/belt =  $(x \cdot 2 \text{ min.}) \cdot 0.58 \text{ €}$

Anti-slip mats\*: 25 € (approx. 4 transports = 6.25 €)

Laying out the anti-slip mat: 1 min.  $\cdot$  0.58 €

New lashing straps/edge protection brackets are expected every six months, therefore **28 lashing straps/56 edge protection brackets** are required without anti-slip mats and **6 lashing straps/12 edge protection brackets** are required with anti-slip mats.

\* Depending on the degree of wear, the replacement can also take place sooner or later as long as the sliding friction coefficient of  $\mu$  0.6 is not adversely affected.

### Savings

Savings by using  
Anti-slip mats:  
approx. **16 800 € per year**

Without Anti-Slip Mats	Costs per year: 42 336 €	
Costs lashing straps	$(28 \cdot 10 \text{ €}) : 240 \text{ days}$	1.17 €
Costs edge protection brackets	$(56 \cdot 1 \text{ €}) : 240 \text{ days}$	0.23 €
Salary costs while pre-tensioning the lashing straps	$(14 \text{ pcs.} \cdot 2 \text{ Min}) \cdot 0.58 \text{ €}$	16.24 €
Costs per truckload		17.64 €
10 truckload per day		$17.64 \text{ €} \cdot 10$ = 176.40 €
Approx. 240 days per year		$176.40 \text{ €} \cdot 240$ = <b>42 336 €</b>

With Anti-Slip Mats	Costs per year: 25 464 €	
Costs lashing straps	$(6 \cdot 10 \text{ €}) : 240 \text{ days}$	0.25 €
Costs edge protection brackets	$(12 \cdot 1 \text{ €}) : 240 \text{ days}$	0.05 €
Salary costs while pre-tensioning the lashing straps	$(3 \text{ pcs.} \cdot 2 \text{ Min}) \cdot 0.58 \text{ €}$	3.48 €
Anti-slip mats	25 €/4 transports	6.25 €
Salary costs while positioning the anti-slip mats	1 min $\cdot$ 0.58 €	0.58 €
Costs per truckload		10.61 €
10 truckload per day		$10.61 \text{ €} \cdot 10$ = 106.10 €
Approx. 240 days per year		$106.10 \text{ €} \cdot 240$ = <b>25 464 €</b>