ROTHSCHENK

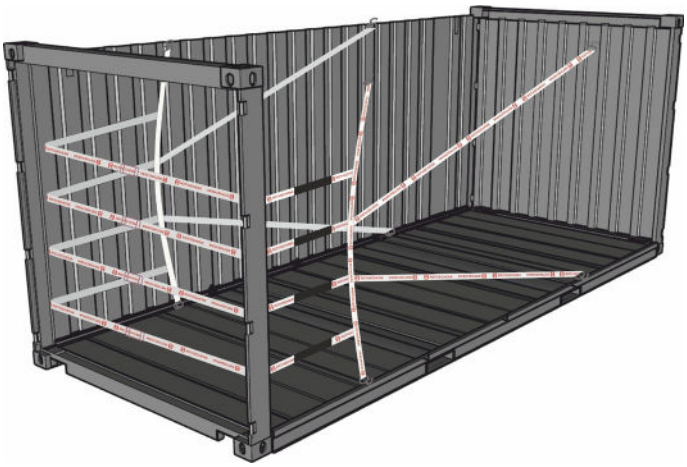
User information on the restraint system

Pro Lash Tec 4.38+

Basic Info

Restraint System for Load Securing / Rückhaltesystem zur Ladungssicherung
In combined transport according to CTU-Code / im kombinierten Verkehr gemäß CTU-Code

Sea area A, B, C
Sea area A, B, C



The basis for the specification of the restraint forces is the IMO/ILO/UNECE Code of Practice for Packing of Cargo Transport Units as of 2014. The owner of the container can provide you with information about the actual load values. Since the load-bearing capacity of the lashing points in the container can vary depending on the manufacturer, we recommend the use of the (R) lashing systems according to the G&H GmbH Rothschenk loading instructions. The retention forces listed in the table are based on the acceleration values mentioned in the Code of Practice in Chapter 5, Table 5.3 and the possible coefficients of friction with different material pairings. To determine the coefficients of friction that occur during your transports, you can refer to the information in the EN 121915-12011-06 table. Vertical movements of the load units may require additional safety measures to prevent damage to the load units. When loading, observe the maximum payload and the permissible load distribution.

Notes on loading:

Safety instructions for the user:

- Use the protective clothing required by the risk assessment of your workplace.
- The (R) lashing systems should only be used by trained personnel or in accordance with the loading instructions prepared by G&H GmbH Rothschenk.
- The belts of the (R) lashing systems are under high tension during loading and unloading. Make sure you don't get hurt by the belt buckles when cutting the straps.
- If you have any questions, please contact G&H GmbH Rothschenk.

Requirements for the container:

- The container must be checked according to the CTU code and safe for transport.
- The container floor must be undamaged, swept clean and free of oils or greases.
- The lashing points used in the container to secure the load must not be damaged.

Cargo requirements:

- The load units must be able to absorb the forces that occur during transport.
- The load units should be stable during loading and loading.
- Since the load units can be subjected to punctual loads during transport, edge protectors may have to be used for sensitive load units.

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Maximum load weight to be secured in kg per bilateral (R)lashing at lashing point strength in the container of 1000 daN = (R) lash 4.38+ then 8000 daN BC						
	Street		**Railroad**	**Sea Area A**	**Sea Area B**	**Sea Area C**
µ/FG	**0.8 FG**	**0.5 FG**	**0.5 FG / Cz 0.7**	**0.3 FG / Cz 0.5**	**0.3 FG / Cz 0.3**	**0.4 FG / Cz 0.2**
0,1	11420	20000	18604	22857	21621	21050
0,2	13330	26660	22222	26666	23529	22220
0,3	16000	40000	27586	32000	25806	23529
0,4	20000	*	36363	40000	28571	25000
0,5	26660	*	53333	53333	32000	26660
0,6	40000	*	*	*	36363	28570
Maximum load weight to be secured in kg per bilateral (R)lashing at lashing point strength in the container of 1500 daN = (R) lash 4.38+ then 12000 daN BC						
	Street		**Railroad**	**Sea Area A**	**Sea Area B**	**Sea Area C**
µ/FG	**0.8 FG**	**0.5 FG**	**0.5 FG / Cz 0.7**	**0.3 FG / Cz 0.5**	**0.3 FG / Cz 0.3**	**0.4 FG / Cz 0.2**
0,1	17140	30000	27906	34284	32432	31560
0,2	20000	40000	33333	40000	35294	33320
0,3	24000	60000	41379	48000	38708	35280
0,4	30000	*	54545	60000	42856	37500
0,5	40000	*	*	*	48000	40000
0,6	60000	*	*	*	54544	42856
Maximum load weight to be secured in kg per bilateral (R)lashing at lashing point strength in the container of 2000 daN = (R) lash 4.38+ then 16000 daN BC						
	Street		**Railroad**	**Sea Area A**	**Sea Area B**	**Sea Area C**
µ/FG	**0.8 FG**	**0.5 FG**	**0.5 FG / Cz 0.7**	**0.3 FG / Cz 0.5**	**0.3 FG / Cz 0.3**	**0.4 FG / Cz 0.2**
0,1	22840	40000	37208	45714	43242	42100
0,2	26660	53320	44444	53332	47058	44440
0,3	32000	*	55172	64000	51612	47058
0,4	40000	*	72726	80000	57142	50000
0,5	53320	*	*	*	64000	53332
0,6	*	*	*	*	*	57140

*The maximum load weight is directly related to the maximum payload and the permissible load distribution of the CTU or the coefficient of friction is higher than the coefficient of acceleration.