

How to use AirCargoRunners

ACR is an approved 3 AirCargo Product from Eltete TPM Ltd for the benefits of the AirCargo Industry

Instructions of how and where to use the AirCargoRunners for the sustainable benefit in the AirCargo platforms (PMC) and (ULD).

Generally the AirCargoRunners are used for :

- 1. A WIDER LOADING area and PREVENTING the bending of the thin PMC pallets caused by the tension from the load security nets and belts.**
- 2. A HIGHER ,more EVEN and more OPTIMAL LOADING HEIGHT**
- 3. Building up empty AirCargoPallets for transporting EMPTY UNITS back.**

Generally ACR (AirCargoRunners) are **REPLACING** the heavy wooden bars/ wooden pallets and is with this respect more than 80 % lighter than the conventional materials being used for the same purpose (1 kg =1m)

1. ACR makes it possible to LOAD WIDER and OPTIMIZE the space.

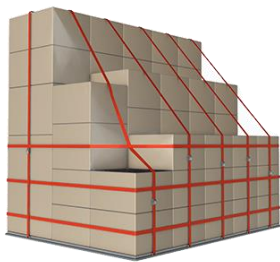
You can load **8 Euro size pallets** instead of **5** by building up on a PMC (aircraft pallet) an ARC platform. With the ARC platform on the top of the PMC (Aircraft pallet) the cargo will be raised up above the locking system (with overhangs) and allows a wider load area. Approx. 35 % more loading area and 80 % less weight in relation to the conventional materials (approx..20 kg / 120 kg = 80 %)



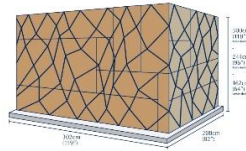
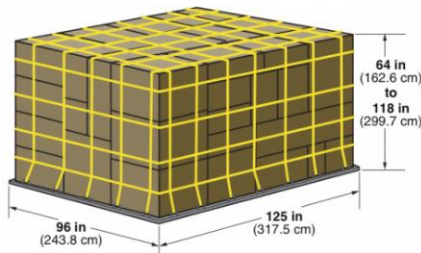
ACR add a lot of beam strength to the PMC and prevent it from bending caused by the tension from the security net and belts.

2. Load HIGHER and make the load more EVEN and LIGHTER.

The space optimization without increasing the weight means savings and more loading and with the ARC you can utilise the space by optimizing the height difference of the load and add more stability without increasing the weight. The Weight of AirCargoRunners is approx.. 1 kg/ meter. Also the AirCargoPads/ TieSheets from Eltete can be used between the uneven box layers to make overall the load more stable.

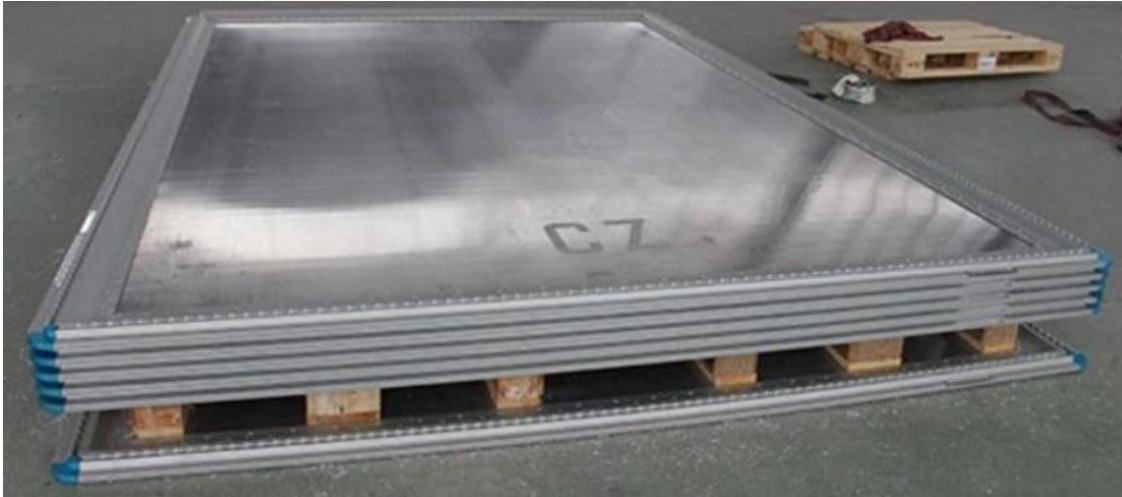


Uneven without ACR Uneven and unbalanced without ACR and AC -Tie sheets



Even and balanced with AirCargoRunners (ACR)

3. With ARC you can easily building up a lightweight pallet for transporting back empty equipment instead of using the conventional heavy wooden beams



The AirCargoRunners(ACR) can **REPLACE** the conventional wooden bars and wooden pallets for transporting empty equipment like PMC plates.

STRENGTH and LOADABILITY

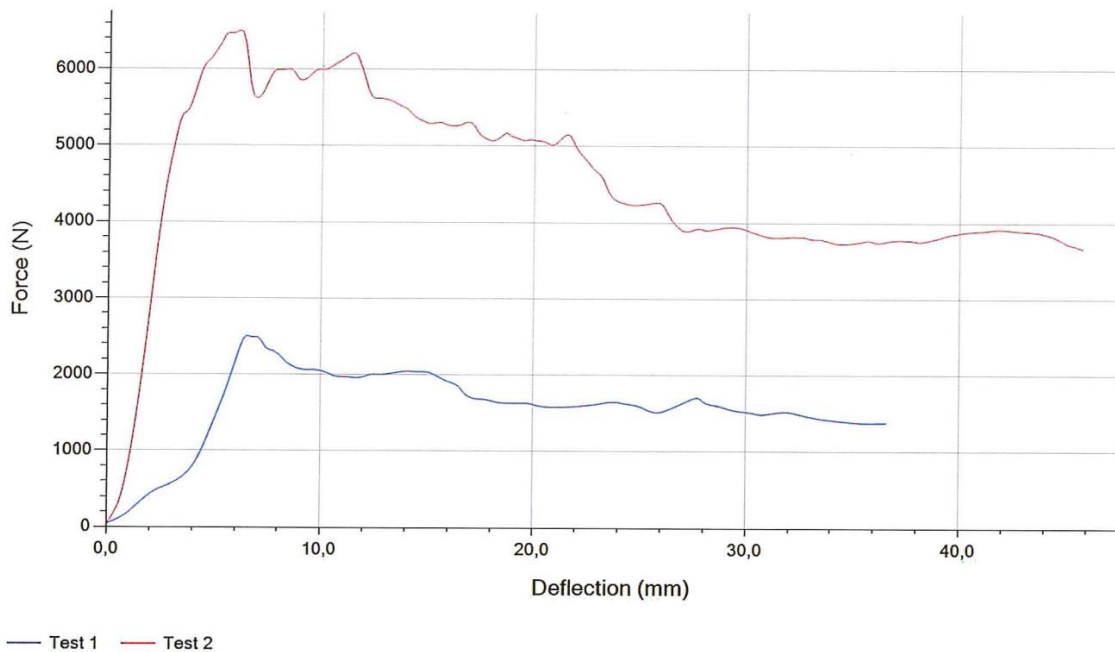
See below the strength of the AirCargoRunners in comperance with some similar products

Pallrun tests (Comparing)

Ref 1 :
Ref 2 :
Ref 3 :

Machine No. : X350-3074
Test Name : HC test
Test Type : Compression
Test Date : 2.11.2023 9.02
Test Speed : 400,000 mm/min
Preload : 50,000 N
Sample Height : 20,000 mm

Test No	Diameter (mm)	Force @ Peak (N)	Stress @ Peak (N/mm ²)	Energy to Peak (N.m)
1	100,0	2506,9	0,319	5,664
2	100,0	6506,8	0,828	24,702
Min	100,0	2506,9	0,319	5,664
Mean	100,0	4506,85	0,574	15,183
Max	100,0	6506,8	0,828	24,702
S.D.		2828,356	0,36	13,462



Test 1: a similar product like ACR Test 2: Eltete TPM AirCargoRunner 3 x stronger

The Market for AirCargoRunners , AirCargoBoxes and AirCargoPads

Where is the biggest potential demand for AirCargoRunners , AirCargoBoxes and AirCargoPads

Cargo (Metric tonnes)*					
2022	2021	AIRPORT	2022	2021	Percent change
1	1	HONG KONG SAR, HK (HKG)	4 198 937	5 025 495	-16.5
2	2	MEMPHIS TN, US (MEM)	4 042 679	4 482 327	-9.8
3	4	ANCHORAGE AK, US (ANC**)	3 462 874	3 654 347	-5.2
4	3	SHANGHAI, CN (PVG)	3 117 216	3 982 616	-21.7
5	6	LOUISVILLE KY, US (SDF)	3 067 234	3 052 269	0.5
6	5	INCHEON, KR (ICN)	2 945 855	3 329 292	-11.5
7	7	TAIPEI, TW (TPE)	2 538 768	2 812 065	-9.7
8	12	MIAMI FL, US (MIA)	2 499 837	2 520 859	-0.8
9	8	LOS ANGELES CA, US (LAX)	2 489 854	2 694 188	-7.6
10	9	TOKYO, JP (NRT)	2 399 298	2 644 074	-9.3
11	10	DOHA, QA (DOH)	2 321 920	2 620 095	-11.4
12	11	CHICAGO IL, US (ORD)	2 235 709	2 536 576	-11.9
13	14	FRANKFURT, DE (FRA)	1 967 450	2 274 969	-13.5
14	15	PARIS, FR (CDG)	1 925 571	2 062 433	-6.6
15	16	GUANGZHOU, CN (CAN)	1 884 784	2 044 909	-7.8
16	17	SINGAPORE, SG (SIN)	1 869 600	1 969 800	-5.1
17	21	CINCINNATI OH, US (CVG)	1 794 451	1 536 998	16.8
18	13	DUBAI, AE (DXB)	1 727 815	2 319 185	-25.5
19	19	LEIPZIG, DE (LEJ)	1 509 098	1 588 815	-5.0
20	20	SHENZHEN, CN (SZX)	1 506 959	1 568 276	-3.9

*Cargo: loaded and unloaded freight and mail in metric tonnes
** includes transit freight