

A220-300



Compartments:

Maximum weights and volumes:

This table shows the maximum weights and volumes per compartment 1, 2, 3 and 4:

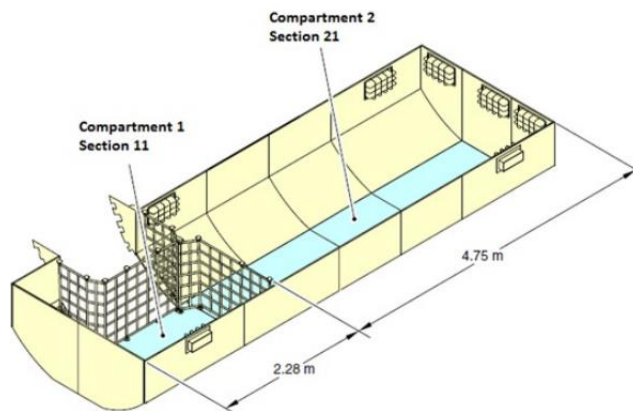
Note: NA indicates that volume figure is not given.

Valid for Version A220-300

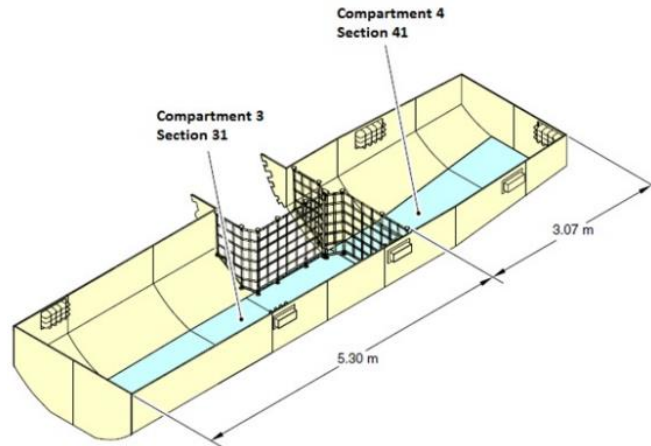
	Forward hold		Aft hold	
	CPT1	CPT2	CPT3	CPT4
Max allowable loading	Section 11	Section 21	Section 31	Section 41
	800kg	1646kg	1858kg	1055kg
	2446kg		2606kg	
Usable volume	3.65m ³	9.00m ³	9.49m ³	5.32m ³
	12.65m ³		14.81m ³	
Max load (flat floor)	732kg/m ²			
Max load (curved floor)	293 kg/m ²			

Caution: The total load of each compartment must not exceed the maximum allowed for the hold.

This is a diagram of compartments 1 and 2 (Forward hold):



This is a diagram of compartments 3 and 4 (AFT hold):



Maximum dimension tables:

Compartment 1 and 2

These tables show the maximum dimensions of cargo items in compartment 1 and 2. All measurements in cm.

CAUTION: If the package is loaded in compartment 1, the maximum length is limited to 178 cm.

CAUTION: For a package wider than 84 cm must be supported on planks and lashed.

Width (cm)	Height (cm)									
	0 to 30	30 to 51	51 to 58	58 to 64	64 to 69	69 to 74	74 to 76	76 to 79	79 to 81	81 to 84
Maximum package length (cm)										
0 to 8	584	541	462	411	363	318	295	274	249	221
8 to 15	569	483	419	378	338	297	277	257	234	211
15 to 23	505	437	386	351	315	279	259	244	224	201
23 to 30	457	401	356	325	295	264	246	231	211	191
30 to 38	417	371	333	305	277	249	234	221	203	183
38 to 46	384	345	312	287	264	236	224	211	193	175
46 to 53	356	323	295	272	251	226	213	201	185	168
53 to 61	333	302	279	259	239	216	203	193	179	160
61 to 69	312	287	264	249	229	208	196	185	172	155
69 to 76	297	272	254	236	218	201	188	178	165	150
76 to 84	282	262	244	229	211	193	180	173	157	142
84 to 91	269	249	234	218	204	185	175	165	152	137
91 to 99	257	239	223	211	196	178	168	157	145	130
99 to 107	246	229	216	201	185	168	157	147	135	119
107 to 117	216	196	180	165	150	132	119	112	97	84

Compartment 3

CAUTION: For a package wider than 84 cm must be supported on planks and lashed.

Width (cm)	Height (cm)									
	0 to 30	30 to 51	51 to 58	58 to 64	64 to 69	69 to 74	74 to 76	76 to 79	79 to 81	81 to 84
	Maximum package length (cm)									
0 to 8	483		462	411	363	318	295	274	249	221
8 to 15	483		419	378	338	297	277	257	234	211
15 to 23	437		386	351	315	279	259	244	224	201
23 to 30	457	401	356	325	295	264	246	231	211	191
30 to 38	417	371	333	305	277	249	234	221	203	183
38 to 46	384	345	312	287	264	236	224	211	193	175
46 to 53	356	323	295	272	251	226	213	201	185	168
53 to 61	333	302	279	259	239	216	203	193	178	160
61 to 69	312	287	264	249	229	208	196	185	173	155
69 to 76	297	272	254	236	218	201	188	178	165	150
76 to 84	282	261	244	229	211	193	180	173	157	142
84 to 91	269	249	234	218	204	185	175	165	152	137
91 to 99	257	239	223	211	196	178	168	157	145	130
99 to 107	246	229	216	201	185	168	157	147	134	119
107 to 117	216	196	180	165	150	132	119	112	97	84

Compartment 4

CAUTION: For a package wider than 84 cm must be supported on planks and lashed.

Width (cm)	Height (cm)									
	0 to 30	30 to 51	51 to 58	58 to 64	64 to 69	69 to 74	74 to 76	76 to 79	79 to 81	81 to 84
	Maximum package length (cm)									
0 to 8	406		406	389	345	305	282	267	241	218
8 to 15	406		396	356	320	284	269	251	231	206
15 to 23	381		363	333	302	272	254	241	218	201
23 to 30	381		340	315	284	257	244	229	208	191
30 to 38	396	356	323	295	272	244	231	216	198	183
38 to 46	366	330	302	282	257	234	221	208	193	175
46 to 53	343	312	284	267	244	224	211	201	185	168
53 to 61	323	295	272	254	236	213	201	193	178	160
61 to 69	305	282	259	241	226	206	196	185	172	155
69 to 76	287	267	246	234	216	201	188	178	165	150
76 to 84	277	254	239	226	208	193	180	173	157	142
84 to 91	261	244	231	216	201	185	175	165	152	137
91 to 99	251	236	221	208	196	178	168	157	145	130
99 to 107	244	226	211	201	185	168	157	147	135	119
107 to 117	213	196	180	165	150	132	119	112	97	84

Air conditioning system:

Compartments 1 and 2:

Ventilation and heating are available. Standard configuration will be VENT ON and HEAT OFF. The ventilation system supplies the airflow to a maintained temperature above 4°C in the forward hold. Heating settings in case of temperature sensitive load will be adjusted by flight crew based on the NOTOC.

Both compartments are equipped with lights and incorporated in the pressurization system.

Compartments 3 and 4:

Only ventilation is available. Standard configuration will be VENT ON. The ventilation system supplies the airflow to a maintained temperature above 2°C in the aft hold.

Both compartments are equipped with lights and incorporated in the pressurization system.

Restrictions

Dangerous Goods

Dry Ice: Maximum amount in Compartment.

		Maximum amount of ICE per compartment Combined weight	
A/C version	Maximum amount of ICE per A/C	1 + 2	3 + 4
A220	908 kg	454 kg	454 kg

Note: Dry ice may normally not be loaded together with AVI, AVC and AVP. However, Live tropical Fish (AVF) and other fish for aquarium use may be loaded together with ICE, as they are packed in closed containers and are not dependent on the oxygen in the compartment.

Scenario	A220-300			
	CPT1	CPT2	CPT3	CPT4
1	ICE (Max 454kg)		ICE (Max 454kg)	
2	ICE (Max 200kg)	AVF	ICE (Max 454kg)	
3	ICE (Max 454kg)		AVC, AVP	
4	AVI, AVC, AVF		ICE (Max 454kg)	

Radioactive Materials: Maximum Transport Index (TI)

A/C version	Max TI pr. aircraft	Max TI pr. package (or Group of packages)	Max TI pr. Compartment			
			1	2	3	4
A220	4	See note and table below	0	0	4	0

Radioactive Materials: Maximum Package/Group Height and Separation Distance

The below table shows:

- The maximum allowed height per package (or group of packages).
- The minimum separation distance (horizontally) between packages (or groups of packages).

Note: Use the column for Minimum separation distance when:

- the package/group height, or
- the Transport Index (TI)

exceeds the permitted values for grouping packages together.

Transport Index (TI) per package (or group of packages)	Max. height per package (or group of packages) (cm)	Min. separation distance horizontally (cm)	Category
0.0	No restriction	No restriction	I – White (RRW)
0.0–1.0	n/a	30	II – Yellow (RRY)
1.1–2.0	n/a	50	III – Yellow (RRY)
2.1–3.0	n/a	70	III – Yellow (RRY)
3.1–4.0	n/a	85	III – Yellow (RRY)
More than 4.0	Not allowed	Not allowed	III – Yellow (RRY)

Note: For the separation of packages (or groups of packages with different Transport Indices (TI), the minimum separation distance required for the package (or group of packages) with the higher transport index must be applied.

Heavy

There are no restrictions regarding HEA other than maximum dimensions, area load and maximum load in hold. HEA shall always be secured by means of lashing. Volumetrically filling the compartment will not be sufficient.

Always check SIRIUS for current restrictions on origin, destination and possible embargoes.

Human Remains

Do not put non-cremated human remains (HUM) in the same compartment as live animals (AVI), perishables/foodstuffs (EAT) and live human organs (LHO).

If a coffin containing HUM weighs 150 kg or more, it shall also be regarded as a heavy item (HEA) for loading purposes.

Human remains (HUM) shall be lashed, even if the compartment or net section is volumetrically full.

Note: HUM shall always be used as remark code on Loading instruction, Loadsheets and LDM, irrespective of weight

Live Animals

Live tropical fish and other fish for aquarium use may be loaded together with ICE, as they are packed in closed containers and do not depend on oxygen in compartment.

Animals that are natural enemies must not be loaded together in the same compartment.

Animals known to be for laboratory use must not be loaded together with other animals, in order to reduce risk of cross-infection or contamination.

A Notification to Captain (NOTOC) shall be issued when live animals are loaded in aircraft cargo compartment.

Radioactive materials of Category II-Yellow and Category III-Yellow packages, overpacks and freight containers must be separated from live animals by a distance of 0.5 m or more for journeys of 24 hours or less, for journeys of more than 24 hours containers must be separated by a distance of 1.0 m or more.

Note: Crustaceans, aquatics and live fish can be secured by volumetrically filling the compartment. **AVC and AVF can be loaded together with EAT, AVF can be loaded together with ICE.**

Most live animal shipments must be treated as wet cargo. Therefore, plastic sheeting or tarpaulin must be placed under live animal containers in order to avoid soilage of aircraft holds, ULD's and other load.

Isolation from Cold Transfer Beneath Animal Cages

Loaded animal cages need to be insulated from cold transfer, as the aircraft does not have heated floors in the cargo compartments. Insulation can be made by various methods, such as: Spreader boards under the cage; insulating material, blankets etc.

Note: If the insulating material also can absorb fluids, the LAR requirement to have plastic under the boxes or cages can be ignored.

Table on the next pages shows the quantity limits for loading live animals on A220-300 aircraft.

Animal, example	DCS	Maximum weight quantity in compartment		Container constructions (LAR CONTAINER REQUIREMENTS)
		1+2	3 + 4	
Cats, dogs <i>Note: For fighting dogs, wild cats/dogs are other requirements</i>	AVI	125 kg gross weight	NA	Fibreglass, metal, rigid plastics, weld metal mesh, solid wood or plywood (LAR CR1)
Small primates, monkeys, arboreal species <i>Note: Primates destined for the research industry are prohibited.</i>	AVI	125 kg gross weight	NA	Wood, metal, wire mesh and muslin or other light material. (LAR CR 31)
Baboon, chimpanzee, gibbons, gorilla, orang-utan <i>Note: Primates destined for the research industry are prohibited.</i>	AVI	125 kg gross weight	NA	Wood, metal, wire mesh and muslin or other light materials or Hardwoods, metal weld mesh and muslin or other light material. (LAR CR 33/34)
Non-domesticated mammals	AVI	125 kg gross weight	NA	Metal, hardwood, min.1.3 cm plywood or similar material, welded mesh, iron bars (LAR CR 71-75, 77, 80, 83)
Lynx, foxes, wild dogs, wild cats, jackals, hyena etc.	AVI	125 kg gross weight	NA	Wood, metal, synthetic materials, weld mesh and wire mesh. (LAR CR 82)
Reptiles (lizards, frogs, turtles, snakes, amphibians etc.)	AVC	No limit		Closed and adequately ventilated containers; must be well constructed and be able to withstand other freight damaging it or causing the structure to buckle or collapse. Clean and leakage proof. As well prevent from handler bites. (LAR CR 41-47)
Leeches, worms	AVC	No limit		Plywood, water-resistant fibreboard, water resistant hard-board, rigid plastics, burlap. (LAR CR 65/66)
Mice, rats, minks, rabbits, squirrels, chinchillas, marten, nutria, stoat, hamsters, guinea pigs, ferrets etc. <i>Note: Laboratory animals are not allowed</i>	AVI	125 kg gross weight	NA	Wood, fibreglass, rigid plastic, lined with wire mesh strong enough to contain the animals and resist gnawing at all times (LAR CR 79, 81, 84)
Penguins	AVP	NA	125 kg gross weight	Wood, 4-6mm plywood, fixed wall plastic (high density polyethylene (HDPE) containers, fibreglass, composite or synthetic materials, wire mesh, shade cloth, plastic mesh, burlap and rope (LAR CR22)

Animal, example	DCS	Maximum weight quantity in compartment		Container constructions (LAR CONTAINER REQUIREMENTS)
		1+2	3 + 4	
Seal, sea lion, walrus	AVP	NA	125 kg gross weight	Solid wood, plywood, strong metal, welded wire mesh and burlap. (LAR CR76)
Shrimps, crabs, lobsters, crayfish, oysters, mussels, mollusc, snails	AVC	No limit		Fibreboard, polyethylene and wood, expanded polystyrene/Styrofoam (EPS). Inner walls must be leak-proof by either waxing or lining with polyethylene sheet or other suitable material. There must be an air space over the animals in order to meet their oxygen materials. (LAR CR 57, 58)
Live chickens or any other poultry birds <i>Note: 1 DAY OLD Chicken or any other poultry are prohibited</i>	AVI	125 kg gross weight	NA	Wood, water – resistant perforated hardboard (pegboard), non-toxic plastic, fibreglass, synthetics and burlap. (LAR CR 18)
Birds- pets <i>Individual or small shipments of birds, e.g. pets</i>	AVI	125 kg gross weight	NA	Wood, non-toxic plastics, fibre-glass, synthetics, wire mesh burlap/muslin or other light material. (LAR CR 23)
Birds (other species) including flightless	AVI	125 kg gross weight	NA	Wire mesh, non-toxic wood, non-toxic plastic, fibreglass, synthetics and muslin cloth or other light material. (LAR CR 11-21, 24-25)
Insects (scorpions, bees, spiders, etc.)	AVI	125 kg gross weight	NA	Wood, fibreboard, plastics, polystyrene, water resistant cardboard, bioplastics. (LAR CR 61-62)
Tropical fish	AVF	No limit	NA	Should consist from outer and inner container; water-resistant fibreboard insulating material, plastic or wood, expanded polystyrene or Styrofoam. <u>Outer</u> – can be constructed of fibreboard, wood, wood products or any plastic material of adequate strength. <u>Inner</u> – strong plastic (polyethylene bag). It is preferable that each bag is placed in an outer bag of similar size to prevent leakage of water.(LAR CR 51)
Aquatic and fish (other than tropical)	AVP	NA	No Limit	Water-resistant fibreboard, insulating material, plastic or wood, expanded polystyrene or Styrofoam. (LAR CR 50-54)
Weasels, polecat, fretka, skunk, hedgehog, mongoose	AVI	125 kg gross weight	NA	Wood, plywood hardboard (masonite, non toxic plastic, fibreglass, synthetics, sheet metal, weld mesh and wire mesh (LAR CR 78)

Live Human Organs

Live organs shall be loaded as close as possible to the door section. Do not load LHO together with Live animals

Perishables

No aircraft restrictions other than maximum dimensions, area load and maximum load in hold, but always check SIRIUS for current restrictions on origin, destination and possible embargoes.

Sensitive

No aircraft restrictions other than maximum dimensions, area load and maximum load in hold, but always check SIRIUS for current restrictions on origin, destination and possible embargoes.

Valuable

No aircraft restrictions other than maximum dimensions, area load and maximum load in hold, but always check SIRIUS for current restrictions on origin, destination and possible embargoes.

VAL shall not be reported separately on the Loading Report. The weight is included in the general cargo figure.

Vulnerable

No aircraft restrictions other than maximum dimensions, area load and maximum load in hold, but always check SIRIUS for current restrictions on origin, destination and possible embargoes.

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