



# MSC AIR CARGO

Customer onboarding booklet



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# WELCOME ABOARD MSC AIR CARGO!



**JANNIE DAVEL**  
MSC Air Cargo  
Senior Vice President

Dear Valued Partner,

I am thrilled to extend my personal greetings and a warm welcome to you as we embark on this exciting journey together. As the SVP of MSC Air Cargo, it is an absolute privilege to have you join our family of forward-thinking businesses in the world of air freight.

In a world that is ever-evolving, where speed, precision, and innovation are paramount, we are committed to redefining the future of air cargo logistics. At MSC Air Cargo, our vision is not just to be part of the industry; it's to lead it, to reshape it, and to set new standards.

Our team is dedicated to delivering value-added solutions that make a real difference. Whether you're shipping time-sensitive products, pharmaceuticals, or high-value goods, we understand that your shipment is unique.

OUR VISION IS NOT JUST TO BE PART OF THE INDUSTRY; IT'S TO LEAD IT, TO RESHAPE IT, AND TO SET NEW STANDARDS.



What sets us apart is our unwavering commitment to customer service. We understand that in the air freight industry trust and reliability are of utmost importance. As your trusted partner, we'll work tirelessly to exceed your expectations.

Innovation drives us. Together, we will explore uncharted territories and pave the way for groundbreaking solutions that will elevate your business to new heights.

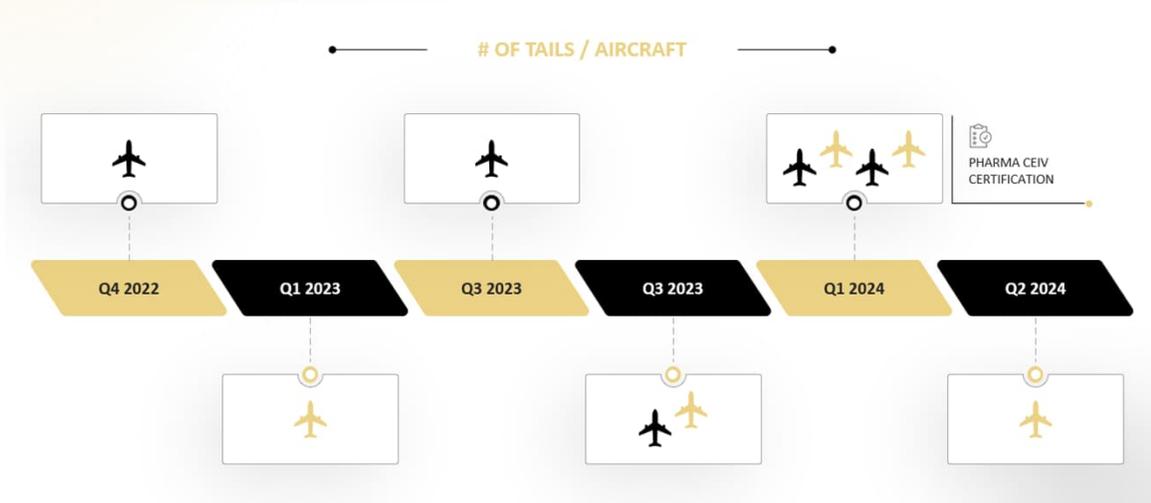
Our customer onboarding booklet is just the beginning of our journey together. It's designed to provide you with a comprehensive understanding of our services, values, and commitment to your success.

Thank you for choosing MSC Air Cargo as your partner in air freight. We are excited to embark on this voyage of innovation, service excellence, and mutual growth with you.

Welcome aboard!

Sincerely,

# MSC AIR CARGO OVERVIEW



- Trusted Partnership to Logistics Services Providers & freight forwarders
- Premium Products portfolio –Pharmaceuticals, Secure, FRESH, Specialized solution and General & Dangerous Goods.
- IATA CEIV Certification enabled in newly designed End2End process.
- Point-to-point network with gateways and cross-over points (no HUB) based on trade corridors and specialized Product solutions with extended Road feeder services (trucking) offering.

*"WE CREATE AIR SOLUTIONS TO MEET THE NEEDS OF OUR CUSTOMERS THAT ENABLE AGILE GLOBAL TRADE IN A SAFE AND SUSTAINABLE MANNER".*

## CEREMONY



# PRODUCT PORTFOLIO ROADMAP



**SHIPPED GENERAL**  
when you think economical and reliable.



**SHIPPED PHARMA**  
when integrity and special care is key.



**SHIPPED FRESH**  
when freshness becomes our mission.



**SHIPPED SECURE**  
when getting there secure is everything.



**SHIPPED SPECIAL SOLUTION**  
when customization is essential.



**SHIPPED DANGEROUS GOODS**  
When special care and precision are required.



VALUE-ADDED



Innovated Network 1st → 2nd & 3rd Tier Airport Customer Trade-lane Strategy



Premium Products & Road Feeder Service offering



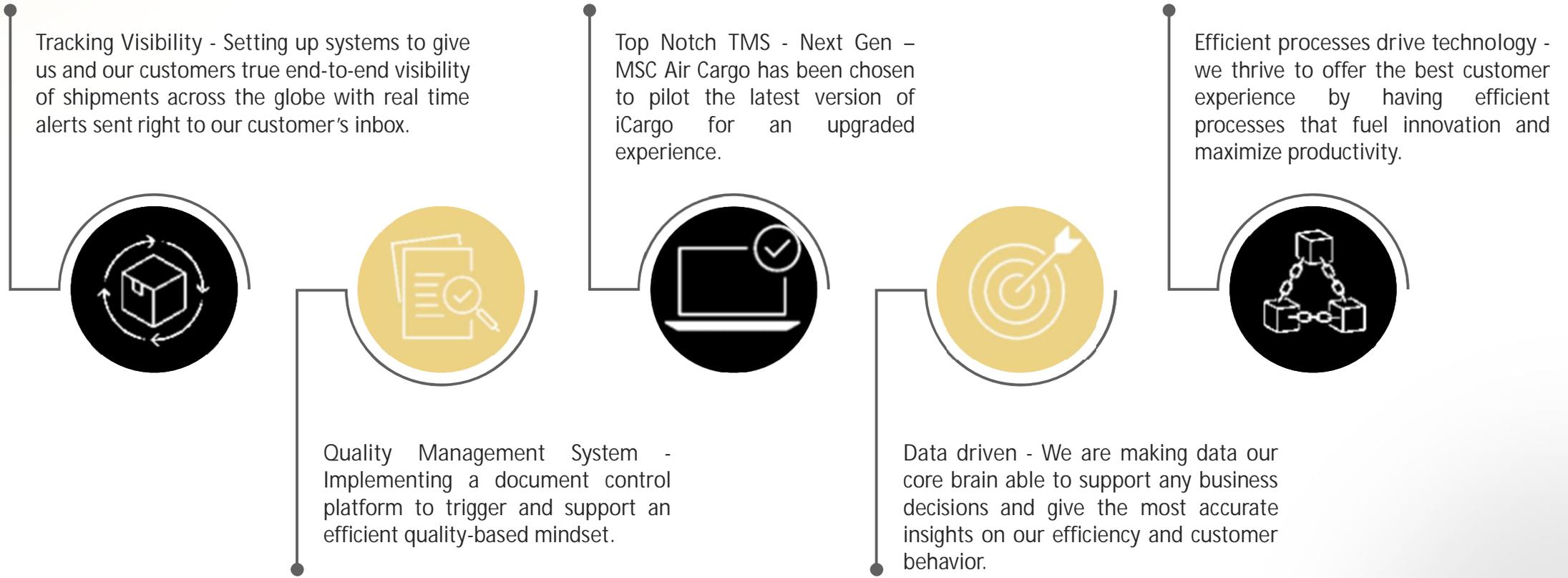
Greenfield E2E process design incorporating IATA & industry Quality Certification by Q3 2023

# EFFICIENT TECHNOLOGY FOCUS



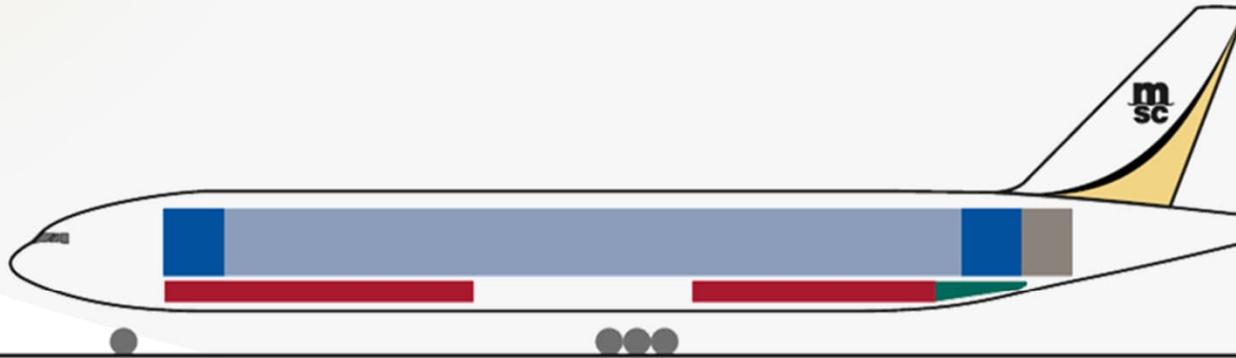
MSC AIR CARGO leverage INNOVATIVE technologies to create a customer-based experience delivering meaningful and valuable products.

We have the luxury to shape our business in an AGILE manner instead of relying on LEGACY systems.



# MSC AIR CARGO

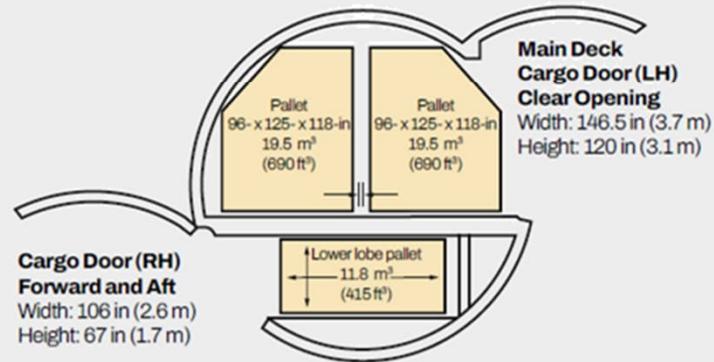
## BOEING 777 – 200 SERIES



### SPECIFICATIONS FOR SELECTED ULDs

ULD COMMON DESIGNATION	MAX EXTERNAL DIMENSIONS L X W X H (IN/CM)	INTERNAL CUBI CAPACITY (FT <sup>3</sup> /M <sup>3</sup> )	MAXIMUM GROSS WEIGHT (LB/KG)	WEIGHT TARE (APPROX) (LB/KG)
M-1H	96 x 125 x 118 in 244 x 317.5 x 300 cm	750 ft <sup>3</sup> 21.2 m <sup>3</sup>	14,491 lb 6,800 kg	816 lb 370 kg
M-1	96 x 125 x 96 in 244 x 317.5 x 244 cm	623 ft <sup>3</sup> 17.6 m <sup>3</sup>	15,000 lb 6,804 kg	772 lb 350 kg
LD-1	60.4 x 92.0 x 64.0 in 153.4 x 233.7 x 164.6 cm	175 ft <sup>3</sup> 5.0 m <sup>3</sup>	3,501 lb 1,588 kg	265 lb 120 kg
P6P/PMC	96 x 125 x (64 to 118) in 244 x 317.5 (162.2 to 300) cm	407 to 740 ft <sup>3</sup> 11.5 to 20.9 m <sup>3</sup>	Variable Variable	265 lb 120 kg

### CROSS SECTION SHOWING MAIN DECK AND LOWER COMPARTMENT



### DIMENSIONS AND KEY DATA

#### 777-200F SPECIFICATIONS

MSC Mediterranean Shipping Company, world leader in transportation and logistics, has started developing a new MSC Air Cargo solution in response to customer demand and as a complementary service to its container shipping solutions. Please find below the specifications of our aircrafts.

# MSC AIR CARGO

## BOEING 777 – 200 SERIES

### TYPICAL MAIN DECK CARGO LAYOUT



### TYPICAL LOWER LOBE CARGO LAYOUT



### TYPICAL LOWER LOBE CARGO LAYOUT

MAIN DECK		LOWER LOBE	
	(22) 96 in x 125 in x 10ft Contoured Pallets		(10) 96 in x 125 in x 64 in Pallets
	(4) 96 in x 125 in x 116 in Contoured Pallets		(1) Bulk
	(1) 96 in x 125 in x 8 ft Pallet		

### MAIN DECK SIDE DOOR PACKAGE LENGTH LIMITATIONS

WIDTH IN INCHES	10	20	30	40	50	60	70	80	90	100	110	120	130	140
HEIGHT IN INCHES	120	319	286	260	239	220	205	191	173	149	100	100	100	100
	114	372	330	296	270	248	229	214	199	181	157	125	117	117
	108	439	376	340	306	279	256	237	221	206	186	162	135	135
	102	513	440	386	345	312	285	263	242	228	211	189	163	152
	0-85.5	839	666	553	474	415	370	333	304	281	259	241	219	192

**NOTE:** The package size table above does not pertain to internal engine carriage. However, when loading an aircraft engine through the side cargo door, the full dimensions of the door shown above may be used when loading with care.

### 777-200F SPECIFICATIONS

MAXIMUM REVENUE PAYLOAD	232,000 lb	105,233 kg	CRUISE SPEED	559 mph	1002.33 km/h
MAIN CARGO COMPARTMENT	18,301 ft <sup>3</sup>	518.2 m <sup>3</sup>	MAXIMUM DESIGN RANGE	4,885 nmi	9,047 km
BULK COMPARTMENT	600 ft <sup>3</sup>	17.0 m <sup>3</sup>	MAXIMUM GROSS TAKEOFF WEIGHT	766,800 lb	347,814 kg
			MAXIMUM GROSS LANDING WEIGHT	575,000 lb	260,815 kg

Cargo data based on Weight & Balance Manual

# MSC AIR CARGO BOEING 777 200 SERIES

## B777-200F MAX ICE 2859 KGS NET PER AIRCRAFT AT 2% SUBLIMATION RATE

(if lower compartments are to be used no more than 272 Kg Net per lower compartment and included on aircraft max)

The Company has established these limits on dry ice amounts considering the recommended carriage limits guidance provided by the Boeing's Service Letter using a base sublimation rate of 2% per hour.

### RECOMMENDED MAXIMUM DRY ICE LOAD (IB / KG) 777 F (FREIGHTER) | TOTAL - ALL COMPARTMENTS

777 F Operating  
Modes Definitions  
(Two Pack Normal Operation)

	Sublimation rate (x%) and Max applicable amount lb / kg respectively														
	(lb)		kg		(lb)		kg		(lb)		kg				
MODES 4 AND 5	1%	12,610	5,720	2%	6,303	2,859	3%	4,199	1,905	4%	3,151	1,429	5%	2,524	1,145
MODES 7 AND 8	1%	10,237	4,643	2%	5,103	2,315	3%	3,406	1,545	4%	2,558	1,160	5%	2,034	923
MODES 2 AND 3	1%	9,031	4,096	2%	4,517	2,049	3%	3,017	1,369	4%	2,254	1,022	5%	1,801	817
MODES 1 AND 6	1%	5,507	2,498	2%	2,761	1,252	3%	1,834	832	4%	1,391	631	5%	1,101	499
DRY ICE SUBLIMATION RATE (% weight/hour)		1%		2%		3%		4%		5%					

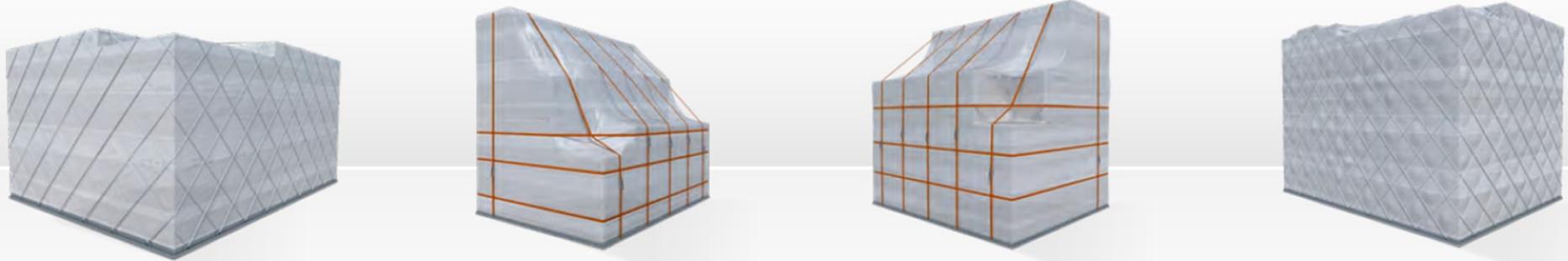
The shipper is ultimately responsible to provide confirmation on the sublimation rate. A higher sublimation rate may limit the total quantity of dry ice per compartment and aircraft. There can be an increase to 5720 Kg if the sublimation rate doesn't exceed 1% - Safety Risk Assessment required.

### ACTIVE ULDS APPROVED BY FAA

MANUFACTURER	ULD	PART NUMBER
ENVIROTAINER	RKNe1	P/N 120007R
CSAFE	RKN	P/N CS10-02800
ENVIROTAINER	RAPe2	P/N 140010R-O
DOKASCH GMBH AIR CARGO CONTAINER	RAP Opticooler	P/N BUD 09010-2
CSAFE	RAP	P/N CS40-0840001

**Note:** Only Active ULDS listed in the above list are authorized to be transported on Company aircraft

# CONTOUR OVERVIEW



	PMC LOWER DECK PASSENGER & FREIGHTER	PMC Q4 FREIGHTER ONLY	PMC Q5 FREIGHTER ONLY	PMC Q6 FREIGHTER ONLY
<b>CHARACTERISTICS</b>				
VOLUME	10.9m <sup>3</sup>	17m <sup>3</sup>	19m <sup>3</sup>	18.9m <sup>3</sup>
STANDARD TARE WEIGHT	120kg (including lashings)	120kg	120kg	120kg
MAX. GROSS WEIGHT	6,804kg (restricted to permitted weight per bay/position on aircraft)	6,804kg (subject to aircraft bay/maximum position)	6,804kg (subject to aircraft bay/maximum position)	6,804kg (subject to aircraft bay/maximum position)
<b>NOTE</b>				
BASE:	244cm   96in	244cm   96in	244cm   96in	244cm   96in
MAX. HEIGHT AT CONTOUR SIDE:	157.5cm   62in	132cm   52in	193cm   76in	244cm   96in
MAX. HEIGHT:	157.5cm   62in	294cm   116in	300cm   118in	244cm   96in
TOP LENGTH:	244cm   96in	99cm   39in	117cm   46in	244cm   96in



