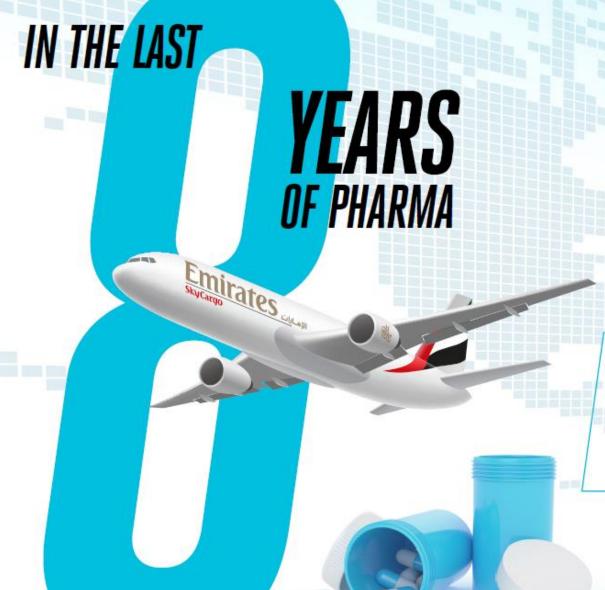




# LIFE SCIENCES AND HEALTHCARE











OVER

580 MILLION KGS OF PHARMA CARGO

TRANSPORTED DURING THIS TIME BY EMIRATES SKYCARGO 41 PHARMA STATIONS

TOP 5 PHARMA ORIGINS:



INDIA 30% OF PHARMA EXPORTS



GERMANY 14% OF



9% OF



BELGIUM 6% OF ARMA EXPORTS



SWITZERLAND 3% OF PHARMA EXPORTS

**EMIRATES PHARMA FACTS:** 

GDP-CERTIFIED Pharma hub COOLEXPANSION 94 ADDITIONAL AIRLINE COOM IN DXB = 94 PALLET POSITIONS

382 COOL CELL ULD POSITIONS

OVER

**20,000** M<sup>2</sup> Handling space

<mark>78</mark> PHARMA Cool Dolues 6 ACTIVE / HYBRID CONTAINER MLA'S PHARMA FREIGHTER HUB IN DWC

#### **PHARMA**



#### PHARMA AXS

Pharma AXS utilises Emirates Pharma thermal covers from Origin to Destination. Designed for less temperature-sensitive items or shipments that already come with advanced passive packaging.



#### PHARMA PLUS AXD

Pharma Plus AXD combines both Emirates Pharma covers and our fleet of cool dollies on the ramp in Dubai to mitigate the risk of temperature fluctuations.





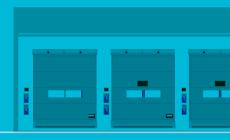
Emirates SkyCentral (DWC)

#### PHARMA ACTIVE AXC

Pharma Active AXC which offers the highest category of protection and closed temperature control using active containers from six suppliers for extremely sensitive pharma products.



















 For the movement of clinical trials, human tissue & organs, cell and gene therapies etc.  High priority, white glove service monitored by the Emirates control tower team in Dubai.  Ability to book faster connection times utilising the bulk hold in the aircraft.

#### MEDICAL DEVICES AXM

- The European Medical Device Regulation (MDR) is a new set of regulations that governs the production and distribution of medical devices. (REGULATION (EU) 2017/745 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 April 2017 on medical devices)
- Supports the movement of instruments used for the diagnosis, prevention treatment, monitoring or alleviation of illness.
- Make sure all devices are moved under GDP guidelines.
- Shipments can be booked either with or without temperature controlled.









#### ACTIVE SOLUTIONS AVAILABLE



ENVIROTAINER C-SAFE DOKASCH VA-O-TEC SKYCELL SONOCO













**Envirotainer** offers two technologies:

- e1/e2 compressor cooling and electric heating
- t2 based on dry ice refrigeration

C-Safe RKN is compressor-driven refrigeration of 4°C - 25°C.

The battery life is over 100 hours at 25°C

**DoKaSch** electric cooling and heating - Cargo temperature range: +2°C -+30°C.

Battery charging time: 4 to 6 hours

Va-q-tec are advanced passive containers using vacuum insulation panels based on the principles of the thermos flask. These panels offer unparalleled heat insulation at minimum thickness

SkyCell uses high end insulation technology and phase change material. Temperature protection under extreme conditions (up to +65°C) and down to -35°C) and features permanent inside and outside temperature logging

Sonoco Pegasus ULD is an aircraft friendly, passive temperature controlled container with Integrated onboard telemetry monitors door to door, on the ground and in the air. Recording everything and transmitting data on real-time temperatures, location, door opening and more.

RKN T2 - 2.93m3

RAP T2 - 8.22m3

RKN E1 - 2.30m<sup>3</sup>

RAP E2 - 6.38m3

RLP - 4.40m3

RAP - 6.6 m<sup>3</sup>

RKN - 2.00m3

RAP - 6.68m3

APS Single - 1.79m3

APS Double - 3.21m3

RK - 1.87m<sup>3</sup> RAP - 6.50m<sup>3</sup> EURO - 1.19m3

US - 1.7m3

XL - 2.5m3

TWIN - 3.2m<sup>3</sup>

1500 - 1.54m<sup>3</sup>

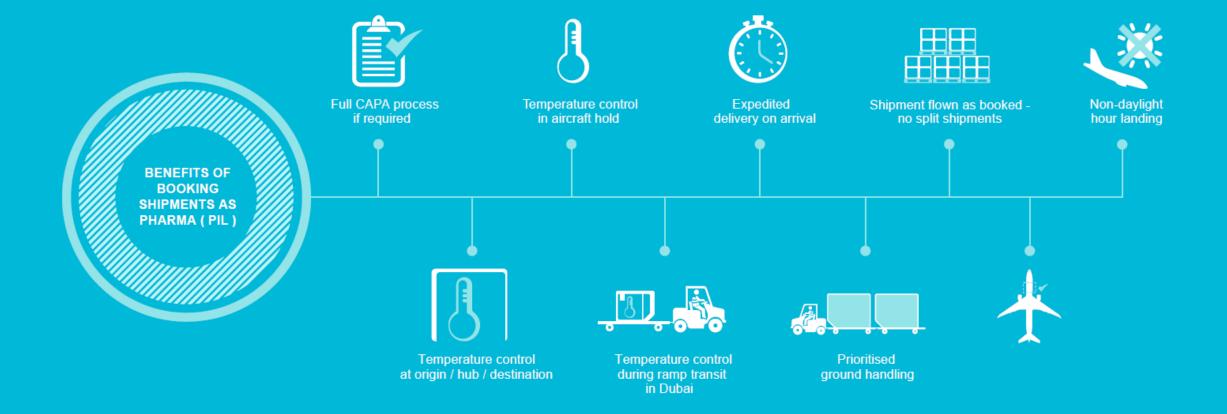
1500 X - 1.66m3

2500 - 2.5m3

Pegasus ULD - 1.51M3

#### KEY AIRPORT TO AIRPORT FEATURES





### **ACTIVE SOLUTIONS - ONLINE**





ACTIVE CONTAINERS CHECKED EVERY 6 HOURS WHEN NOT IN FLIGHT



TEMPERATURE INFORMATION
AND BATTERY LEVELS
UPLOADED ONLINE



AUTOMATIC NOTIFICATION WHEN CUSTOMER SUBMITS EMAIL ON SKYCHAIN

## ROUTE NETWORK

December 2024



#### **ROUTE MAP KEY**

PAX-only destinations

Cargo-only destinations 7

31

PAX & Cargo

TOTAL DESTINATIONS: 14

Pio de Janeiro
São Paulo
(GPU)

Buenos Aires



Emirates SkyCargo

## PHARMA STATION NETWORK







Johannesburg

Osaka Shanghai Hong Kong

Emirates SkyCargo Pharma Station Network represents those stations that are GDP certified and comply fully with all our stringent pharmaceutical handling processes.

Sydney

Melbourne

#### GOOD DISTRIBUTION PRACTICE (GDP)





- Pharmaceutical air cargo shipment handling at Dubai International Airport (DXB)
  - · Ramp operations at Dubai International Airport (DXB):
  - From warehouse to aircraft staging area
  - From aircraft unloading to warehouse induction
- Pharmaceutical air cargo shipment handling at Dubai SkyCentral (DWC)
  - · Ramp operations at Dubai SkyCentral (DWC):
  - From warehouse to aircraft staging area
  - From aircraft unloading to warehouse induction
- Road service between DXB to DWC

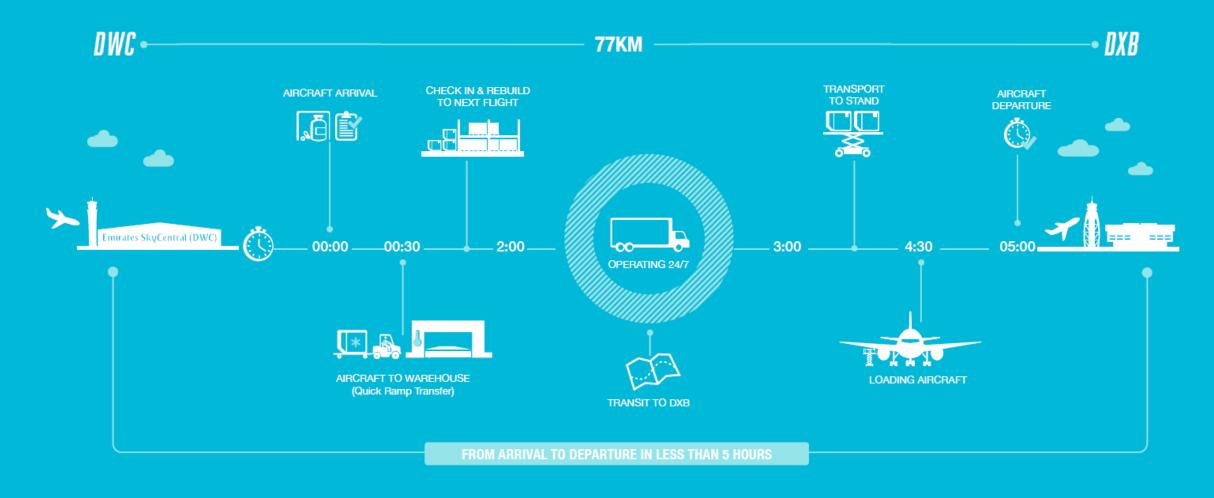


GDP CERTIFICATION\* BY BUREAU VERITAS



## CONNECTING THROUGH OUR TWO HUBS





## EMIRATES LIFE SCIENCES AND HEALTHCARE DEDICATED COOL DOLLIES









Transports temperature- sensitive cargo between aircraft and warehouse



Can maintain temperatures between 2°C - 20°C



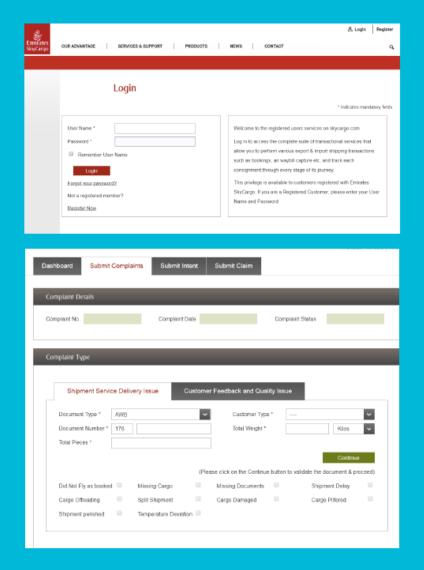
Acts as a temporary storage unit at ramp for quick transfer cargo (connecting onward lights in 1-3 hours)

#### SYSTEM DRIVEN CAPA PROCESS

#### System driven process gives

- · Easy access no delay of info to airline
- · Clear and full data capture
- Single source notification reduce confusion
- · Acknowledgement confirmation of receipt
- Status transparency updating status
- Investigation direct focus / reduce time
- · Clear lead times realistic
- · Clear reporting quick release to the market
- · Historical data analysis





#### EMIRATES LIFE SCIENCES AND HEALTHCARE TRAINING





EU GDP guideline



Quality system process



Emirates SkyCargo quality assurance programme



Audit



Deviation management



Deviation recording, measurement and monitoring



Quality risk management approach



GDP compliant premises



Hygiene



Cargo 2000 (C2K) shipment milestone



Handling



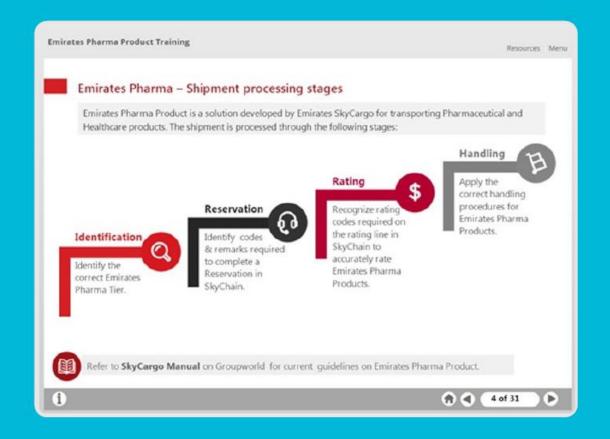
Contingency plan

#### PRODUCT TRAINING



#### New online product training





## **OUR FACILITIES**



















