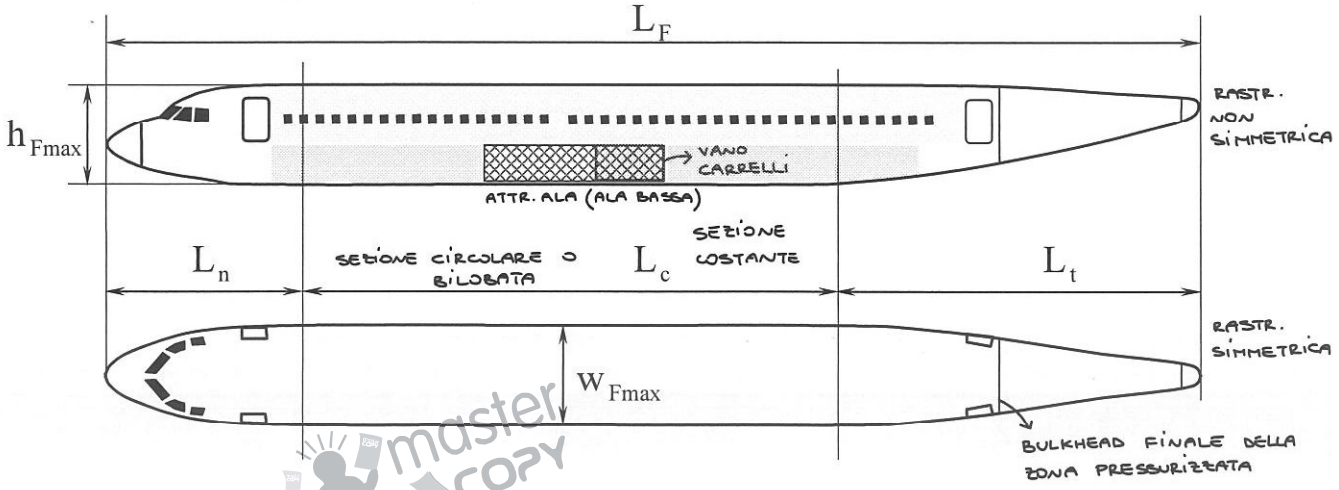
Dimensionamento della fusoliera

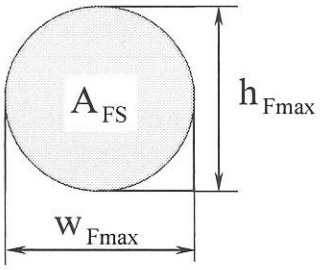
DIMENSIONI CARATTERISTICHE FUSOLIERA



$$D_{Feq} = \sqrt{\frac{4}{\pi} A_{FS}}$$

$$L_n = (1.5 \div 2.5) \cdot D_{Feq}$$

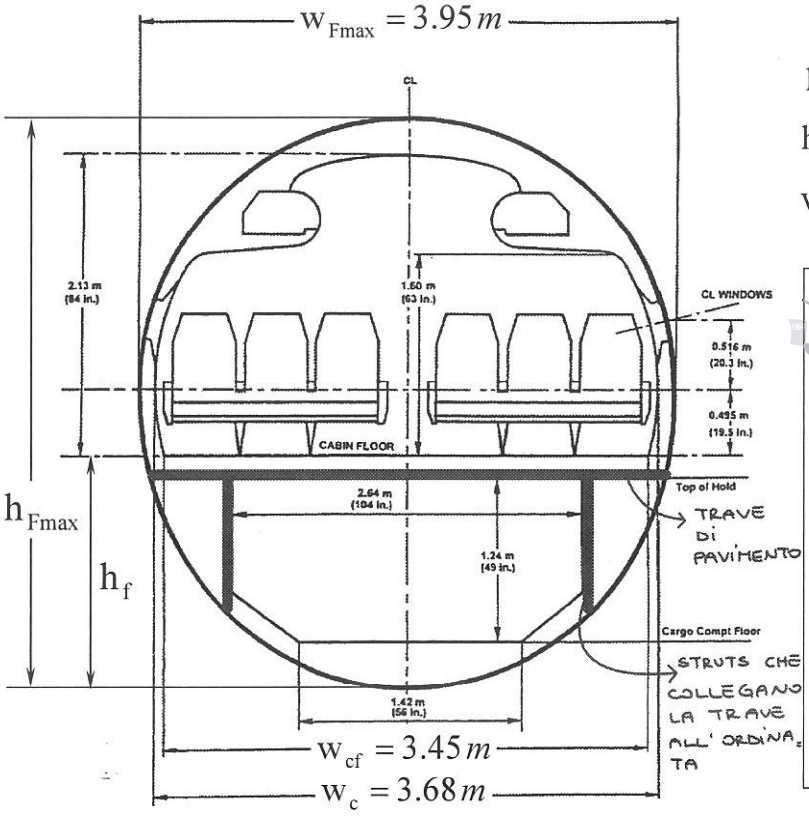
$$L_t = (2.5 \div 3.5) \cdot D_{Feq}$$



- POSIZIONE + NUMERO DELLE USCITE DI EMERGENZA SONO FONDAMENTALI: DEVONO GARANTIRE L'EVACUAZIONE COMPLETA AL BUIO IN 2.5 MINUTI

SEZIONE TIPICA DI FUSOLIERA: NARROW-BODY AIRCRAFT (1)

L'USO DI CONTAINER STANDARD HA RESO MOLTO PIÙ AGILI LE OPERAZIONI DI MOVIMENTAZIONE IN AEROPORTO.



Airbus A318 - A321

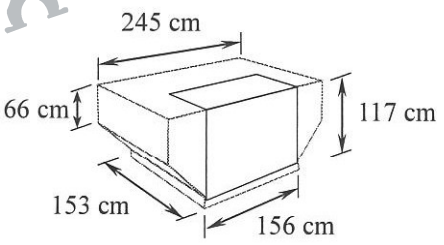
SEZ. BILOBATA => PIÙ SPAZIO VICINO AL FINESTRINO

$$h_{Fmax} = 4.14\,m$$

$$h_f = 0.38 \cdot h_{Fmax}$$

$$w_c = 0.93 \cdot w_{Fmax} \qquad w_c = 0.87 \cdot w_{Fmax}$$

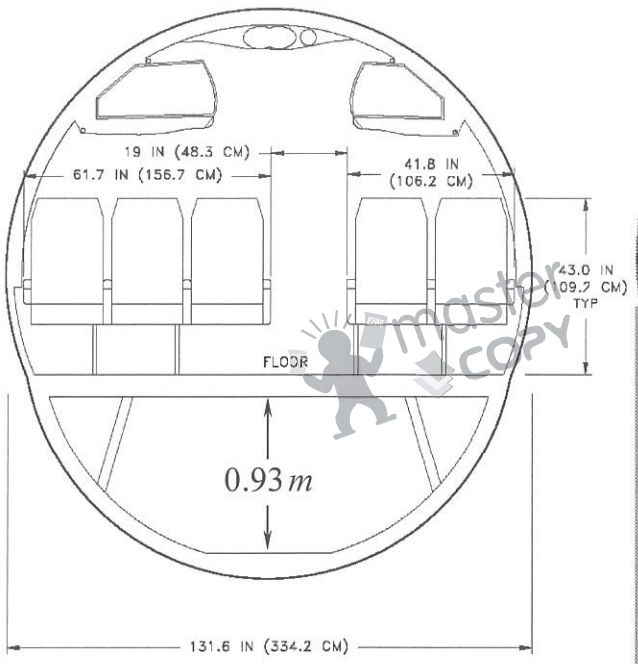
Container LD3/46(W)



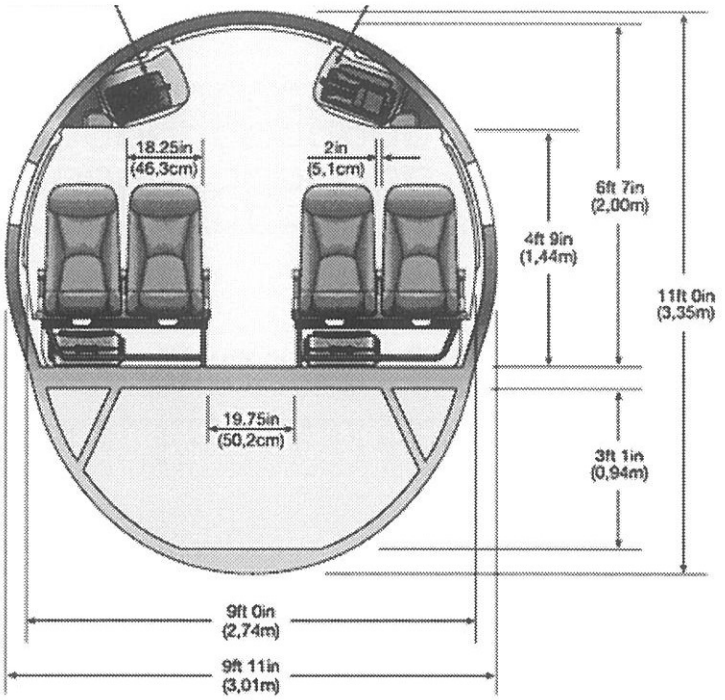
Tara	= 90	kg
Max peso netto	= 1045	kg
Max peso lordo	= 1135	kg
Volume interno	= 3.68	m^3

SEZIONE TIPICA DI FUSOLIERA: NARROW-BODY AIRCRAFT (2)

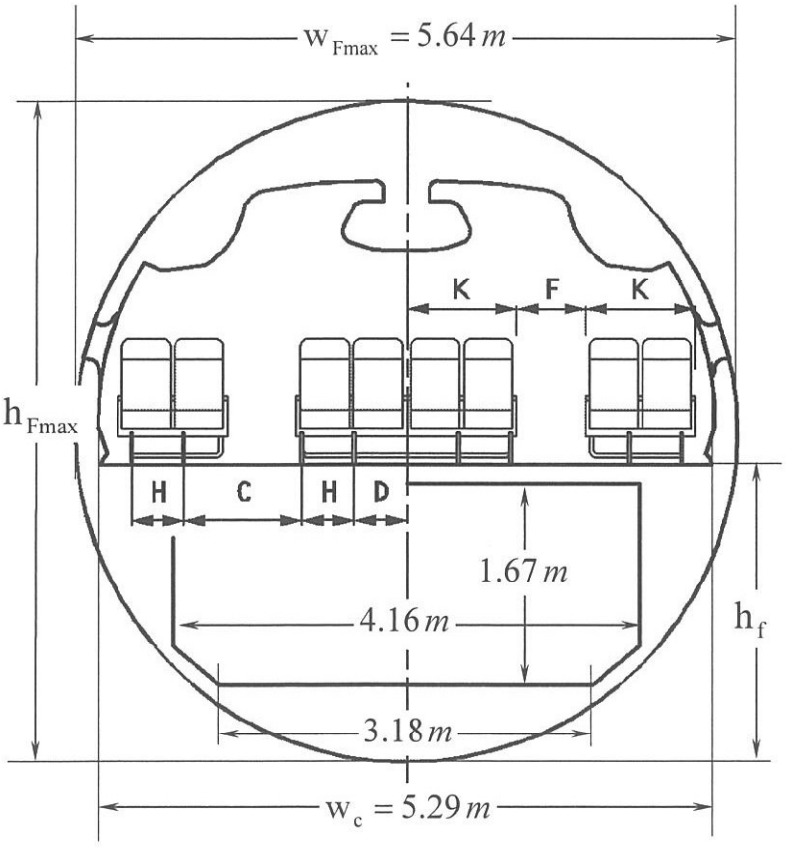
Boeing 717



Embraer ERJ 170 - 175 - 190



SEZIONE TIPICA DI FUSOLIERA: WIDE-BODY AIRCRAFT



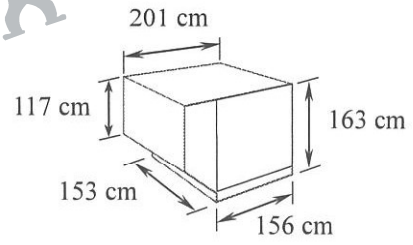
Airbus A300 A310 A330 A340

$$h_{Fmax} = w_{Fmax}$$

$$h_f = 0.46 \cdot h_{Fmax}$$

$$w_c = 0.94 \cdot w_{Fmax}$$

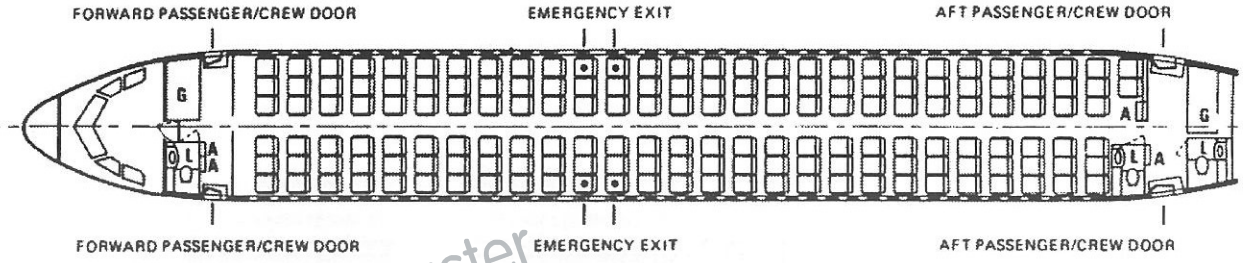
Container LD3



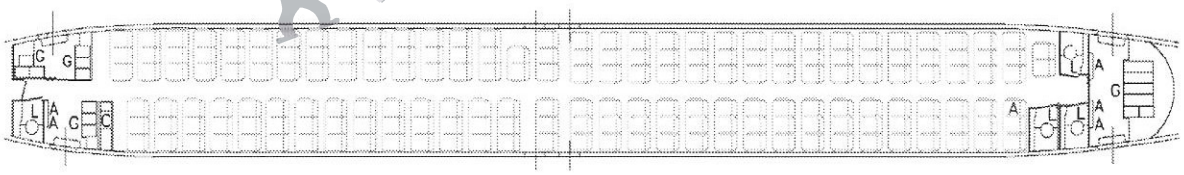
Tara	= 98	kg
Max peso netto	= 1490	kg
Max peso lordo	= 1588	kg
Volume interno	= 4.13	m^3

ALLESTIMENTI CABINA: NARROW-BODY AIRCRAFT

Airbus A320: 164 economy Class seats at 32-in pitch



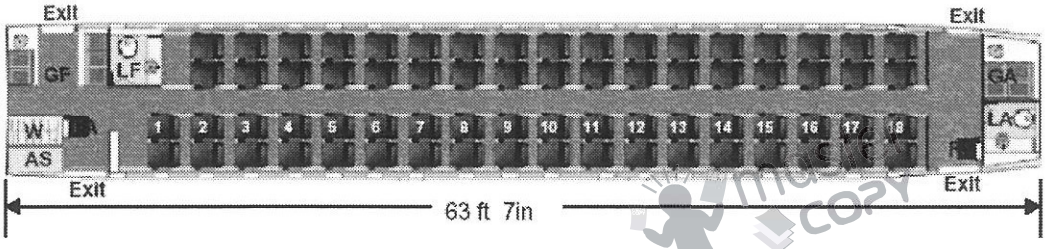
Boeing 737–900: 177 economy Class seats at 32-in pitch



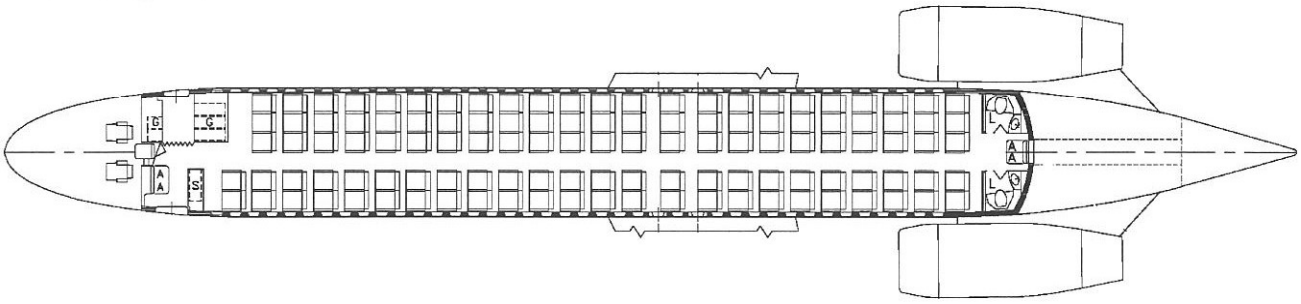
SINGLE CLASS
177 ECONOMY CLASS SEATS AT 32-IN PITCH (SHOWN)
OR 189 ECONOMY CLASS SEATS AT 31-IN PITCH

ALLESTIMENTI CABINA: NARROW-BODY AIRCRAFT

Embraer ERJ 170

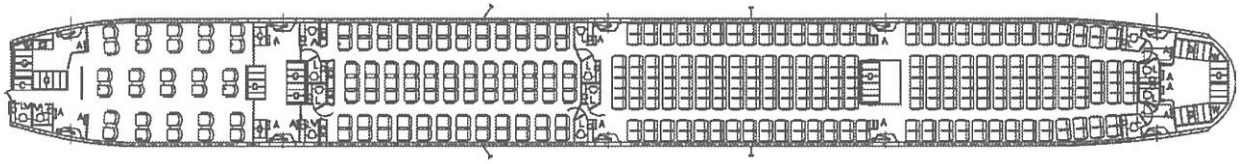


Boeing 717

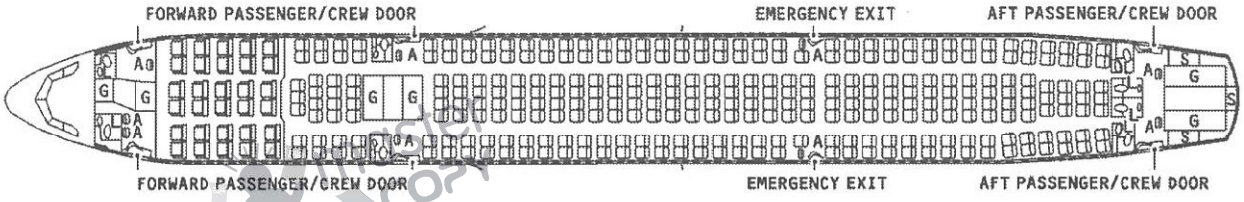


ALLESTIMENTI CABINA: WIDE-BODY AIRCRAFT

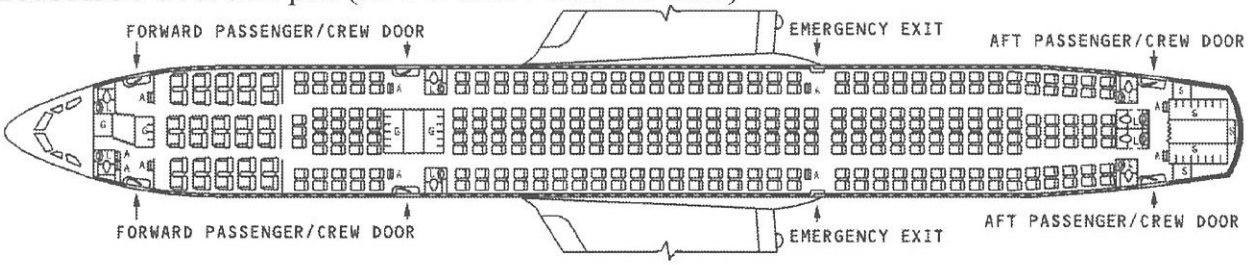
Boeing 777-300: 368 pax (30 FC 60in + 84 BC 38in + 172 YC 32in)



Airbus A340-300: 335 pax (30 FC 60in + 305 YC 32in)



Airbus A330-300: 332 pax (30 FC 60in + 302 YC 32in)



Sizing