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A380, New generation New experience

The most advanced, spacious and eco-efficient airliner in service today

The A380 today

- **124 A380s have been delivered to 10 operators** (10 to Lufthansa, 9 to Air France, 45 to Emirates, 12 to Qantas, 19 to Singapore Airlines, 8 to Korean Air, 5 to China Southern Airlines, 6 to Malaysia Airlines, 6 to Thai Airways, 4 to British Airways).
- **4 new customers will operate the A380 as from 2014 : Skymark, Asiana, Qatar and Etihad.**
- **Total firm orders for the A380 stand at 324 aircraft** from 20 customers.
- **The market potential is around 1,700 aircraft**
- **The first flight took place in Toulouse on 27 April 2005**
- **The A380 first entered into commercial service with Singapore Airlines in October 2007**
- Some 170 flights are performed each day by the A380 over the world, and **2 million passengers fly on the A380 each month.**
- The world A380 fleet has accumulated more than 1,3 million revenue flight hours in 155,000 commercial flights and more than 55 million passengers have already flown on the aircraft
- An A380 takes off or lands in the world every 5 minutes.
- The A380 is already **airport proven with 157 small and large airports visited to date.** The A380 operates 35 airports and uses existing ground handling equipment yet ensures a short turnaround time
- The A380 Family starts from a baseline passenger aircraft with a capacity of **525 passengers in three classes**, and a **range of 15,700 km / 8,500 nm** (more than 1,300 nm than the 747, 1,100 nm more than the 747-8).
- **The total cabin surface area of the A380 is 550 m²**, with two separate, full-length widebody cabins:
 - Main Deck (MD) cabin, the widest of any airliner, is 20" (51cm) wider than the B747 cabin
 - Upper Deck (UD) cabin, the first full widebody UD cabin ever, is 71" (180cm) wider than the B747 cabin:

=> 50% more useable floor area with 40% more passengers
- The **quietest cabin in the sky** – lowest cabin noise of any existing passenger aircraft. The A380 cabin is about 5dB_{SIL3}* quieter than the 747 cabin
- Larger stowage bins – 15% more bin volume per passenger in economy class

- The A380 offers **unmatched fuel efficiency**, thus reducing the CO2 footprint of each passenger (**fuel consumption: less than 3 litres/pax/100km** in a typical 3 class configuration - 525 seats). The 747-400 has 22% higher Fuel Burn/seat than the A380.

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A380 specifications

Dimensions

Overall length	73 m
Height	24.1 m
Fuselage diameter	7.14 m
Maximum cabin width	Main deck: 6.58 m Upper deck: 5.92 m
Cabin length	49.90 m
Wingspan (geometric)	79.8 m
Wing area (reference)	845 sq.m
Wing sweep (25% chord)	33.5 degrees
Wheel diameter	1.1 m
Wheelbase	30.4 m
Wheel track	14.3 m

Basic operating data

Engines	Rolls-Rolce Trent 900 or Engine Alliance GP 7200
Engine thrust range	311 kN
Typical passenger seating	525
Range (w/max. passengers)	15,700 km 8,500 nm
Long Range Cruise	M 0.85
Bulk hold volume	14.3 cu. m

Design Weights

Maximum take-off weight	560 tonnes
Maximum landing weight	386 tonnes
Maximum zero fuel weight	361 tonnes
Maximum fuel capacity	310.000 litres

A380 Fun Facts

- The A380 is the largest civil aircraft (max seating capacity of 853 vs 660 in 747) in history
- The A380 was launched in December 2000, 34 years after the Boeing 747 (1966).
- An A380 comprises 500 kilometres of electric cables.
- An A380 consists of around 4 million individual components with 2.5 million part numbers produced by 1,500 companies from 30 countries around the world.
- It takes 13,000 rivets to join the 3 sections of the fuselage and 4,000 rivets are used for the junction of the wings and the fuselage.
- The volume of the three decks (including cargo/baggage hold) is 1,570 m³, enough space for 35 million ping-pong balls.
- The total area of the A380's two passenger decks is 550 sq. meters, the same as 3 tennis courts, or slightly more than 1 basketball court (usable floor area is 50% higher than in the 747).
- One wing (empty, without fuel), weighs 40 tonnes.
- During take-off the wing will flex upwards by over 4 metres.
- The wing span is 79.8m and the wings are swept at an angle of 33.5 degrees.
- The A380 wing area is 845 sq. meters, 54% more than the B747-400. This enables the A380 to land 20 knots i.e. 35km/h slower than a 747 at its maximum landing weight of 386 tonnes, and helps to reduce noise around airports.
- An A380 has 5 landing gears and 22 wheels.
- 5,000 light scenarios on board, using a wide choice of fluorescent and LED technology.
- The weight of the external paint of the A380 (topcoat plus primer) is equal to 531 kg – the weight of a horse. It takes 10 to 15 days to paint an A380

- The air conditioning features the most advanced filters in the industry, allows 15 different temperature control zones and contributes to cabin noise reduction by low-speed air exchange. The air in the cabin (1,570 m³) is changed every 3 minutes. The temperature can vary between 18 and 30 degrees.
- The maximum design load on the 6-wheel body gear is 260 tonnes - equivalent to 200 VW Golfs or Peugeot 206s.
- The average catalogue price of an A380 is 403 million dollars.

It takes an A380 to compete with an A380