

Airport buses: an important part of the mix

For the large number of airports around the world that move passengers through remote stands, buses are the preferred method of getting passengers between those gates and the terminal. Vehicles will also take flight and cabin crew to and from their aircraft, and thus represent an important part of the tool kit required by an airline to keep things moving smoothly and comfortably on the ramp



Perhaps the biggest advantage offered over competitors is COBUS's commitment to the highest levels of customer service

Andreas Funk, sales director, COBUS



The variety of bus types within our fleet guarantees the right bus for each specific transport

AeroGround's Bernd te Brake

Southern Germany's biggest and busiest air gateway is Munich International Airport, and it offers an example of the challenges of operating a fleet of buses each and every day for departing and arriving passengers, as well as crew members.

AeroGround, a 100% subsidiary of Munich Airport operator Flughafen München and the only supplier of a full range of handling services at the gateway, looks after the airport's bussing operation. By way of example, in 2015, AeroGround transported 6,200,000 passengers and 580,000 crew members across Munich Airport's apron.

The transport division of AeroGround Flughafen München currently operates a total of 56 buses for passenger and crew transport. The buses take passengers to and from all of Terminal 1 and Terminal 2's remote positions (although there

are no bus gates at the new satellite terminal that was opened in 2016).

With regard to crew shuttles, AeroGround's buses operate to all remote positions of Terminal 1, Terminal 2 and the satellite terminal as well as to the cargo apron. Besides crew shuttles on the apron, AeroGround offers a special crew shuttle service direct from aircraft to crew hotels.

The vehicle fleet currently consists of: 24 MAN Lion A23 articulated buses; eight MAN Lion A21 regular buses; two IRISBUS Crossway LE intercity buses; 15 Mercedes O 530 regular buses; four Mercedes O 530G articulated buses; and three Mercedes Sprinter Transfer 45 vans. According to Bernd te Brake, AeroGround's head of operations transport: "The variety of bus types within our fleet guarantees the right bus for each specific transport."

"In order to operate and handle our remote positions, bus services are absolutely necessary," explains te Brake. "Especially in cases of gate changes and repositioning of flights which involve numerous transfer passengers, a high degree of punctuality is required in order to avoid any delays."

In 2012/2013 the majority of the bus fleet was renewed, and te Brake confirms that currently there are no plans for further purchases. However, any such acquisitions involve a range of different considerations being taken into account, he notes. "Besides ecological and economic considerations with regard to purchase and operation, it is essential to take the infrastructures of our airport into account."

"For example, the driveway to Lufthansa's Flight Operation Center is not accessible for over-sized buses. And, it is here that we operate 300 crew shuttles per day."

"Furthermore, a large share of our buses also transport passengers in public areas. When we acquire those buses we



need to make sure that they meet the legal requirements for operation on public roads," te Brake points out.

SPECIALISATION

Airside spoke to three very different companies that supply vehicles to those businesses such as AeroGround that operate airport buses. Germany-headquartered COBUS is entirely dedicated to the airport bus market, and it is reaping the benefits of that specialisation.

"Business has been very good over the last 18 months now," informs sales director Andreas Funk. "We've been able to add new customers, as well as satisfy the needs of existing customers" for airport buses. Indeed, such has been the scale of demand, it has been difficult to keep up with requirements, and the company is looking at ways to increase its capacity to supply its growing customer base.

Since the company's initial flagship product, the COBUS 3000, was first introduced to the airport market, the product line has been complemented by the COBUS 2700, 2700s, 2500 and the E.COBUS. And many of the supplier's clients are today looking to concentrate their purchasing in the area of electrically powered buses, making the latter model a particularly healthy seller right now.

Stuttgart Airport already has six, and is due to take delivery of another five, for example. Two have been sold to Geneva Airport in Switzerland and Canada's Vancouver Airport has also joined the list. Some carriers that also operate buses are going in this direction too.

The trend will be further reinforced by emissions requirements that are only getting more and more rigorous, Funk points out, a process that is particularly noticeable in Europe. On the other hand, what is holding some operators back in the transition to fully electric buses is the paucity of charging points at many airports, and the high cost of such buses' battery units.

The price of electric bus batteries is not really coming down, and this means a high initial purchase cost. Although the total cost of ownership (TCO) of an electric bus compares very favourably with a bus powered by a diesel engine, the high start-up cost still makes acquisition of an electric bus a very expensive option for many potential operators. Perhaps some sort of governmental assistance at the national level across the world, part of executive programmes to minimise emissions, might be in order here, Funk suggests.

Either way, electrically powered buses are likely to remain a strong focus of COBUS looking forward, Funk confirms.



Left: One of the many MAN buses in use at Munich Airport

Right: One of the three Mercedes Sprinter vans operated by AeroGround at Bavaria's Munich Airport



CUSTOMER SERVICE

A mid-sized company of about 40 employees, COBUS made turnover of 80 million euros (US\$85.4 million) last year. Being totally dedicated to the airport market is one of its unique selling points (USPs), but perhaps the biggest advantage it offers over its competitors, says Funk, is COBUS's commitment to the highest levels of customer service. "We are like a satellite, always orbiting around the customer," Funk says.

Thus, a field service engineer from COBUS always accompanies a new bus purchase to help the customer with any issues the client might face introducing a COBUS model into service. Furthermore, such engineers are available to fly around the world to help any customer with any issues that might also subsequently arise.

The company also has its own maintenance and repair unit at Wiesbaden, Germany. This unit can overhaul second-hand COBUS buses that have been bought back by the company, before re-sale to a new client. This can happen more than once in the lifetime of any given vehicle.

Plus, COBUS's extensive stock of spare parts, conveniently located near Frankfurt Airport, can be quickly flown out to any bus in mechanical distress.

Carbridge buses at Melbourne Airport



Local support, total commitment



TLD Aircraft tractors
Reliable, safe and easy to use

www.tld-group.com

7 factories and 33 Sales and Service offices
worldwide to provide you superior GSE and Support

TLD

Support and after-sales service would mean little without a high-quality product, however, and COBUS prides itself on the quality and reliability of its products. It has sold about 3,700 buses since becoming COBUS in 1970, and the vast majority of these are still in operation.

The product is "well known and speaks for itself," Funk declares. "And customers keep coming back to us."

ELECTRIC DRIVE

Another bus manufacturer, this one on the other side of the world, has also devoted much of its energy into electric drive. More generally, however, Australia-headquartered Carbridge describes itself as a leader in aviation passenger ground transport. As well as operations at five major airports across Australia (in Adelaide, Brisbane, Melbourne, Perth and Sydney), it also has an office located in Singapore to assist with future contracts in Asia.

With about 200 vehicles in service at various gateways, Carbridge supplies low-floored city buses, Carbridge DUO (dual end drive) buses, the TORO electric bus and smaller, VIP/charter vans.

Its various low-floored city buses provide for landside operations at the above-mentioned airports. They serve long-term car parks and provide terminal transfer services.

The company also operates 35 Carbridge DUO tarmac buses working in Perth, Sydney and Melbourne. They provide terminal-to-aircraft transportation for domestic and international passengers.

"The DUO has been extremely successful for the Australian airport industry," Bruce White, Carbridge product division manager – national and Perth manager, informs. "As airports are bringing more aircraft onto the ground during peak times, the need to bus passengers is growing. The DUO is designed [with its dual front and back cab drive] to remove the necessity for reversing in an airport environment."

The Carbridge TORO is used on public roads, with the first six vehicles of this model owned by Sydney Airport. The



vehicle is Australian Design Regulation (ADR) compliant and is road-registered. The TORO was developed such that it can be used for any market to replace any existing city bus.

A partnership of three firms together developed and builds the TORO: China's BYD, Gemilang Australia (the body builder) and Carbridge. "We build them and operate the vehicles so we have first-hand knowledge of what is required to make this vehicle first class and to lead the electric bus market in Australia," says White. The buses are built without any government funding or assistance, he adds.

Carbridge's entry into the electric bus market in terms of research and development, manufacture and sales, has facilitated "the very successful operation of Australia's first fleet of electric buses", and been a key development focus of the firm.

Moreover, some of the new technology incorporated in Carbridge's electric vehicles has proved to be even more successful than anticipated, White remarks. "Basically, our run time is far exceeding initial forecasts. The bus can operate 32 hours between charges, with a re-charge of only three hours."



All six Carbridge TOROs

Furthermore: "Series 2 will have a greater battery capacity with the physical size of the battery reduced."

White continues: "The build process of the bus is also being amended. Weight is a critical factor with buses and to be able to reduce the weight has a major effect on the overall performance. Carbridge constantly meets with the engineers at Gemilang to discuss options in the build of the body of the bus."

Buses are by no means Carbridge's only product. It also offers luggage trolley services (known as Easy Cart) alongside airside bussing for various airlines, and vehicle maintenance for GSE clients.

Meanwhile, progress has also been made away from the factory floor and at customer locations. For example, Carbridge is collaborating with the Aerocare Australia group, which describes itself as "Australia's leading independent provider of aviation services" and has over 3,500 employees. Co-operation with the handler facilitates "greater cross-utilisation amongst both companies to offer a more cost-effective operation to all our clients", White declares.

Elsewhere, Carbridge has also formed a relationship with a company that will supply wheelchairs to some of the major airlines in Australia. Carbridge will become the Australian agent for these wheelchairs, White reports.

SIZE ISN'T EVERYTHING

Established in 1948, Belgium-headquartered Van Hool, an independent manufacturer of buses, touring coaches and industrial vehicles, built the world's biggest airport shuttle bus for SGSIA to support its ground handling service at Algiers International Airport.

Three of these buses were supplied to the airport in 2012 to ferry passengers back and forth between the airport building and the aircraft.

At 14.64 metres long and 3.75 metre wide, Van Hool described the shuttle bus as the world's largest in terms of capacity (with space for 146 standing passengers, 14 seated). The vehicle is equipped with six sets of double doors: two on the right-hand side, two on the left-hand side, one at the front and one at the rear.

As well as capacity, the airport also had another particular requirement: because of the extreme heat often experienced in Algeria, a particularly efficient air-conditioning system had to be integrated to transport passengers in comfortable conditions.

A spokesman for the company notes: "The production of this vehicle is proof of what Van Hool is capable of – tailor-made solutions for any customer in the world." ■

European Quality Cargo Castors

for loaders, decks and dollies
maintenance free
long life time (8-10 years)
enable real easy ULD handling




The ones that really let your cargo fly!





contact us at info1@colson-europe.com