



Hong Kong takes tugs

The Hong Kong Government Flying Service recently purchased two new Mototok Twin 3900 tugs. These tugs, which can accommodate nose wheels of up to 39 centimetres wide and weights up to 39 tonnes, will be deployed mainly on civil protection and search and rescue operations. The Hong Kong government intends to use the tugs specifically with its EC 155, AS 332, Super Puma and Fixed Wing Challenger 605 helicopters. What convinced the Chinese, who actually came across Mototok via the Internet, was the vehicle's exceptionally flat format, its easy and safe operation and its quick return on investment, together with its green credentials and the fact that it enables a single person to move a helicopter in a hangar or on an apron using a remote control. The tugs were delivered eight weeks after they were ordered.

"We are delighted to have this new customer on board," says Thilo Wiers-Keiser, Mototok co-founder and Sales Director. "These two tugs are the first ones we will supply to Hong Kong." One of the features that contributed to the decision to buy as always was the fact that anyone in the hangar who has completed two hours of basic training can manoeuvre an aircraft or a helicopter on their own. Additional technicians or wing walkers are not needed during manoeuvring, as the operator with the remote control has a complete, all-round view. This autonomy and independence could be life-saving, especially in the application planned for Hong Kong, as Thilo Wiers-

Keiser explains.

"When a pilot has to take off on an urgent rescue flight, he cannot wait until a three- or four-person team is in place to move the helicopter to the required position. It normally takes a brakeman in the helicopter along with two or three other people to ensure that the aircraft does not hit anything when it is manoeuvring. And the special driver's licence needed for a towbar tractor is also not required."

The model's low profile and environmental friendliness makes the difference here and the design of the tug has also earned accolades because of the fact that a helicopter carrying out a rescue mission is equipped with an array of antennae, lights, load hooks, radar and camera equipment, all of which must not be damaged when the helicopter is being manoeuvred or loaded on to a tug. Helpfully, it takes just 15 seconds to cradle or release an aircraft or helicopter.

A complete power solution from IST

Switzerland-based IST claims to offer the world's first totally integrated system for the supply of electrical power and pre-conditioned air to aircraft on the ground. Given that stationary aircraft need 400 Hz electrical power whilst on the ground, IST's solution represents an answer that is both compact and modern.

Discarding the traditional APU, thanks to the use of stationary systems that provide power and pre-conditioned air, typical fuel savings of up to 90% (excluding grey energy) have been reported, with CO₂

and other pollutants reduced by some 90%, whilst the level of noise on the ramp drops appreciably.

Manufactured entirely of stainless steel, the doubly insulated, two or three stage tube acts as an excellent conduit for the hosing itself.

Aircraft Ground Energy Systems (or AGES) have found favour at various stations. IST's most recent work has been carried out at Palma De Mallorca airport, where a prototype telescopic tube on the airbridge has replaced the existing example. Up to 20 further telescoping tubes are pending installation over the coming months, dependent on the results of the initial installation.

Elsewhere, Munich airport has benefited from a PCA distribution system whilst at Hamburg, a new hose reel has been fitted to an airbridge, together with hose baskets. A further multiple is also awaiting installation.

Beyond this, the enterprise has been looking at the concept of a decentralised point-of-use PCA unit with air temperatures of -3°C at the outlet of the unit. IST was due to test this unit at Airbus on site in Toulouse with the new A350 in July.



Reaching new heights

From TIPS comes a newly-designed passenger stair model, the PS2438TPE. TIPS has been working hard at lowering the carbon footprint of its GSE and that of the new model is almost zero.

Thanks to its electric auxiliary drive and the option for solar panels, these steps are fully stand-alone and exhaust-free. The onboard charger enables charging without the need of any special modification to an airport infrastructure and battery removal is child's play.

For easier and safer docking, TIPS offers the option of operating the stairs from the driver's position, which is on the platform. The better overview ensures greater safety levels and contributes to confidence and precision. Moreover, it is an example of mainly electric GSE with just one hydraulic component, which thereby reduces maintenance. With its maximum speed of 6 kilometres an hour (optionally 15 kilometres an hour), the model enables short distance movement without the need of being towed. This brings the benefit of time savings and does away with additional towing units. An operations panel on the equipment allows the operator to select the relevant aircraft type before deploying the stairs; the system will then automatically adjust the platform height to the exact docking position. Deployment of the steps is essentially a one-man operation.

A clean lift?

The largest forklift trucks in Doosan Industrial Vehicles' 7-Series range, the D100S-7 to D160S-7, have started rolling off the production line. With low emissions and powerful performance, these trucks are ideal for airfreight operations.

Doosan recently purchased Rushlift and its ground support equipment business at Heathrow, operating as Rushlift GSE. This provides a perfect fit as Rushlift GSE, which will continue to operate under this name, is emerging as a strong challenger brand in all aspects of ground support equipment, from forklifts to pushback tractors.

The new additions to the range are fitted with the DL-056 engine, joining the rest of the 7-Series range which are fitted with the award-winning G2 engine.

Both engines use the same technology which enables them to meet stringent new EU emissions standards without the expedient of a diesel particulate filter. The engines dramatically reduce maintenance downtime and have set a new benchmark for fuel consumption.



By using Diesel Oxidation Catalyst exhaust treatment technology along with an Exhaust Gas Recirculation system, the engines fitted across the range give 23% lower fuel consumption than engines of comparable size. This also means longer maintenance intervals and maintenance-free, after-treatment systems that reduce the total cost of ownership over the life of the engine.

Such low emissions from a forklift fleet can play an important rôle in contributing towards meeting emissions targets for freight terminals and airports as a whole.

It isn't all about the emissions, though, as important as that is: the trucks have a strong and rigid chassis frame, incorporate more metal than plastic in their design for added durability, whilst the new tilting Zeus Cabin provides a 360° view and guarantees ease of access and comfort for the operator.

Heathrow invests in special power application

A UK-based manufacturer of specialist ground support equipment has won a significant contract to supply cutting edge equipment to

London's Heathrow airport.

Powervamp is to supply a number of its Sidewinder special power delivery systems to Heathrow over the next 18 months, in what represents another UK manufacturing first for the firm.

The Powervamp Sidewinder is a retractable series of arms housing the high frequency cables that provide power to an aircraft while at the terminal. The application has been designed to give airports a simple and reliable power transfer system.

This deal represents a major coup for Powervamp, which won the contract ahead of some of the world's biggest engineering firms. Moreover, it was also the only company able to manufacture a sample product from CAD drawings to a finished prototype in a timescale that impressed the key management at Heathrow.

Before designing the Sidewinder, Powervamp engineers worked alongside ground handlers at Heathrow, studying the technical difficulties they faced during rapid aircraft turnaround times, under all types of weather conditions. Initial installation of the first prototype for the Airbus A380 at Heathrow's Terminal 5 took place during

the night curfew.

The Sidewinder is destined for use at Terminal 2 and Terminal 3 and Powervamp has given London Heathrow a five year warranty on the product, demonstrating the company's confidence in its quality.

To date, Powervamp has supplied its products to more than 60 countries and with new products being continuously developed and launched, it sees a growing world market for its products and services.

Joint venture to enhance the passenger experience

The Somerset Capital Group, which is based in Milford, Connecticut, along with AGS Corporation in London, has announced a joint venture to provide turnkey solutions for GSE fleet management.

This new joint venture provides the first such co-operation between an experienced GSE fleet manager (one with a background of maintenance, procurement and optimisation of fleet utilisation) and a blue chip provider of finance with a specialisation in the sector. The companies also bring together geographical experience, thanks to Somerset's North America and Far East market knowledge and AGS with its background of Europe, the Middle East and Africa. Between them, the companies are able to meet the requirements of most of the major global operators.

Many airlines have recently consolidated their networks by acquisitions and global alliances, and have recognised that having enhanced their own on board passenger

experience, they need to now work closer with their global handling partners to improve the passenger experience from the initial departure point: this might start with the home or the hotel, through the departure airport and at the terminal airport; in fact, until the traveller arrives at his ultimate destination. This means the handler has to focus more on these areas, and needs to have a reliable fleet management partner who can react quickly to innovation and respond to new fleet changes.

This new joint venture, rolled out in August, will provide this facility in a seamless manner, according to the partners involved.

New loader from Aviramp

Aviramp has introduced another first into the world of GSE. The EMA Mobiloader provides a much-needed solution to the issues facing airports and handlers, that of loading a heavy EMA into the hold. Although there are other GSE trying to alleviate this problem, the Aviramp Mobiloader is billed as the simplest and most effective to operate.

The system takes just 20 seconds to set up, and includes a solar powered winch for the really heavy loads, which takes 50 seconds per despatch. It also offers an easy way for handlers to manually load and unload, given the sloping gradient of the non-slip serrated flooring. The EMA Mobiloader can carry up to one tonne in weight and it offers complete safety for both handler and airport.

The new GSE was trialled initially at Exeter airport.

