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ground handling INTERNATIONAL

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FLIGHT ESSENTIALS

Exploring the world of the beltloader

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SAFER AND GREENER

Safety devices and cleaner running options typify the current batch of beltloaders, finds the Editor.

Beltloaders may not change very much in terms of technology from year to year but most suppliers report that there have been some developments over the last 12 months.

Charlatte manufactures beltloaders in both the US and France and the French company prides itself on offering the widest electric range within the GSE sector.

The CBL2000E is acknowledged as the Universal model, and it is a beltloader capable of serving anything up to, and including, an A380. A medium solution is the CBL150E, which can cover a range of aircraft, in fact 80% of what the Universal can access; for this reason it is a very popular model. Charlatte says that a mixture of the above two beltloaders has become something of an industry standard for many of its customers, especially those seeking to invest intelligently in GSE. In addition to this pair, Charlatte offers a small model, which is aimed in particular at the business jet sector.

The company's spokesperson reveals that for the company 2019 was a record year, with in excess of 2,000 beltloaders sold (a figure that takes into account US production as well as that of France). Of this number, 300 were electric models, representing almost 15% of its production. A final note concerns the company's aircraft approach system safety device, which is now being routinely requested by Charlatte's customers.

Multiple sites

Another company with multiple sites is TLD, which continues to increase its market share of beltloaders in the US through a mature design and innovative safety features. Beltloaders are typically supplied by TLD's Sherbrooke (Canada) factory, which completed an expansion phase last year to help meet a growing demand for all products. Today the company's NBL is the most widely used beltloader on the market, with three factories producing well over 1,000 machines per year. The NBL is becoming more and more the choice of safety conscious customers in the US because of the pioneering Aircraft Safe Docking (ASD) feature, which is now in its sixth year of production.

A new safety feature offered, which started this year, is the Anti Pinch: this system immediately stops the conveyor belt if a baggage strap or person's hand becomes caught between the belt and the boom. In line with environmental concerns, TLD's NBL-E is available with a choice of lead-acid or lithium-ion batteries; it can also take advantage of TLD's own patented iBS lithium-ion battery system, which allows a modular approach. All TLD E products can be powered with one, two, three or four modules, depending on the requirement.

A twist on the traditional beltloader from Power Stow: this model is selling well

In France, Sebastien Fabre, COO at St Lin, notes that Power Stow has been taking more TLD chassis; these serve as underpinnings for the former's special belt. He is also hearing more and more about pooling of NBL beltloaders and believes that it's a strong market trend that will see an increasing quantity of GSE fitted out for fleet management.

"Diesel or electric? Things are changing a bit. Currently sales are about one third electric. I think that this situation can be attributed to insufficient power outlets at airports. As for safety enhancements, the No-Touch system and collision avoidance are being demanded constantly."

Chinese production for TLD continues apace. According to Yu Tao, COO of TLD Asia, last year saw more and more customers ordering the

GSS Online has been listening to its customers and upgrading its beltloaders

Electric the only way to go, according to French manufacturer Charlatte

company's NBL-E; that has been especially in demand amongst Chinese customers, presumably in line with that country's government's plans for a cleaner ramp.

That said, TLD in China continues to offer both electric and diesel versions of its beltloaders which, when broken down by types, fall roughly 50-50 in terms of diesel and electric. TLD's COO says that Chinese customers in general prefer the lithium-ion battery for motive power whereas other areas are happy to take the lead-acid battery combination. His final words relate to the subject of safety: TLD's anti-collision devices are now being fitted as standard to beltloaders.

A focus on details

The big focus from the Mallaghan engineering team has been on small design changes to improve reliability of its Bendi-belt beltloaders over the past couple of years. A new flight design has eliminated loose straps catching during the loading process and in line with other beltloader suppliers, Mallaghan offers a Controlled Approach System in accordance with IATA's AHM913 recommendations.

Of interest to the green contingent is its 80 V DC fully electric drive beltloader that will be coming to the market soon. Options will be plentiful and include a baggage counter as well as different guard rail installations. A powerful lifting head to assist the stacking of baggage in the hold will also be on the books and Mallaghan has revealed that telematics options will be available ex-works.

Power Stow has experienced a continuously growing demand. More and more companies are interested in the supplier's equipment, because ergonomics, reliability and productivity are important criteria. Sales in Europe and Asia were good last year.

"We work in close collaboration with our customers and always listen and strive to better understand their challenges," says Martin Vestergaard. "For example, we made adjustments to our auto-levelling aircraft docking system, which makes it easier for ground handlers to perform a precise docking on an A220, where the cargo door opens out away from the aircraft." Beltloaders are available in electric, petrol and diesel-powered versions but electric is becoming more and more popular in the US, Europe and Asia. In 2019, more than 70% of the units sold in Europe and Asia were electric. Euro 5 engines are used in the European and Asian markets; in the US it is Tier IV final.

Made in the US

At Textron, there has been a focus on safety and environmentally friendly equipment. The company's Brad Compton relates that the 660 continues to sell well, to the point that a second production line has had to be set up. Petrol, diesel and electric options are all offered and the US operation supplemented by its facility in the UK under the Douglas label. Like other respondents, Textron has developed its own aircraft avoidance system, which is dubbed the Smart Sense.

At GSS Online, petrol-powered beltloaders are the company's stock-in-trade. According to the company's Luke Brown, the very first demonstration unit was sent out in 2015. He adds that at present the company sees no great need to offer other types of power plant.

"Over the last 12 months, our beltloader has been modified a couple of different ways. LGSTX, who was one of the first users, requested that the next generation would have power brakes. Thus, we will apply those as an option for future customers. Additionally, while we can use any engine that the customer prefers, we are starting to recommend the a Mitsubishi 2.4 L engine and GM 6L50 transmission because we have found immense success with it in our trams, and we know that it will make the beltloaders more durable, stronger and overall better."

He adds that GSS also has an aircraft avoidance system (the AASA), which relies on a combination of cameras and infra-red sensors.

NMC Wollard makes a conventional beltloader as well as an extendable one. "TC-888 sales were within projection," reveals Tim Taylor. "There were electrical upgrades to wiring, panels and speed controls, as well as additional improvements with respect to ergonomics."

Wollard's beltloaders are available with 80V AC electric power but where customers seek diesel options, Tier IV Final is the standard engine level. And, unsurprisingly, Taylor notes also that there have been more enquiries for electric units in recent months. ghi