

Filtering Out Mechatronics' Opportunities

Mechatronics is bringing together two key areas of expertise – electronics and mechanical engineering – to create new opportunities for door and window fabricators and installers.

Mechatronics is an area that's growing for Avantis International, a company known for its water filter sensors - and for its hardware. "In the glazing industry, most people know us for hardware," says Mark Bromley, CEO of Avantis. "But that's just part of the business. Avantis is one of South-East Asia's leading manufacturers of electronic sensors and indicators for a global market. We provide products into sectors such as water filtration, pharmaceutical and medical, as well as distance and measurement.

"We manufacture the indicators that tell customers when the cartridges in water filtration jugs need changing for Europe's leading water filtration company. This requires a high degree of accuracy and consistency. Avantis has



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been producing sensors and indicators for seven years and during that time we have supplied 91 million smart indicators globally."

Smart tech and locking systems

As part of the hardware development programme, Avantis has invested into mechatronic assembly lines in Malaysia, making them capable of integrating electronics into high security locking systems. Bromley adds: "In 2019 we are launching Kubu. It's a simple and affordable solution for the mass market that combines the me-

chanical lock and electronic sensor. The official launch of the products will be at FIT Show 2019, where we will be demonstrating how it works and the benefits to fabricators, installers and homeowners. More excitingly, we will show how it will integrate with the smart home technology that's becoming an essential feature in many homes.

"We believe that 2019 is year for mechatronics for Avantis. This is backed up with a huge investment programme to bring exciting new products into the door and security industry." **i**

Don't Blow A Gasket Over Stockholding Issues

The major problem with any of the gaskets available for repairs is the variety of different gaskets that have been used in all the different types of PVC-U doors and windows.

To overcome the issue of searching for different types of gaskets, Windowparts have developed the Flexi-repair gasket system

available in pre-packed 10m coils. The range consists of three draft-proofing flipper gaskets and three wedge gaskets to retain the sealed unit.

Draft-proofing

The draft-proofing range compresses down to 2mm, provides up to 7.3mm cover and is also designed to act like a bubble gasket. There are three different arrow sizes for fitting into the

sashes and frames of the PVC-U. The gaskets re designed to follow the contours of the window/door profiles even if the sashes are bowed. Windowparts claim the range of three gaskets will cover 99 % of PVC-U doors and windows.

Wedge gaskets

Each of the products in the wedge gaskets range will provide two options for holding the glass in place. **i**

Picture: Windowparts has developed the Flexi-Repair Gasket System.



New Cylinder Is 3-Star Of The Show

The Kenrick 3-Star cylinder has been designed for installers who want their fabricator to supply a top of the range door locking solution at a reasonable price.

The cylinder is independently tested to meet the latest security standards of the British Standard Kitemark (TS007 3*).

Bumping and screwing

It is Secured by Design and features multiple high security pins to provide maximum security and excellent resistance against the known cylinder attack methods – picking, drilling, snapping, bumping, pulling and screwing.

Gone in 15 seconds

Steve Williams from Kenrick says: "With more than 70% of burglars gaining access to a property through a door, the choice of hardware for that door is a very important decision for any homeowner.

"Sadly, the number of attacks on



Kenrick has expanded its cylinder range with the introduction of a new 3 star high security cylinder.

doors is increasing because intruders can quickly and quietly manipulate the cylinder and gain access to a property – typically in less than 15 seconds.

"We need to stamp this type of crime out and offer far greater peace of mind for the homeowner. Our new 3 star cylinder eliminates any possibility of tampering with the cylinder, making homes much less vulnerable to attack."

Both sides

Williams continues: "The real beauty of our cylinder though is that it meets the standards of TS007 on both sides of the cylin-

der, which means that fabricators only need to stock one cylinder for both open in and open out doors. It's also compatible with an A1 key blank, so homeowners can easily buy extra affordably priced keys from the high street if they need to."

Retro-fit

The cylinder is manufactured in a polished brass or a nickel finish and can be easily retro-fitted with no additional preparation. It is available as Paired Alike or Thumb Turn and in all sizes from 70mm to 110mm in 5mm increments. [i](#)

Salty Seadogs Prefer An Armour Coating

Rust and atmospheric pitting is a common problem for homeowners who live in coastal areas due to the high concentration of sodium chloride in the air

Stonebridge has now been certified to resist the salty elements for its forged steel hardware.

However, atmospheric problems aren't exclusive to the seaside. People living in industrial areas

can also experience difficulties due to the corrosive effect of airborne pollutants as a result of certain manufacturing processes.

480 hours

Stonebridge's Armor-Coat range has been successfully tested to BS EN 1670:2007 Grade 5, the highest possible standard. The test required products to be exposed to a neutral salt spray under controlled laboratory conditions for 480 hours and the results showed exceptionally high

corrosion resistance. "We've designed this new range to give consumers a stylish choice of hardware that they can be confident will last for a very long time," says Ian Smith, Design & Brand Manager at DJH Group, owners of the Stonebridge brand. "To come through a 480-hour salt spray test is a massive achievement. Our nearest competitors failed at well under half that time, so that just shows how difficult it is."

Fade away

As well as providing protection from corrosion, the Armor-Coat system also incorporates UV protection for fade resistance. [i](#)



Boosting Bi-Fold Security & A Hinge Revolution



Trade fabricator Sternfenster, has strengthened its partnership with Yale Door and Window Solutions

Trade fabricator Sternfenster, has strengthened its partnership with Yale Door and Window Solutions after choosing to supply the Yale Lockmaster multi-point lock for use across its aluminium bi-fold door offering.

Mike Parczuk, Sternfenster MD, says: "We have been using a range of Yale products. As the bi-fold door market is booming, we're developing our existing range and as such have chosen to offer the Yale Lockmaster for its security credentials."

The Yale Lockmaster 28mm backset multi-point lock features a combination of hooks and anti-lift bolts, along with smooth operation, tolerance and ease of use. The Lockmaster range is manufactured in the UK and carries the Made in Britain marque.

Paul Atkinson from Yale says: "By taking on the Lockmaster multi-point lock, Sternfenster can promote a high security bi-fold package that fits the slim style aluminium look that is popular today. This comes with the added benefit of the Yale guarantee."

Revolution Window Hinge achieves EPD

Yale Door and Window Solutions has achieved a product-specific Environmental Product Declaration (EPD) certification for its Revolution Window Hinge.

The globally recognised declaration provides environmental information and the materials used to make it. It also details the manufacturing processes involved, including the environmental implications of the raw material used, energy efficiency, transportation impact, and waste generation.

The EPD can help contribute to LEED and BREEAM compliance in commercial buildings and high-rise housing developments.

Thanks to its patented dual closing function, the hinge can be switched after installation between anti-blowback and easy close functions depending on specification and housing requirements.

Onsite configuration allows for increased flexibility across housing portfolios with multiple build-

ing types and also helps reduce time and costs associated with returns or contractors carrying high levels of stock.

The hinge is available in 27 sizes to accommodate sash heights ranging from 300 mm to 1,780 and can form part of a PAS 24 window set. It is also fully BBA certified, made in the UK and compatible with all three main window types; PVC-U, timber and aluminium.

Reversible

Yale has also launched a fully reversible window hinge with easy close functionality.

The Yale Verso window hinge has several additional features alongside the easy close functionality, including full rotation for cleaning – making it a good choice for upper floor residential and commercial upper floor windows.

For practicality and convenience, the sash rotates fully on the outside of the building, ensuring no damage to window blinds, curtains or internal window displays. Likewise, the geometry does not allow the sash to rotate above the height of the frame. This ensures that there are no issues in recessed installations or those with protrusions above the window.

Grant Stratford, Technical Director for Yale Door and Window Solutions, says: "The Verso window hinge provides the ideal reversible solution with easy close functionality. It is a hinge that has been designed to be both user-friendly and secure."

The hinge is available in six module sizes to accommodate sash heights ranging from 460mm to 1,500mm. [f](#)

The Future Opens Up For Panoramic

UK sales Of Panoramic Doors have gone from a standing start to more than 4,000 in 2018, in just four years.

In September 2014, Panoramic Doors' owner in the US, Alan Rees, said his product 'eliminates the need for hinges, bolts and locks, which in turn, reduces hardware costs and man-hours. Since then 20,000 Panoramic doors have been sold around the world..

UK sales alone have gone from a standing start to more than 4,000 in 2018, in just four years.

Moving understanding

Panoramic Doors offers an alternative to the bi-folding door craze. Michael Connor, MD of Panoramic Doors in the UK, says the company is making the most of 'the difference' through a huge social media campaign that makes extensive use of video. He says: "Most bi-folding doors are shown opened and stacked or closed so most homeowners think they understand how they work. So it is crucial that we show the difference, which is beautifully emphasised through a number of videos. Panoramic Doors move in their own way."

The Panoramic Doors folding system has a series of bottom-track supported rolling panels that travel independently from each other along a single track. This minimises weight stress on headers. The first panel is a fixed traffic door and can be on either side of the opening or on both sides. Independent panels slide to either end, click into place and then convert from sliding to swing panels and stack against the pre-



vious panels, which reduces the amount of space needed to operate the door.

Furniture may be set close to the door for example and they are ideal for installing on smaller rooms where space is at a premium. It also allows greater flexibility in how the doors are used throughout the year - fully openable during the sunniest days, smaller openings when temperatures are more moderate but fresh air is desirable.

Installation

In the US Panoramic Doors are sold direct to the public, with American homeowners opting to employ their own favourite contractors. In the UK, home improvers generally expect products to be installed by the company they buy them from which has required a different approach: "Of course it is crucial that Panoramic Doors are installed correctly," says Connor. "And despite our doors having considerably less componentry to go wrong than conventional bi-folds, they still have to be set correctly to ensure the installation is as good as the product itself.

"We therefore supply our doors through carefully chosen and accredited installers that, once appointed, have to go through an intensive installation training programme and re-training on an ongoing basis. We will not compromise on this."

Prospects

In return for such robust expectations, Panoramic's sales promotion is powerful and effective, with UK sales growing by 36% in January alone, not usually regarded as a great month for such products.

Fabricated entirely in the UK at the company's Sheffield factory, doors are shown in a growing number of showrooms throughout the UK where homeowners may choose from several leaf and finish options, including aluminium/aluminium, aluminium/timber-clad. There is a full range of RAL colours for the aluminium profiles available. Further material and finish combinations will be launched this year. [i](#)

Picture: Panoramic Doors offer an alternative to bi-folds.

Smash & Grabbers Defeated By Warrior



When it comes to businesses seeking positive feedback from customers, Warriors Doors, a Secured by Design member company that specialises in manufacturing secure entrance doorsets, has achieved something of an accolade.

Bradley Out of the 12 jewellery shops in Soho Road, Handsworth, Birmingham, close to the City's landmark Jewellery Quarter, Warrior Doors has supplied and installed its bespoke doors to nine of them.

Going down a riot

It's no wonder that the door company (which is based in Birmingham) is receiving commissions both on its doorstep and from high value jewellers, banks and bullion dealers when its doors have withstood attacks by sledgehammers, axes, battering rams and ram raids by vehicles.

The company's goal is to maximise security without compromising on light or visual aesthetics providing a range of high-specification security doors

that have surpassed the most rigorous security testing to achieve certification to LPS1175 Security Levels 2, 3, 4 (version 7).

Even Warrior Doors' SR2 standard composite glazed doors have withstood vehicle ram raids and can block a 9mm round.

Warrior Doors is the first company in the country to have achieved a fully glazed door to LPS1175 security level 4 (SR4) that can open either into or out from a building.

Impact of robbery

MD Brett Barratt, said that spending on security is often underestimated and not considered as an investment in the business until the full impact of a robbery is experienced first hand. "The real costs are to people involved who can be traumatised by the event for months, if not longer," he said.

Loss of high-value stock, whether it's cash, diamonds, gold and watches can have a huge impact on the business continuity and in some cases the

business never actually recovers, forced eventually to close down.

Jewellery style

Brett Barratt continues: "We have been able to provide some of the highest security doors available without compromising on the exacting demands of jewellers towards aesthetic appearance and maximum vision into their shops."

Attack on film

In one video on the company's website, you can see a prolonged attack using a 5 Series BMW car on a door installed at the front entrance to a jeweller's shop in Smethwick, Birmingham. Even after repeated ramming attempts by the car and subsequent unsuccessful attempts to force entry by the police and fire brigade, the door could still be opened and closed and locked perfectly.

One of the assailants, who was trapped in the interlock in the jeweller's shop, was arrested by police. The other assailant fled the scene.

The video can be viewed at - <https://bit.ly/2GAft7N>

Commercial and industrial

The company also makes high-specification secured doorsets for commercial and industrial premises as well as local authority housing and housing associations. **i**

Picture: The street in Birmingham where 9 out of twelve jewellers have chosen security doors from one manufacturer.