

Issue 27

# insider

May 2015



manufacturing world-class interiors



For this issue of the Insider we look at the exciting projects in which SAS are involved

Cover story:



London skyline

The first four months of 2015 have been both busy and positive in many regions, particularly in the London market as illustrated on the front and back cover.

Back in 2007, issue 4 of the Insider magazine looked at the future building boom and the tallest building being constructed in London. Seven projects were mentioned, six of which have been completed and feature SAS International metal ceilings, partitioning and architectural metalwork. The Pinnacle (22-24 Bishopsgate) was put on hold due to the financial crisis, but is being restarted and we are hoping to supply metal ceilings.

The six SAS projects are 122 Leadenhall St (Cheese Grater), 110 Bishopsgate (Heron Tower), 201 Bishopsgate (Broadgate Tower), 32 London Bridge (The Shard), 51 Lime St (The Willis Building) and 20 Fenchurch St (Walkie Talkie). There are case studies for 20 Fenchurch Street and 122 Leadenhall Street on pages 18-21.

During April three product ranges were launched following improvements and changes in offerings. These include radiant heating, system 750 tubeline and acoustic baffles. More details can be found on page 3.

The London transport market has also boomed. SAS Project Management have won the contract to design, supply and install metal ceilings including tubeline and baffles, in addition to wall linings for London's Victoria Underground Station. A little further afield, we are revisiting Stansted Airport and supplying bespoke baffles, curved bulkheads and system 330 mega panels for the Pier 1 refurbishment. Read more about both projects on pages 8-9.

The 'on site with SAS' pages have grown from two to four in this issue of the Insider, due to the remarkable number of projects in which SAS have been busy with during 2015 (although, of course, this does not include all of them). You can also see a stunning spread of completed project photos.

Often SAS employees and customers are faced with product and industry language which may not be understood by everyone. To help decipher the terminology a 'Jargon Buster' feature has been introduced on pages 14-15. Please contribute suggestions for this going forward.

The brand new SAS International website was successfully launched internally on 27th March and externally on 1st May. There is a New Website feature on pages 16-17 and an update in Digital Corner on page 25 for those who want to know more.

Finally you can learn more about 3D printing and SAS' printing capacity on page 24.

Don't forget to read about the Maintenance Team in Meet the Team.

This is your publication – so please keep sharing your ideas, stories and feedback with us throughout 2015.

Rosa

Rosa Lenders, Editor

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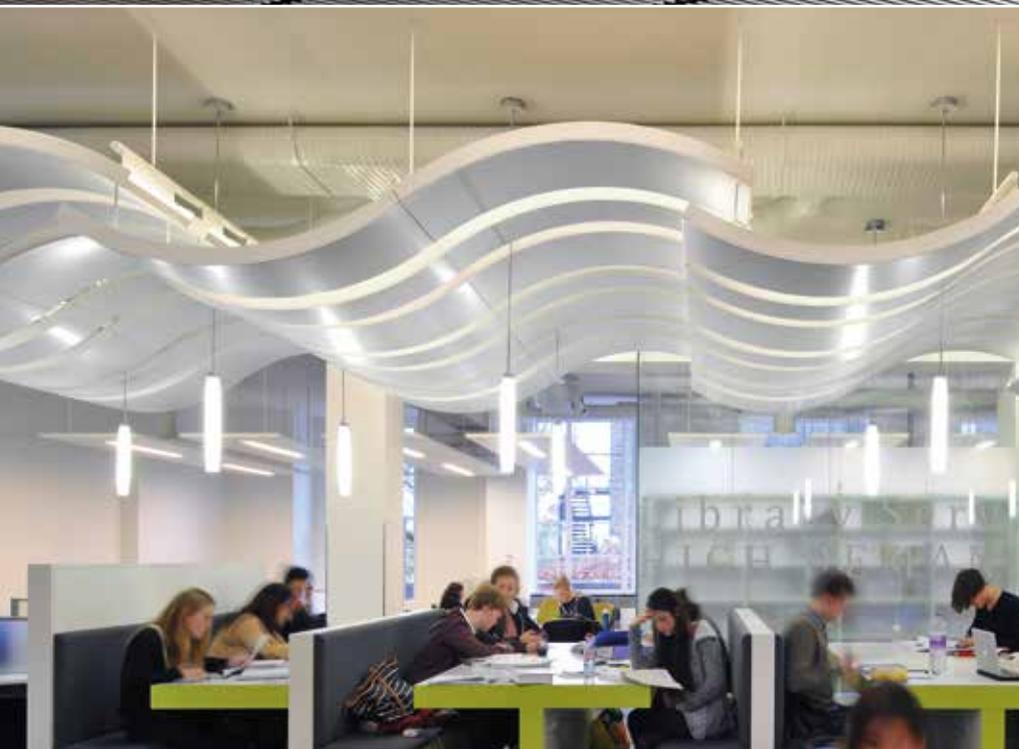
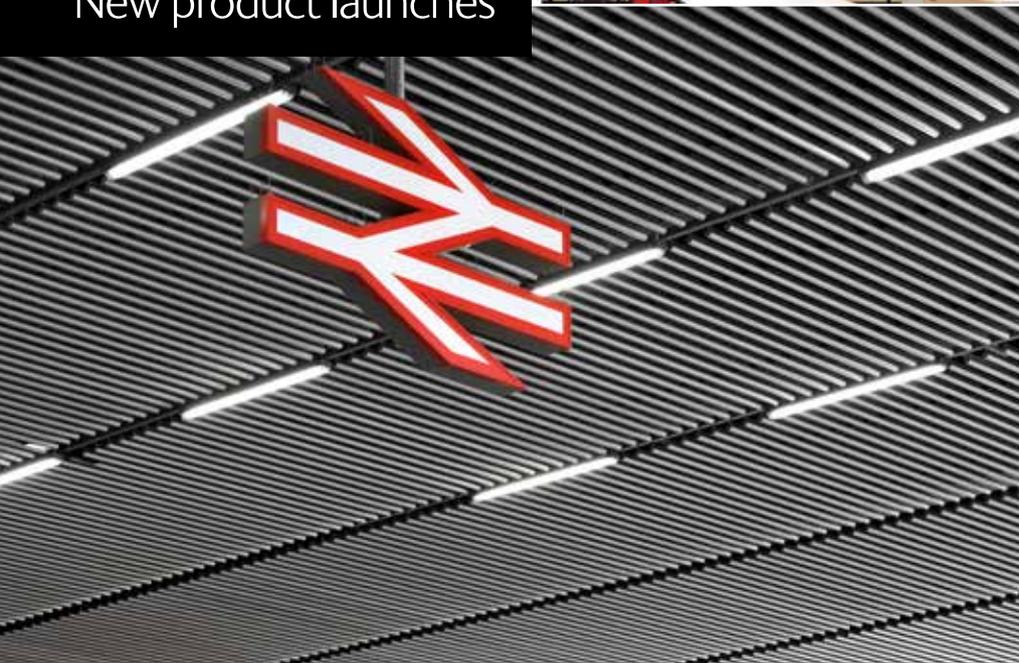
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The Insider brings you news from every part of the SAS group.

We would like to have your feedback and contributions, including your views about the changes we have made to the Insider. Our email address is sasinsider@sasintgroup.com



## New product launches



### Radiant Heating

Radiant Heating Solutions are now being sold in SAS International's Room Comfort product portfolio, providing customers with a comprehensive offering of both heating and cooling solutions when specifying SAS International ceiling systems.

Radiant panels are offered as either standard or anti-ligature panels; SAS International also offers radiant modules and radiant rafts. A new Radiant Heating brochure is available, showcasing the products and highlighting the systems features. It can be downloaded from the website.

Aligning with SAS International's room comfort product offering, this inclusion will provide both clients and project teams with innovative solutions as well as expert technical support.

### System 750 Tubeline Ceilings

Continuing its innovative approach to product design and manufacture, SAS International launched its improved System 750 Tubeline, offering greater flexibility of use and enhanced aesthetics. The system can be specified for a variety of different applications:

1. Standard
2. Curved and waveform
3. Wall panel integration
4. Bulkheads
5. Exposed soffit
6. Smoke extraction
7. Different extrusions
8. Solar shading
9. Chilled beam integration
10. Decorative design
11. Lighting integration
12. Exterior/interior
13. Way finding

Access panels are offered as standard, and available as a small or large hatch. Further highlighting the product offering is a new System 750 brochure which can be downloaded from the website. Further highlighting the product offering is a new System 750 brochure which can be downloaded from the website.

### Acoustic and Waveform Baffles

SAS International has also launched an updated range of standard (System 500) and waveform (System 510) acoustic baffle systems. With standardised module sizes and carrier profiles, the new systems offer more installation options, and now enable continuous runs.

- High performing, visually engaging design, ideal for acoustic treatment in open, exposed interiors and thermal mass cooling
- Dual-sided perforations for excellent acoustic performance
- Ease of integration, visual zoning of areas
- Variety of applications; retail, leisure, education, commercial offices as well as solar shading

## Shaping London: Nine SAS projects shortlisted for the RIBA London Awards 2015



SAS International supplied interior solutions to nine out of 68 projects shortlisted

for the Royal Institute of British Architects (RIBA) London Awards 2015.

The regional RIBA Awards recognises projects which have significantly contributed to London's architecture. Regional winners will be considered for

a RIBA National Award for architectural excellence and some projects will then go head to head for the prestigious RIBA Stirling Prize.

SAS International's buildings shaping London:

### South-East London

- Ark All Saints Academy and Highshore / Allford Hall Monaghan Morris
- National Theatre / Haworth Tompkins
- NEO Bankside / Rogers Stirk Harbour + Partners

### South- West London

- Burntwood School / Allford Hall Monaghan Morris
- One Eagle Place / Eric Parry

### West London

- 10 New Burlington Street / Allford Hall Monaghan Morris
- William Perkin School / Feilden Clegg Bradley Studios

### North London

- Two Pancras Square / Allies and Morrison

### London

- Heathrow Airport Terminal 2 Concourse / Grimshaw

## Supporting excellence at the BCO Awards 2015

For the second year running, SAS International is a Gold sponsor of the Fit out of Workplace category at the British Council of Offices (BCO) Awards 2015, which recognise best practice in office design and functionality. Awarding innovative approach to creating and reinvigorating workspaces in an environmentally friendly and accessible way, the projects improve experience for both employees and visitors.

SAS International works closely with many of the architects and designers behind the shortlisted and winning projects, providing them with innovative, high quality solutions often designed to bespoke requirements. Last year, SAS provided products for 44 of the shortlisted entries of which three regional winners went on to become national exemplars of interiors fit-outs.

Regional Events for the shortlisted participants take place throughout April and May. Winners of these awards then attend a national awards dinner held on 6th of October.

SAS International fully supports the BCO's approach towards raising the standards for office development, highlighting the importance of dealing with the rapidly changing needs of occupiers while creating inspiring and functional environments.



## Greenwich tubeline hoping to win over Judges



SAS International has submitted the Gateway Pavilion, Greenwich project for the Judges' Award at the 2015 FIS

(previously AIS) Contractors Awards.

The FIS Contractors Awards are presented annually to promote and encourage high levels of craftsmanship in seven categories - Interior Fit Outs, Ceilings, Partitioning, Drywall Construction, Specialist Joinery, Operable Walls and the Judges' Award.

Two judges visited the site in Greenwich on the 25th February this year to see the bespoke curved tubeline solution which was designed, supplied and installed by Project Management. SAS are hopeful that the project will be successful, after Project Management's Imperial War Museum won Silver for the Judges' Award. The SSE Hydro in Glasgow also had great success in winning 'Project of the Year' and Gold in The Judges' Award 2014.

The winners will be announced at the FIS President's Lunch held at The Dorchester on 9th June.



## New addition to the IT Crowd

SAS International is delighted to announce the appointment of James Greene as IT Manager.

Having worked in the IT sector for over 18 years, James brings with him a wealth of experience in change management, using the latest in technology to streamline business processes.

An advocate of technology as an enabler for better working practices, James focuses on gathering information in order to identify solutions and improvements, which are then implemented to provide the most cost effective option.

He will be responsible for improving the end users' experience of IT, enhancing the speed and reliability of the network infrastructure. Additionally, a presence indicator, available via a mobile application, will synchronise with everyone's Outlook calendar, no matter where you are located in the world.

For increased security, James will also be moving our data from multiple sites to a central data centre to improve access speed, back up and scalability.

We wish him all the best in his new role at SAS International.



## SAS sponsors Property Council of Australia awards

SAS International is supporting innovation and best practice within Australia's property industry for the second year in a row, sponsoring the 'Best Office Development' category at the Property Council of Australia's Innovation and Excellence Awards.

One of the projects shortlisted in this category is the iconic Sydney office building 161 Castlereagh Street at Liberty Place, better known as ANZ Tower, which achieved an impressive '6 Star' Green Star Office

Design rating and features System 150 and System 320 metal ceilings. This SAS International design and supply project has received further nominations in the Best Sustainable Development – New Buildings, and Innovation categories.

The winners were revealed at the Innovation & Excellence Gala Dinner on the 1st of May at the five star surrounds of The Star's Event Centre in Sydney. Good luck to all finalists.



Josh Hillman (right)



## New SAS website

SAS International has been hard at work in order to develop and launch its new company website which has been designed to reflect the company's market leading status and brand profile. Providing the ultimate user-friendly experience with improved navigation and functionality throughout, it allows

customers to access detailed product information from multiple devices. The new website offers a clean, modern design, stunning imagery, easy-to-navigate functionality, and a content-rich site experience which will encourage interaction and help the business grow.

The soft launch took place on 27th March, allowing time for testing and improvements. SAS International asked its staff for feedback, implementing any necessary changes before the website was externally launched on 1st May and promoted through third

parties such as the Architect's Journal in the UK, DesignMENA in the Middle East and Architecture & Design/Infolink in Australia. SAS International is planning to utilise social media channels to further engage with its audiences across the world and increase sales enquiries.

For any further enquiries or assistance with the new website please contact Matthew Mills [mamills@sasint.co.uk](mailto:mamills@sasint.co.uk) or Katie Marcham [kmarcham@sasint.co.uk](mailto:kmarcham@sasint.co.uk)

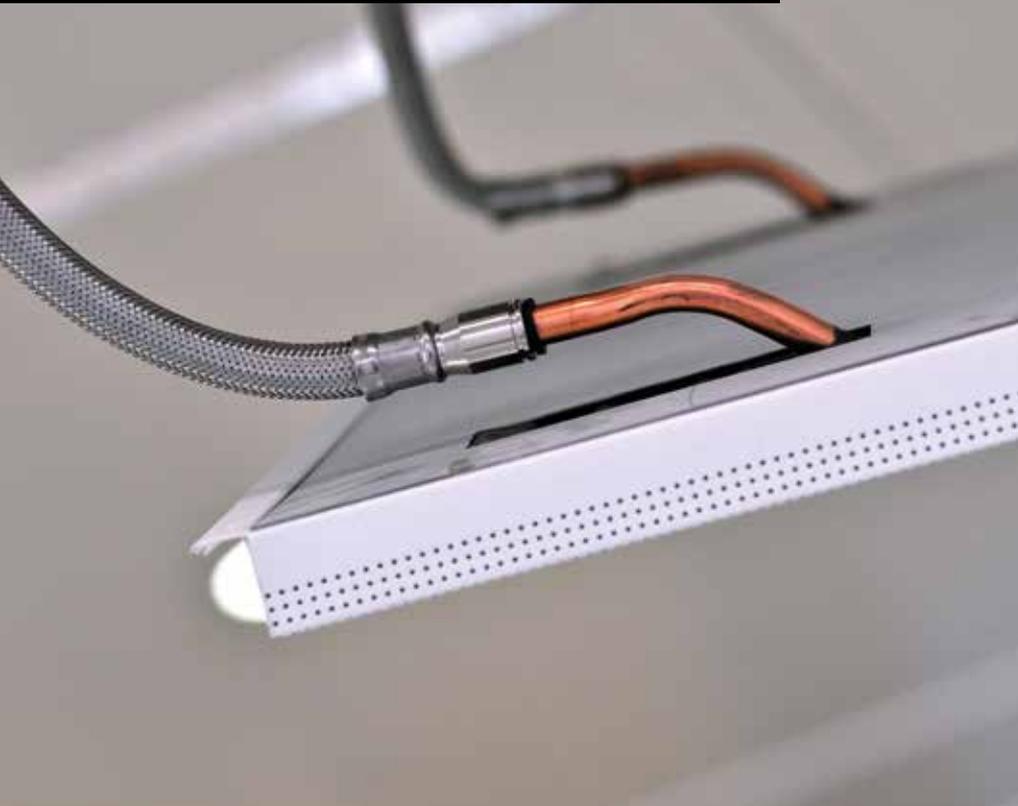
## Lean Mean WEMO Machine

Following a recent visit to the Dutch headquarters, SAS International purchased its third WEMO punching and bending machine which was delivered to the Bridgend factory at the end of April this year.

To further support clients and provide the highest standard of service, design-led installations and expertly manufactured, quality products, SAS International has invested in machinery, and following the arrival of the WEMO line, also updated the control equipment.

The third line substantially increased the manufacturing capacity in Bridgend, and combined with investment in the Bridgend paint line, there has been a significant improvement in flexibility and ability to deliver in shorter lead times throughout the year.

## HCP move to Room Comfort



Over the past few months SAS have been reviewing the room comfort product portfolio. Heating and cooling products have been branded in different ways, under the names of HCP and SAS International.

HCP products included perimeter heating, trench heating and radiant heated ceiling panels whilst SAS international's offer comprises radiant chilled ceilings, chilled beams and ISMs (Integrated Service Modules).

Following a detailed review of current sales, project pipeline and market demand SAS have decided to restructure this part of the business. Consequently the decision was made to discontinue both HCP trench and perimeter heating from our product portfolio with immediate effect.

The team, now operating under the guidance of Paul Aubrey and Duncan Wisely, will continue to develop, promote and sell the radiant heating panel products within the Room Comfort portfolio. To ensure consistency these products will now be sold under the SAS International brand.

With heating and cooling products trading as SAS International we have re-focused our energy upon accelerating the further development of products to satisfy market demand. Various applications for radiant heating panels are currently undergoing testing and development and will be launched this year.

All enquiries for room comfort products should be directed to Duncan Wisely's team at Reading. If you have any questions please feel free to contact him.

## Product Data Templates: Focus on Data not models

A UK Government mandate for Level 2 BIM to be implemented on procured public sector projects by 2016 is fast approaching. One of the requirements is the use of Construction Operations Building Information Exchange (COBie\*) files which allow for a multitude of non-graphical data and information to be stored in a standardised, organised manner (a spreadsheet), providing a level of detail and point at which information needs to be provided for specification and project teams.

BIM is the hot subject in the industry at present, but there are many misconceptions about what is required from manufacturers regarding product

information and BIM. At the same time the national standard for the management of information and BIM requirements is not finalised.

However, Specifiers and project teams that are working to a BIM process require product data from manufacturers. A new format of Product Data Templates (PDTs) have been developed through the FIS (Finishes and Interiors Sector), previously known as the AIS.

These standard templates are produced for each system. The core of the template is the key COBie information. Much of the information required is very similar to the information SAS International would provide on a K40 ceiling specification document.

Designed to fast track the flow of general product information into BIM models, PDTs anticipate the information sought by every party – from specification through operations to decommissioning and replacement. That way, information can be standardised, avoiding duplication, repetition, time

and ultimately cost. This process is not so easy to manage if you manufacture more application led or bespoke systems/products but parameters and criteria have been set to be as general and forgiving as possible.

When a manufacturer completes a PDT, it becomes a Product Data Sheet (PDS) – a 'digital' description of the product.

SAS International have been a key partner in developing PDTs to provide specifiers with the mandatory information required, and to help them meet Government regulations. Currently working on the Ceiling and Partitioning products PDTs, we are hoping that the templates will be adapted industry-wide, helping to create a comprehensive database of all products that a building is made of, replacing the Building Owner's Manual, or Operation and Maintenance Manual (O&M).

SAS International PDT's will be available soon. Any queries please contact Andrew Jackson.

## AIS + FPDC = FIS

Issue 25 of the Insider magazine reported on the merger of the AIS (Association of Interior Specialists) and FPDC (Federation of Plastering and Drywall Contractors) in June 2014.



The AISFPDC have been working hard to rebrand their identity. Members, including SAS International, were instrumental in the creation of the new brand.

On Friday 10th April the new brand FIS, which stands for Finishes & Interiors Sector, was successfully launched. The brand has defined a new sector which includes ceilings, drylining, fit-out, screeding, steel framed systems, plastering and partitioning.

The purpose of the FIS is outlined in their launch video and includes;

- Giving support for the benefit of FIS members
- Sharing knowledge for the benefit of the wider industry
- Driving quality high for the benefits of clients
- Taking pride in what we do for the benefit of everyone in the sector
- A driving force in the construction industry
- One strong voice for the sector

SAS has been a member of each association over the years and welcomes the new rebrand, offering a stronger voice for contractors and manufacturers of interior fitout solutions.

## Birmingham New Street Station's latest product made at Apollo Park

An 1800mm diameter Aluminium disc manufactured at Apollo Park, is the latest product to be supplied for the latest phase of the Birmingham New Street Station refurbishment project. Installation of the ceiling discs at the station's main concourse was overseen by SAS International's Project Manager Dave Woollard.

Suspended over the kiss & ride area, a designated space for the goodbye kisses of enamoured travellers and loved ones, the discs offer a number of functional as well as aesthetic benefits. The 'loose fit' ceiling approach allows for quicker installation, services access and easier co-ordination. Individual ceiling elements can appear to be floating, adding a dramatic architectural feature.

We previously reported on the progress of the station refurbishment project (see Insider 22 and 26) which is expected to be finished in September 2015. Before the completion, SAS International will have installed bulkheads and luminaire panels on Platform 9 and designed System 600 Raft ceilings and baffles.

Thank you to Mahendra Patel, Production Engineer for supplying the photos.



## In memory of Meg from Maybole

At a recent dance, held in Maybole Town Hall, Andy and Angela Jess and their family raised an amazing total of £2,048.50 in memory of their daughter Meg who worked on the paint line in our Maybole Factory. This donation was split equally between Brain Cancer and Pancreatic Cancer charities. Andy and Angela would like to thank the people of Maybole and surrounding areas, too many to mention, for all their generous support in donating money and raffle prizes.

Meg's family would like to offer their heartfelt thanks to Julie Heath and the workforce who very kindly

donated the proceeds of their Christmas raffle as well as individuals donating. Julie said SAS International and its staff were more than happy to help. All of these donations brought their total to £2,230.60 for the Neuro-Oncology fund at the Beatson.

Pictured from SAS International is Scott McClure who works in Personnel/Payroll and sold the raffle tickets at Christmas time. Julie Heath, Personnel Manager is also pictured (right).





## 84 million passengers at Victoria Underground Station

Using Victoria Underground Station in London during rush-hour is a rather unnerving and claustrophobic experience. With 84 million passengers passing through every year, Victoria is the second busiest station in the London Underground network. However, temporary gate closures to halt the stream of commuters entering the station is a daily occurrence, with small ticket halls and no lift access being the two main reasons for the frequent congestion.

At the beginning of January, SAS International's Project Management division was subcontracted to redevelop the ticket offices and passenger walkways. Work on the tunnel linings will also take place to improve tunnel stability and durability to ensure uninterrupted, smooth running of the trains.

TWBN (Taylor Woodrow/Bam Nutall) Joint Venture, the main contractor for this project, specified SAS International products based on its proposed installation of PPC steel metal ceilings instead of Vitreous Enamel for the platform and the concourse. The redevelopment project, designed by multidisciplinary consultants Mott MacDonald, will also feature System 330, System 130, Tubeline, Baffles and Wall Linings.

Work is due to start in May with expected completion in March 2017.





## SAS revisits Stansted Airport

SAS International has won the contract for Stansted Airport's Pier 1 refurbishment, which is part of the new £8m upgrade of the Satellite One departure area. Specified for offering delivery time assurance and providing solutions to challenges presented, SAS International supplied bespoke baffles, curved bulkheads and System 330 with mega access panels, amounting to 4,000m<sup>2</sup> of products.

Architects Pascall + Watson are working to Norman Foster's original ground-breaking design, which made Stansted the first airport to feature trapezoidal tiles and has seen this iconic design copied all around the world; Chek Lap Kok Airport in Hong Kong for example. SAS International worked on Stansted's Main Terminal in the early 1990s, and returned in 2008 for the International Arrivals extension.

The main contractor is Galliford Try and work on site started in March 2015.



On site with SAS



## One billion invested for TCR station

The Tottenham Court Road station transformation is one of the biggest transport investments in the West End for decades (£1bn), and reflects the expected rise in passenger demand. In the Insider issue 25 SAS International announced its involvement with the restructure and refurbishment of Tottenham Court Road. Now in Phase 2, Project Management is working on 43 different areas of the station, supplying a plethora of products which include;

- Vitreous Enamel ceilings for passage ways
- Curved Vitreous Enamel ceilings for escalator barrels
- Flat and curved Vitreous Enamel ceilings and bulkheads for stairways and stairwells
- Water management for water ingress
- Vaulted Vitreous Enamel ceilings for passenger adits
- Stainless steel fire door surrounds



## SAS International back on home ground

No.1 Forbury Place in Reading is the largest speculative office development outside London. SAS International supplied 15,000m<sup>2</sup> of System 150 planks 1500x300mm, together with blind boxes. Designed by Aukett Fitzroy Robinson, the development consists of two buildings, offering double height receptions, central atria and individual floors of up to 2,500m<sup>2</sup> of Grade A office space, as well as a basement car park.

M&G and its development manager Bell Hammer, together with contractors Galliford Try are pushing for Phase 1 to be finished and the building to be opened in summer 2015.



## Hamilton Square Station project crosses the finish line

SAS International Vitreous Enamel wall linings and lighting boxes were specified for refurbishment of the platforms, tube tunnels and commuter passage ways at the Hamilton Square Station in Birkenhead. Reopened after a £4m redevelopment, the station also features

over 2,000m<sup>2</sup> of SAS metal ceilings installed by Project Management in the ticket hall and platforms 1 and 2.

Helping to meet the demands of an ever increasing number of passengers, there has been significant

investment to improve station facilities across the railway network in the Liverpool City Region.

A case study will be available from the SAS website.



## Metal beats mineral fibre in Sydney

High rise office buildings at 1 Oxford Street and 259 George Street in Sydney have been fitted out with SAS International metal ceilings following a recent extensive refurbishments. Originally mineral fibre ceilings, the office areas at both locations now feature Signal White (RAL 9003) rectangular metal ceilings and System 310 with acoustic fleece. The lift lobby at 259 George Street also features System 150 with acoustic fleece.



## Saving the Money Box

As reported in the Insider issue 25, SAS International has supplied metal ceilings for the redevelopment of the Commonwealth Bank's 'money box', an iconic building at 5 Martin Place in Sydney. The architects are Johnson Pilton Walker. Over 15,000 m<sup>2</sup> of System 330 featuring EL60, a bespoke elliptical perforation pattern is being installed.

Working with Grocon, the main contractor, and Cubic Interiors, the installer, SAS International provided technical expertise in resolving ceiling perimeter and services integration issues.

Due for completion in 2015, 5 Martin Place will be a 19 level Premium Grade building comprising the redevelopment of existing heritage buildings and extended new development.

The development repositions the existing property through a major reconfiguration of the existing 'heritage' component, and the construction of an additional nine levels of premium office accommodation.



## System 750 Tubeline ceiling for Sydney law firm

Minter Ellison is one of the largest Australia-based international corporate law firms. For their Sydney offices, SAS International supplied 800 m<sup>2</sup> of Tubeline, 2,200 m<sup>2</sup> of System 310, and 800 m<sup>2</sup> of System 150.

In Sydney SAS International is working with its distributor Grayking and Elite Project Services who are installing the ceilings. The fit-out contractor for this project is Buildcorp Interiors.

The project was completed in April 2015.

On site with SAS

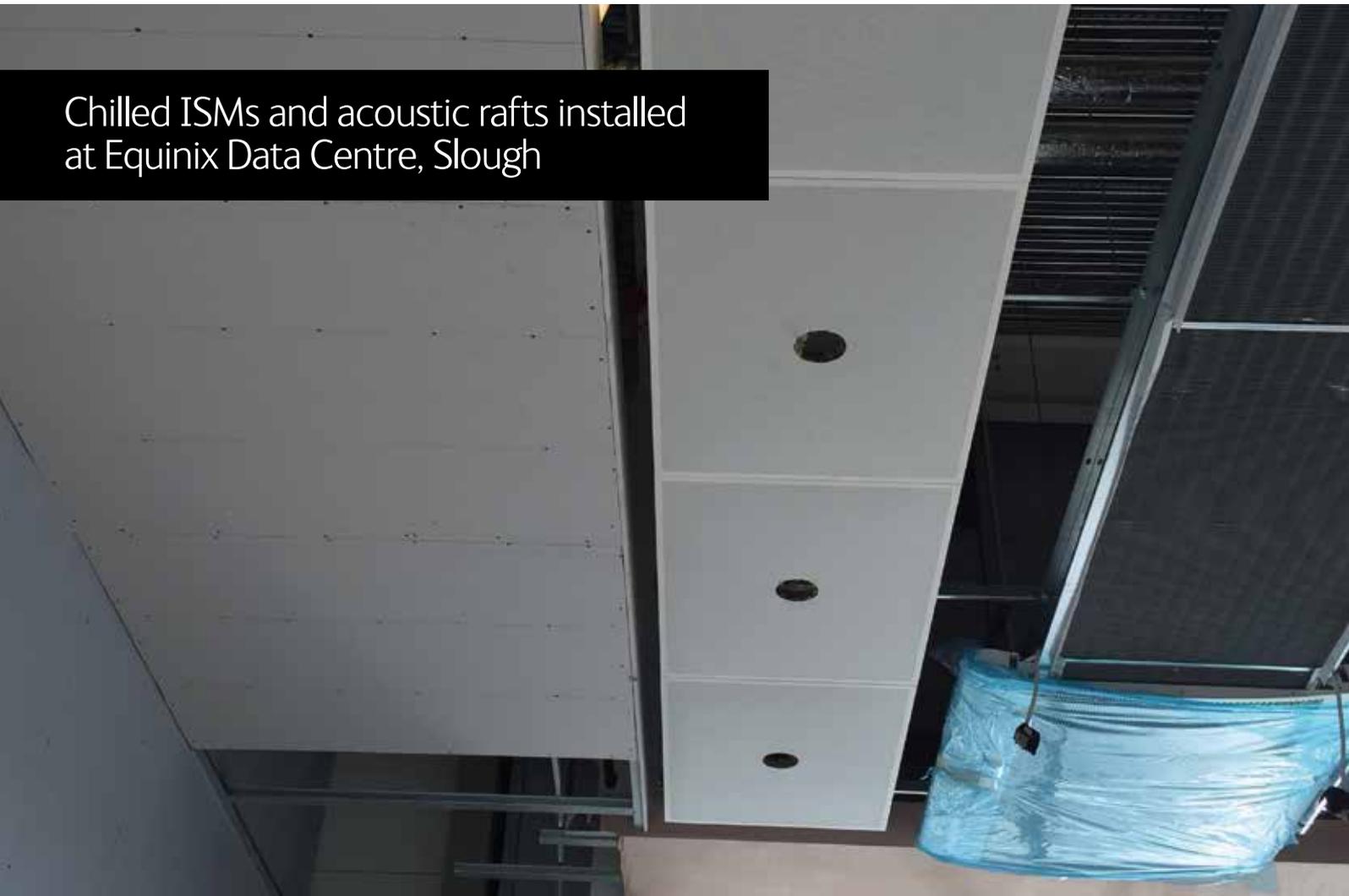
## Ready for take-off

Specified by BAM Construction, the new Rolls Royce Aero Engine Controls development in Solihull will feature SAS International's System 150 metal ceilings, installed by Titan Interior Solutions. The £60 million Advanced Manufacturing and Technology Facility will replace two existing AEC sites, incorporating technology, design, development, manufacturing and testing capabilities.

When operational, the facility will produce engine control systems for a range of applications, including the Rolls-Royce Trent family of aircraft engines.



## Chilled ISMs and acoustic rafts installed at Equinix Data Centre, Slough



Fancy one for the road?



MDG Architects are working with main contractor Clegg Group on the construction of the BMW / MINI flagship centre in Reading. For Inchcape, the owners of Cooper BMW, this is the largest investment they have made in Europe, and is reflected in the design of the three storey building.

Working with M&E consultants Peter Brett Associates and sub-contractor Lusso Interiors, SAS International has supplied System 8000 single glazed partitioning, incorporating 10mm clear toughened glass with full height glass doors and eclipse glass sliding doors. Also supplied was System 130 metal ceilings, installed by

sub-contractor PANARC Interior Solutions LLP.

The centre will include a 32 new car showroom, an indoor approved used car display of 65 cars, 26 service bays, a customer lounge area as well as a kid's zone.



## Jet black metal ceilings in Australian offices

For the refurbishment of an iconic landmark building at 2 King William Street in Adelaide, HASSELL architects specified 250 m<sup>2</sup> of SAS International's System 320 with 18mm acoustic pad in RAL 9005, jet black. The heritage-listed building comprises a ground floor retail space, and upper office floors for which SAS supplied its products.

Built in Modern/Art Deco design, 2 King William Street has been faithfully restored to its former glory and provides the perfect combination of high quality building services with modern functionality, flexibility, style and service.

## We've got the need, the need for speed!

System 8000 curved glass partitioning with sliding glass doors has been supplied for the state of art Graypaul Ferrari showroom in Nottingham. SAS International was specified by architects Axis 3 Design. The main contractor on the project was Chas Smith Shopfitters, and the sub-contractor Tapper Interiors.

This is the second time SAS International has worked with the Ferrari dealership; Graypaul Birmingham specified System 8000 for the first showroom in the UK to display Ferrari's new Corporate Identity.

Terminology around SAS International products can sometimes be baffling. Wouldn't it be great if we could all be on the same page all the time, understanding each other? Don't worry, we are here to help with the first instalment of our Jargon Buster series. How many did you already know?

## SAS Products

### EMAC

SAS' range of steel suspension products



Top Hat

Anything with a top hat shape

### J Bar

Suspension rail which supports the tiles for System 200/205



Saucepan J-bar

Shallow J-bar for supporting System 600 raft panels

### RAL

RAL is a colour matching system used in Europe



dB

Decibel – a measurement of sound

Absorption

Ability of a surface to absorb sound, minimising the reflection of sound energy back into a space

Attenuation

Sound attenuation is used to describe the reduction in sound between two spaces separated by a dividing element, with two basic sound transmission paths

AG

Anti graffiti paint finish

Noggin

A single module length of grid that goes between the cross tees to hold the tile up

AB

Anti bacterial paint finish

### Spring tee

Suspension grid for system 120



### Omega bar

A clamping rail for system 150



## Tee Grid

An exposed flat tee grid system for use with tegular or lay-in ceiling panels that provides a tegular effect.



## Tegular

A panel that sits below the level of the grid.



## Alugrid-P

is a plain version without the threaded recess and gives a completely flush ceiling.

## C profile

(aka bandraaster) – Linear suspension grid which can be used to locate partition head tracks



## Omega C-profile

A linear suspension grid with continuous thread-form that allows the easy location and relocation of partition heads by means of an M6 bolt, without causing damage to the ceiling



## Alugrid-Q

A flush ceiling system features a continuous lineal recess with an M6 threadform and negative quirk relief detail abutting the ceiling tiles, giving a small recess between the tile and grid.



## Tartan grid

Two direction grid system



## Aperture

A preformed opening made during manufacture with vertical upstands to the edges

## Reinforced Aperture

A formed aperture with factory fixed stiffeners to support lighting

## Cut out

An aperture with no upstands to the edges

## Alugrid

Suspension grid

## SAS International's New Website - have you visited it yet?

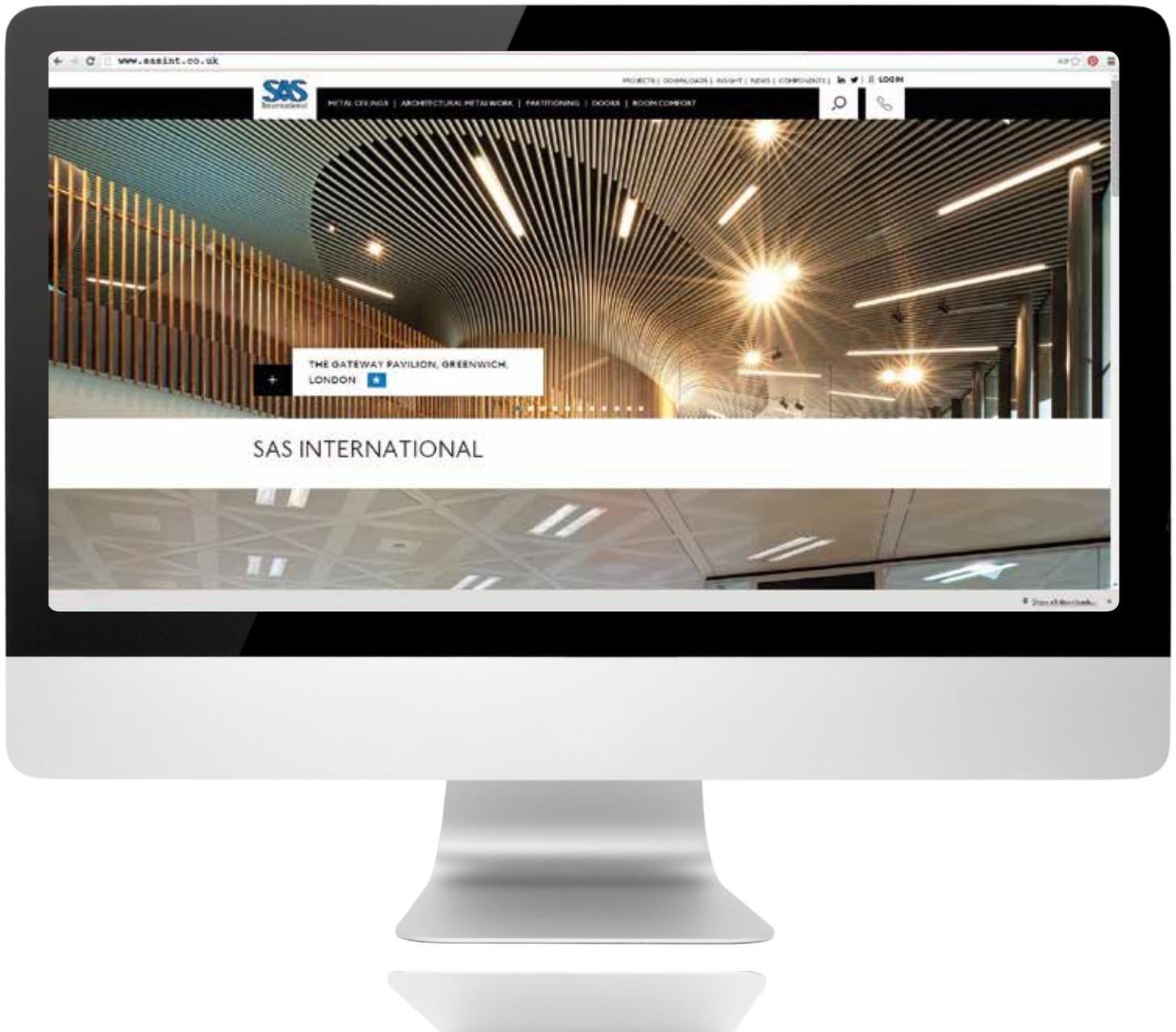
Those of you who have already visited SAS International's new website will have seen the major improvements in terms of imagery, user-friendliness and navigation. Following on from a survey sent to existing website users, specifiers and customers, three key objectives were set to achieve the final look and function of the new site.

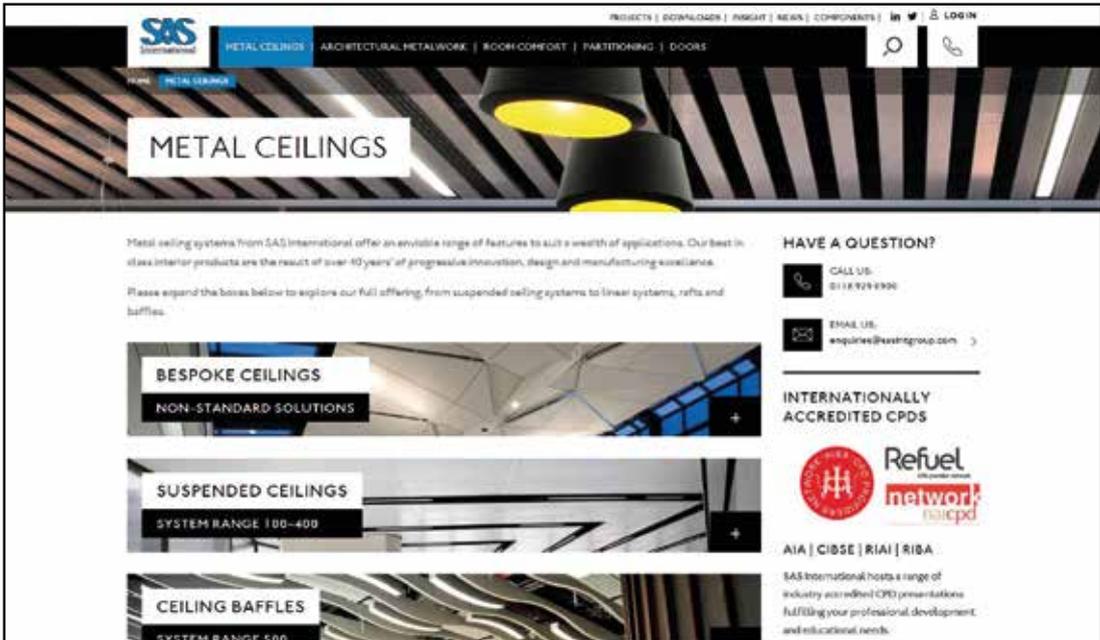
New and updated technical information is now readily available, and more importantly, easy to find. One of the main goals was to improve the user experience (UX) which was achieved by allowing straightforward image-led, intuitive navigation. The new website is fully responsive and allows for real

time access using various devices and screen sizes. Altogether, the new website helps to refresh and better represent SAS International's brand, and ultimately will increase engagement between SAS International and its target markets.

### Homepage:

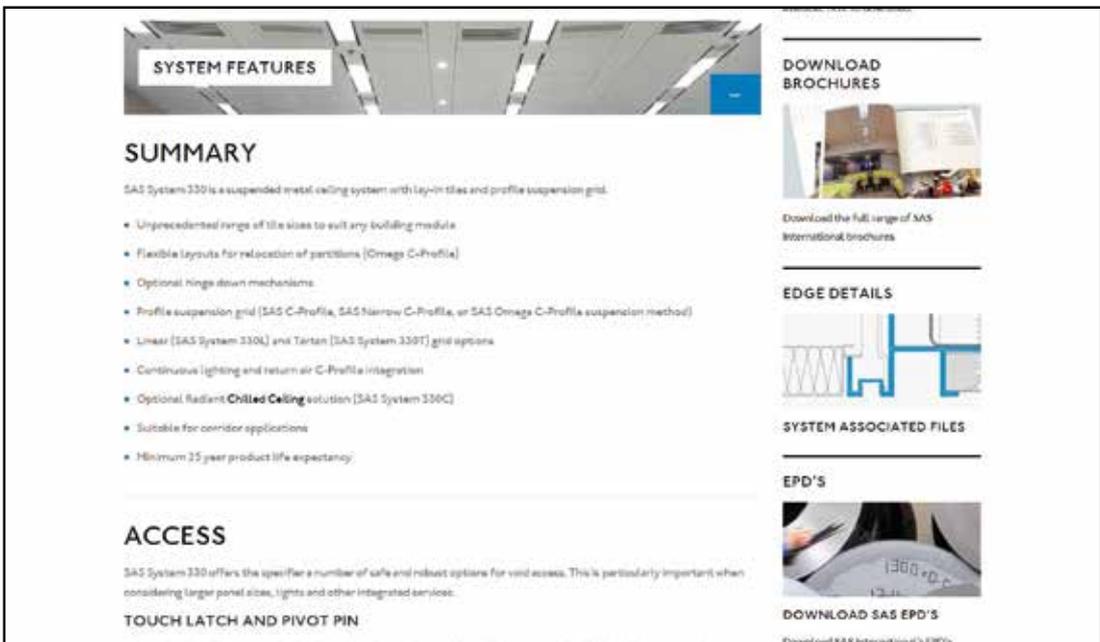
The homepage welcomes visitors with stunning imagery of SAS International projects, providing them with a visualisation of the products in use. Case studies, News and Insights, and Product categories can be accessed straight away.





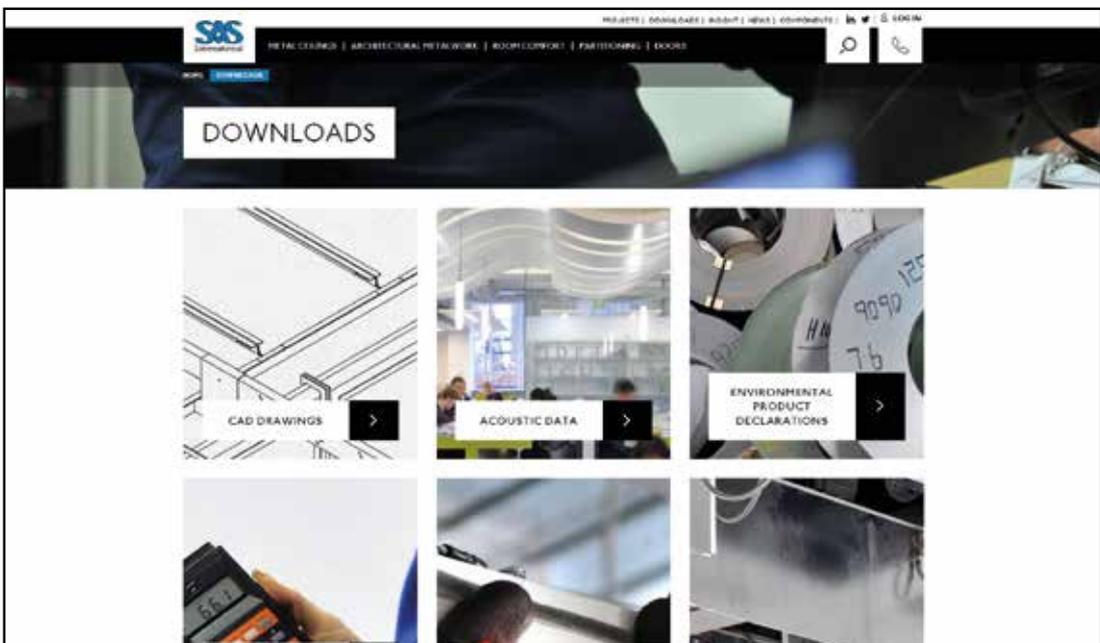
**Product section:**

The product section can be entered via the product categories or the primary product led navigation bar on top of the page. Separated into metal ceilings, architectural metalwork, room comfort and partitioning and doors sections, the structured product portfolio consists of logical product categories, such as Bespoke Ceilings or Ceiling Baffles.



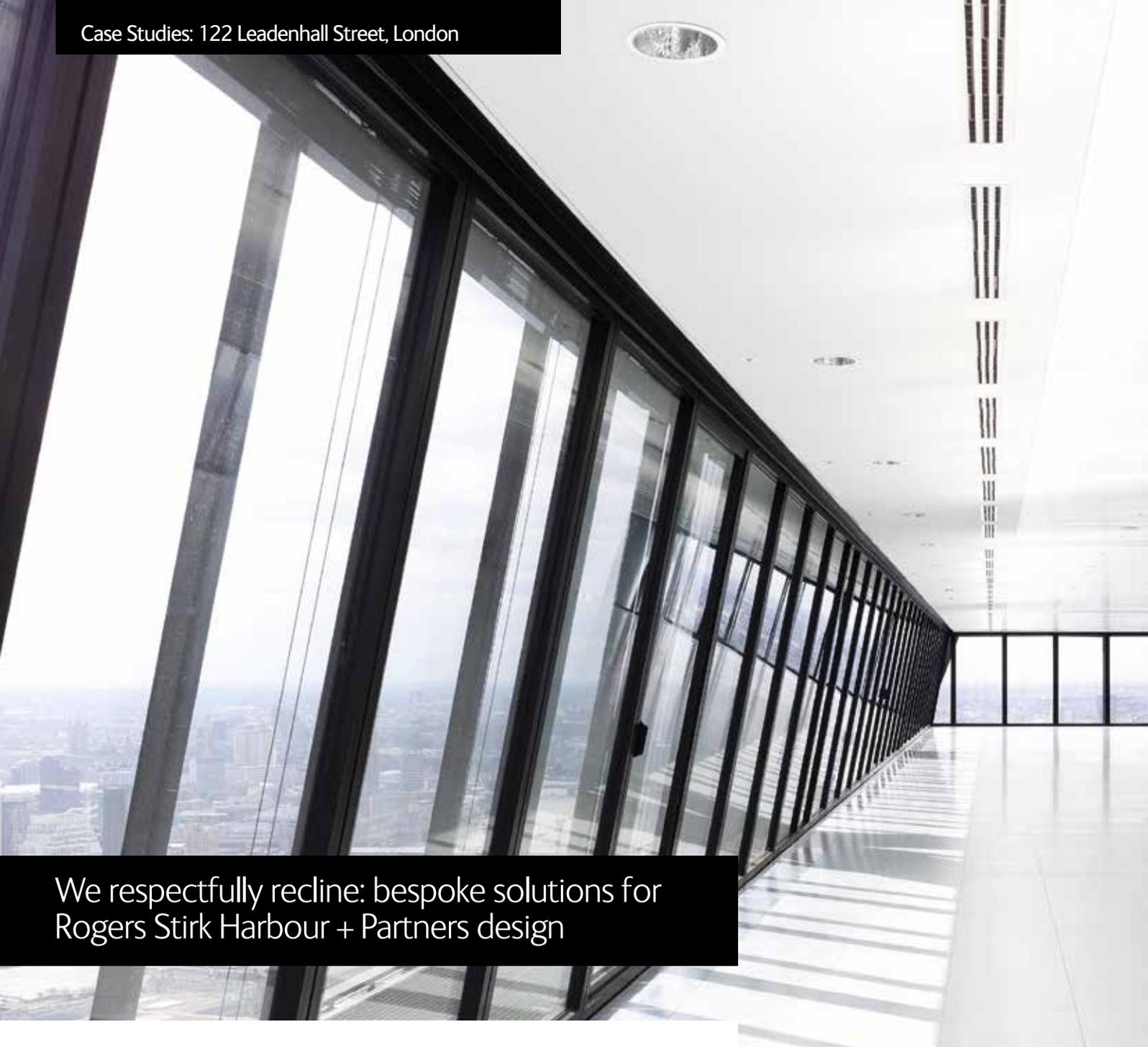
**System pages:**

The system pages are now a 24 hour live hub for updated product information, including drawings, statements and associated downloads. "Promotional blocks" in each section will advise and remind users of application details or enhanced systems options aiding them in the specification of relevant systems.



**Downloads Section:**

Registered users can download CAD drawings, Acoustic data, Environmental product declarations, Environmental accreditation statements, Installation advice, O&M + COSHH data sheets, CE Marking + ISO statements, Literature and the Insider magazine.



## We respectfully recline: bespoke solutions for Rogers Stirk Harbour + Partners design

Back in 2007, issue 4 of the Insider magazine looked at the future building boom and the tallest buildings being constructed in London. Seven projects were mentioned, six of which have been completed and feature SAS International products.

122 Leadenhall Street, dubbed the 'Cheesegrater', takes into careful consideration its existing surroundings as well as the impact on the view of major London landmarks such as St Paul's Cathedral, resulting in the distinctive tapered shape angled at 10 degrees.

Unusually for a tower, the building, designed by architects Rogers Stirk Harbour + Partners (RSHP), has no central core; the strength lies in its wedge-shaped megaframe that houses the office floors. With all of the building's services located in a detached north-facing tower, efficient and adaptable floor plates, minimal pillars and light flooding in from three sides, the offices offer unparalleled flexibility for occupiers as well as stunning views. The world leading architecture practice itself will be moving into the building, providing the ultimate endorsement.

Through close consultation with the architects, SAS International was able to design and manufacture

a bespoke ceiling solution that works around this unconventional structure where each office floor is 'stepped back' and 750 millimetres narrower than the one immediately below. SAS International has supplied 57,000m<sup>2</sup> of System 330 on tartan grid and bespoke triangular panels to 47 floors (out of 50), with further floors to be completed in 2015.

The bespoke triangular panels feature a large half and half continuous special perforation; the design also needed to incorporate special access to the services above. The special perforation used for the North Core then became a standard across the rest of the shell and core. Specified for its robust structure and excellent accessibility, System 330 Tartan Grid was installed throughout the CAT A offices, ensuring smooth partition fixing integration which allows for flexible use of the office space.

A BIM model was created to ensure compatibility of the ceiling with the existing structure. SAS International also designed and manufactured off-site mock ups which allowed Richard Roger's practice to evaluate the proposed solution in detail ahead of construction. The individual pods were then prefabricated off-site and dropped into the structure.

The prefabrication process was a very important part of the building's construction; more than 80% of the overall components were prefabricated off-site and then delivered and assembled on-site by the construction team led by Laing O'Rourke. Using off-site manufacture makes the building process safer, less wasteful and more accurate, especially in such a constricted area. It also helps to minimise noise and disruption.

While the construction process cuts waste to near zero by designing and manufacturing most parts off-site, aspects such as the triple-layer glass 'skin' help to achieve energy savings in the cooling and artificial lighting systems. The Cheesegrater has received pre-certified BREEAM Excellent rating.



Developer	British Land
Architect	Shell & Core - Rogers Stirk Harbour & Partners
CAT A	Pringle Brandon
Cat B ongoing	TP Bennett, Gensler, SOM, MMoser
Main Contractor	Laing O'Rourke Construction South Ltd
Fit out contractors ongoing	Overbury, MMoser, Advanced interior Solutions, PSG Global
Sub-Contractor	
Shell and Core	BDL, North Core Astec Projects Ltd
Fit Out ongoing	IDC Contracts Ltd, Westco Partnership Ltd, Celtic Contractors Ltd, CD Office Interiors Limited
Systems	Bespoke Triangular Panels System 330



Walk this way, talk this way:  
SAS International specified  
for 20 Fenchurch Street  
aka the Walkie Talkie

SAS International has supplied its metal ceilings to many iconic buildings adorning the London skyline. However, none have made as many headlines as 20 Fenchurch Street, otherwise known as the 'Walkie Talkie'. The world-renowned architect Rafael Viñoly came up with this bold and unique design not only to challenge the conventional box shape, but also to maximise the building's rental potential. The top floors of skyscrapers are more prestigious and therefore can charge higher rent than lower floors, hence the progressively increasing floor space and distinctive shape of the building. In January 2015 the Sky Garden, with a terrace, café, bar and restaurant on the 35, 36 and 37th floors have opened to public, making it the highest public park in London.

Developed by a joint venture partnership between two of the UK's leading property companies, Canary Wharf Group and Land Securities, 20 Fenchurch Street provides 680,000 m<sup>2</sup> of top quality offices with stunning panoramic views of London. In this project functionality and aesthetics of the interior finish played an integral part in creating and presenting a corporate identity, attracting future tenants and providing a comfortable working environment.

To future proof the office space and answer the demand for flexible solutions, 39,000 m<sup>2</sup> of SAS International's System 130 Alugrid-Q 15/16 metal ceiling were specified for 28 floors, 8 of which (12,000 m<sup>2</sup>) are a Category A fit out.

The Alugrid-Q suspension provides a unique partition head fixing facility which allows for reconfiguration and space planning to accommodate companies' growth or downsizing as partitioning can be moved with ease – a highly desirable feature in the fast moving corporate world. Acoustic treatment in such environment is also an important factor; System 130 metal ceiling solution provides tenants with high levels of room to room acoustic privacy of up to 45dB.

SAS International manufactured the ceiling tiles to accommodate the lighting integration; the LEDs were identified as being heavy and allowance had to be made. Using LED lights instead of fluorescents will result in the energy saving of 15%, with life expectancy being four times longer.

Due to the unusual shape of the building and each floor plate, perimeter detailing was necessary for the multiple fit outs; SAS International worked with 10 different architect and design firms and 12 ceiling subcontractors in total, including MPG for the Cat A fit out.

Completed in April 2014, 20 Fenchurch Street is rated BREEAM Excellent. SAS International is proud to be part of such an outstanding project; our environmental compliance helps project teams meet the increasing demand for environmental compliance including the BREEAM rating.

The project is breaking ground as the first building in London's Square Mile to incorporate the latest energy-generating technology: a 300 kW natural gas fuel cell; in one year, the reduction in pollution will be equivalent to taking 340 cars off the road. In addition, roof mounted photovoltaics will provide the building with 27,300 kWh a year.



Project Photos



BBC Broadcasting House, London - System 330 + 150



Markit, London - System 330



The Guardian Offices, London - System 130AL + 330



Evelyn Grace Academy, London - System 150



LinkedIn, Dubai - System 150



The Gherkin, London



Central Saint Giles, London - System 330 + specials



Siemens MASDAR, Abu Dhabi - System 330



Tottenham Court Road, London - Baffles



Msheireb, Doha, Qatar - Construction site



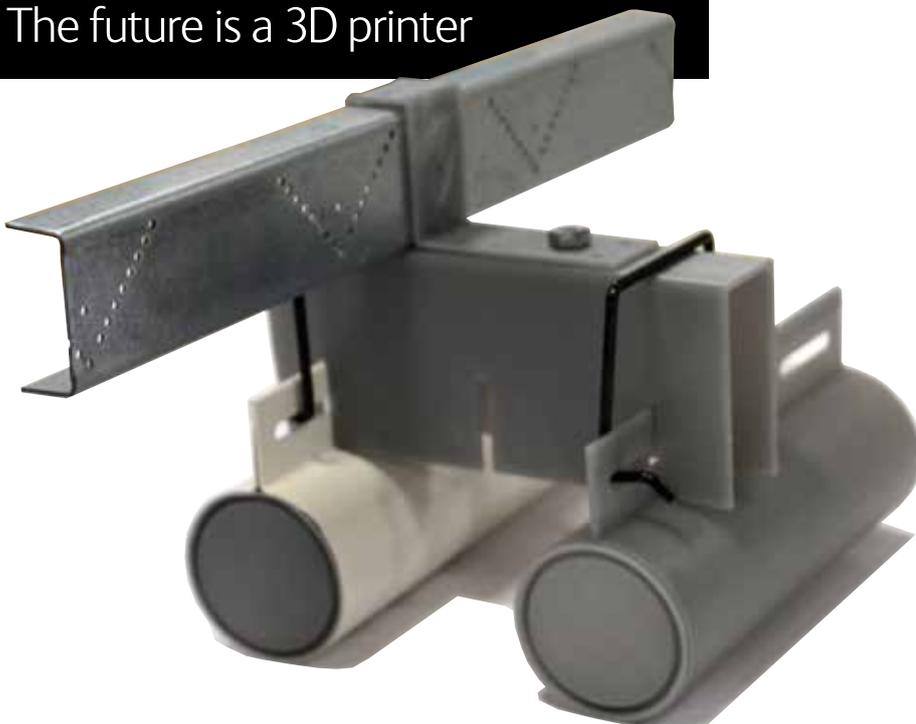
Royal Opera House, Workshop, Essex - System 330



The Shard, London



The future is a 3D printer



SAS International's Research and Development department first used in house 3D printing for the Gateway Pavilions project in Greenwich, London. A 3D doodler pen was used to support initial design concepts when developing bespoke suspension brackets for curved Tubeline ceilings.

By using 3D printing the preferred design prototype could be realised, and any final adaptations made before production. Once manufactured, the successful bracket design was used for both exterior and interior fixings on the project.

There is a clear demand in the architectural and construction market for quick, innovative samples and prototypes. SAS International's 3D printing facility now responds to this demand, supporting project teams and aiding product development in line with SAS' core principles of service, quality, innovation and dependability.

#### Benefits of 3D printing

- **Increase Innovation**  
Print prototypes in hours, obtain feedback, refine designs and repeat the cycle until designs are perfect. Supporting the development of new products and showing innovative concepts.
- **Improve Communication**  
Hold a full colour, realistic 3D model in your hands to impart more information than a computer image. Create physical 3D models quickly, easily and affordably for a wide variety of applications.
- **Speed Time to Market**  
Compress design cycles by 3D printing multiple prototypes on demand, right in your office.
- **Reduce Development Costs**  
Cut traditional prototyping and tooling costs. Identify design errors earlier and reduce travel to production facilities.
- **Win Business**  
Bring realistic 3D models to prospective customers.
- **Personalise Products**  
This can increase mindshare with potential clients.

#### Printing capacity at SAS International

The 3D printer, based at the SAS Reading office is available for general use by the whole group.

At present the 3D printer can print objects within approximately 100mm cubed and can be turned around within 24 hours depending on demand.

SAS encourage everyone to request a print to support their work, it does not have to be a fully developed component. The 3D printer is here to help you during the design process and give you a physical prototype within a short period of time.

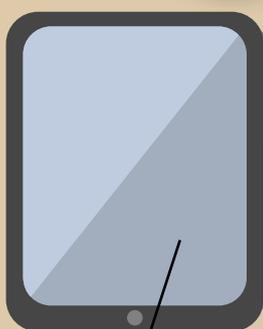
Please see the internal printing guide for designing more detailed considerations. If you would like to request a print please contact Matt Butchard in the R&D department.

## Our brand new website is now live

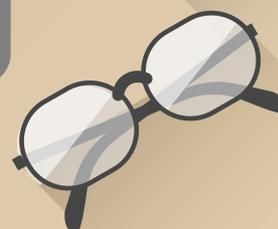
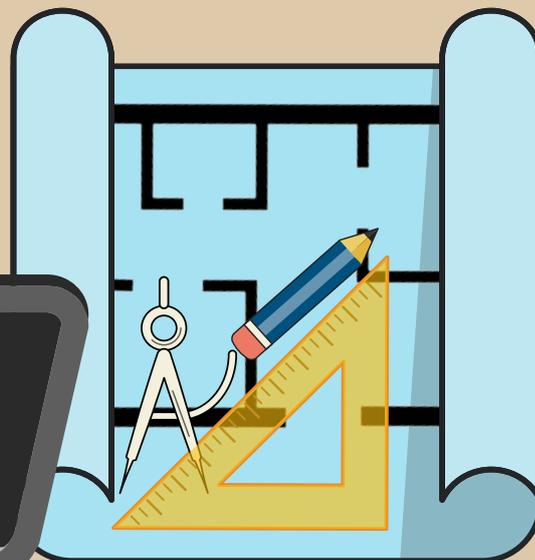
Our brand new website is now live. It is very obviously different to our old website, but it's changed far more than just its look and feel. Before we engaged with any design work, we asked our customers what they needed from a manufacturer's website. Their feedback was conclusive:

A simple, logical navigation and engaging user experience (UX)

Relevant, useful and up to date technical information



A website they can effectively access anywhere (mobile friendly)



### Technical Information

Dealing with the first demand was a significant project in its own right considering the breadth of information we have to manage. What we now have available online is completely current. There is a huge amount of information we still want to share, but this will come in time. The website is a living, breathing communications platform that we'll need to continually feed.

### Navigation and UX

Navigating such a large website was always going to have complications. Our approach has been to think about the starting point of the visit and who may be looking. We have made it very easy to quickly find drawing downloads, but we also allow the user to meander through the site if they want to explore.

The way in which the site has been built allows us to very simply promote content through "blocks". Blocks are a way for us to promote content based on where the visitor is and where they're likely to want to go next. The aim is to make our website the most intuitive and helpful information source in the market.

Another innovation is we can set user groups, so we can push the most relevant content to them. A quick example is users in Australia will see Australian news and projects first, before other region specific content.

### Mobile Ready

Designing a responsive website (jargon for websites you can see on mobiles) is always tricky to perfect due to the sheer number of screen sizes. We have successfully developed a fully responsive website. Google recently announced that they will downgrade websites that are not mobile friendly in the search rankings (came into effect at the end of April).

### Search Engine Optimisation (SEO)

The website is a sales as well as support tool and we need to make sure it generates lots of enquiries.

SEO is incredibly important and the new website has been built based on current SEO best practice. The basic building blocks are all in place to perform well for SEO purposes, but it's no longer the main ranking challenge as it was a couple of years ago. What is increasingly more important is the quality of the content we produce.

### Content

Content Marketing has become another recent industry term. Google has updated their algorithm to prefer content that other people find useful. The more your content is shared and visited, the higher Google will rank you within their search results. Content also has to be recent, current and on topic.

Content has to be interesting, helpful and engaging to warrant somebody taking the time to read and hopefully share with peers – validating and promoting your content for you. By investing the time and money in high value content, we will be able to strive for the goal of recognised knowledge leaders in our market. This will have a huge positive impact on our brand and ultimately long term success.

We now have the tool to strive for these goals. Besides staff, the website is our most important sales and communications tool. If you have any innovative ideas for the website in terms of topics or content, please let the marketing team know.

Team SAS



Wear it. Beat it

On Friday 6th February, SAS Reading took part in the British Heart Foundation Charity Day by wearing red clothing and baking red sweet treats to raise money, in aid of Andrew Skitt's daughter Abigail. Thanks to all those who contributed.

## Reading Half Marathon

Congratulations to the intrepid Team SAS who completed the Reading Half Marathon on Sunday 22nd March. SAS Insider Editor Rosa Lenders ran for Diabetes UK, while Vikki Primmer fundraised for Cancer Research UK. They were joined by Phil Smith, Danny Collins, Gavin Marsh, and Martyn Brand - well done to everyone who ran.



## On site at Tottenham Court Road



Katie Marcham and Danny Collins visited the Tottenham Court Road site to see the progress of the project as it is benefiting from a major transport investment.

## London Marathon

Well done to our brave Sales Director Phil Smith for running the London Marathon on Sunday 26th April.

18 months ago he took his two children to watch a local Iron Man competition, only to be asked "daddy why are you not in this!" They inspired him to buy a pair of trainers and to start running.

He took part in support of Sense, a national charity that supports and campaigns for children and adults who are deaf and blind. He raised an amazing £2,257 to help improve the quality of the lives of individuals and their families.



## Debbie Evans

Thank you to everyone who helped Debbie Evans celebrate her 50th birthday on 5th March! Debbie is an Accounts Assistant at Apollo Park



## Quick wins project update



With almost 100 SAS employees involved, the Quick Wins programme has been a success already. We started with 24 projects, four of which have since been paused and one merged with another. That's 19 active ongoing projects!

The great news is we are on track to exceed our target for savings in 2015.

We are also using advanced communications such as Yammer and Smartsheet to share information. Video

and conference calling has been used by many teams, to save time and money travelling.

**Thank you to everyone involved.**

## My Work: Stephen Everett



1. My current role is Chargehand of the Aluminium Grid Department. My typical day consists of looking through the production/job orders and planning what needs to be achieved that day and allocated labour accordingly. I ensure all machinery is checked in accordance with the Health & Safety procedures set. I then run through with the team what work centre they are working on and what they need to produce for that shift. I also arrange for the relevant materials to be at each work centre to commence production. I make regular checks throughout the day to ensure we are on target and liaise with other departments regarding scheduling new orders.
2. When I started SAS, I was working within the same department packing the grid into the boxes. I then moved onto the machines. I showed a keen interest in learning all the processes as I wanted to advance my career. I then worked my way up to the Lead Hand position and was then promoted to my current position of Chargehand.
3. Before joining SAS, I used to make Bicycle parts for Cyclogear.
4. The introduction of technology has assisted me in my role as I use Syteline to find out

information and check various criteria which in the past I would have had to ask an office member due to the manual processes we used to follow. Also the introduction of LabrTrak on the shopfloor has also eliminated a lot of manual paperwork and records as everything is now on the system and I am able to check what production has been done throughout the day more easily. With regards to the culture, there have been some very noticeable changes over the years of which some have provided challenges amongst the workforce, I have overcome these as I like change and appreciate that the business has evolved and grown and changes are needed to meet customer expectations and remain competitive within the market.

5. I enjoy new challenges and the satisfaction of meeting customer delivery dates to ensure we have no 'to follows'. Also, achieving low tolerance on our products which is evident in the fact that we rarely receive a complaint relating to the grid product. I feel this is an achievement for myself and the team as I pride myself on manufacturing and delivering quality product right first time.
6. The biggest challenge is maintaining the low tolerances and also delivering change through the workforce.

A big thank you to our Long Service Awards Winners.  
And a big welcome to our New Starters.

## 25 years' service



**Stephen Everett** Apollo Park  
Starting Role: Machine Operator  
Current Role: Chargehand

## 20 years' service



**Agnes Gordon** Maybole  
Starting Role: Paint-line Operative  
Current Role: Paint-line Operative

**Denzil Beckey** Bridgend  
Starting Role: Production Carpenter  
Current Role: Carpentry Line Leader

## 15 years' service

**Bob James** Reading  
Starting Role: Estimator  
Current Role: Sales Executive

**Danny Fisher** Apollo Park  
Starting Role: Machine Operator  
Current Role: Machine Operator

**Mark Pestridge** Apollo Park  
Starting Role: General Operative  
Current Role: Chargehand

**Shelagh Donovan** Bridgend  
Starting Role: Accounts Assistant  
Current Role: Credit Controller

## 10 years' service

**Blake Green** Apollo Park  
Starting Role: Machine Operator  
Current Role: Machine Operator

**Dominic de Sousa** Apollo Park  
Starting Role: Production Manager  
Current Role: Production Manager

**John Sheldon** Apollo Park  
Starting Role: Driver  
Current Role: Driver

**Kayley Rodger** Maybole  
Starting Role: Engineering Administrator  
Current Role: Sales Order Processing Administrator

**Mohammed Ali** Apollo Park  
Starting Role: Machine Operator  
Current Role: Machine Operator

**Phil Taylor** Reading  
Starting Role: Market Research Co-Ordinator  
Current Role: Sales Executive

**Scott Davidson jnr** Maybole  
Starting Role: Paint-line Operative  
Current Role: Brake-Press Operative

## New Faces

**Bridgend**  
**Marcus Frances** Production Engineer  
**Marta Cymbalak** Project Co-Ordinator Asst

**Reading**  
**Andy Curran** Project Manager  
**Christopher Toffolon** Designer

**Evgenia Chalkiadaki** Trainee Designer  
**Gareth Evans** Glass Fitter  
**Gordana Pavlovic** Marketing Administrator

**James Greene** IT Manager  
**Jeremy Buick** Senior Estimator  
**Karen Biddle** Document Controller  
**Luanna Buratta** Admin Asst  
**Lyndsey Ewart** Temp Administrator  
**Martine Robins** Group HR Director

**Micaela Gouveia** Junior Estimator  
**Ribeiro** Sales Executive

**Michael Evans** Designer  
**Michalina Kwiatkowska** Estimator  
**Neil Hamblin** Trainee Estimator  
**Nico Price** Trainee Designer  
**Paul O'Brien** Sales Support  
**Peter Gray**

**SAS Direct Birmingham**  
**Adam Gauntlett** Sales Co-Ordinator  
**Ainsley Nash** Driver  
**Rebecca Jones** Branch Administrator

**SAS Direct Burgess Hill**  
**Dennis Farrant** Senior Sales Co-Ordinator  
**Marc Smith** Warehouse Operative

**SAS Direct Leeds**  
**Candi Hunt** Sales Co-Ordinator

**Hong-Kong**  
**Sean Dann** Site Supervisor HK

In this issue of the Insider we meet the Maintenance Team. They are based at Apollo Park, Bridgend and Maybole. They have given us an insight into their job roles and some of their interests outside work, along with their favourite food and holiday destinations.



**Chris Beddoe**

- Q.** What is your role within the team?
- A.** Maintenance Technician
- Q.** What do you do on a typical working day? (What are you responsible for?)
- A.** Attending planned, project and breakdown work.
- Q.** What do you like most about working at SAS?
- A.** Working in all areas with all teams of people.
- Q.** What do you find most challenging about your role/job?
- A.** The need to be proficient across many different fields of technical disciplines
- Q.** What is your favourite food and drink?
- A.** Any take away food.
- Q.** Where is your favourite place for a holiday?
- A.** I enjoy travelling in Europe
- Q.** What are your favourite sports or sports team?
- A.** Manchester United Football Club.
- Q.** What are your hobbies/what do you like to do in your spare time?
- A.** I attend a local CrossFit box and enjoy photography.



**Geraint Dowling**

- Q.** What is your role within the team?
- A.** Maintenance Technician
- Q.** What do you do on a typical working day? (What are you responsible for?)
- A.** Assist in facilitating the smooth running of the plant through both reactive and proactive maintenance.
- Q.** What do you like most about working at SAS?
- A.** The continuous variation in the day to day tasks.
- Q.** What do you find most challenging about your role/job?
- A.** As above.
- Q.** What is your favourite food and drink?
- A.** LaverBread , Ruby Ale
- Q.** Where is your favourite place for a holiday?
- A.** Cyprus.
- Q.** What are your favourite sports or sports team?
- A.** Swansea City Football Club.
- Q.** What are your hobbies/what do you like to do in your spare time?
- A.** Spending time with my grandchildren.



**Nick Biggs**

- Q.** What is your role within the team?
- A.** Maintenance Supervisor
- Q.** What do you do on a typical working day? (What are you responsible for?)
- A.** I co-ordinate the maintenance team at Bridgend. This includes organising workloads, working with production areas, managing projects, liaising with contractors.
- Q.** What do you like most about working at SAS?
- A.** The ever changing targets – no day is ever the same!
- Q.** What do you find most challenging about your role/job?
- A.** The ever changing targets!!
- Q.** What is your favourite food and drink?
- A.** Roast beef dinner with a pint of beer.
- Q.** Where is your favourite place for a holiday?
- A.** No favourite - as long as I am on holiday.
- Q.** What are your favourite sports or sports team?
- A.** Rugby and Football – Manchester United.
- Q.** What are your hobbies/what do you like to do in your spare time?
- A.** Photography and supporting my son playing rugby.



**Steven Powell**

- Q.** What is your role within the team?
- A.** Coordinating and shaping. Plan, lead, organise and control. You only get out what you put in.
- Q.** What do you do on a typical working day? (What are you responsible for?)
- A.** Facilities and Maintenance, Passionate about our buildings and machinery, I believe all breakdowns can be avoided. I spend a lot of time digging into the root cause of our breakdowns and understanding what went wrong.
- Q.** What do you like most about working at SAS?
- A.** What's not to like but if it's one thing, I get a buzz knowing that every piece of work manufactured and shipped on time, we in the Maintenance department had input.
- Q.** What do you find most challenging about your role/job?
- A.** The process route to get anything made internally - still looking for it, let me know if anyone has it.
- Q.** What is your favourite food and drink?
- A.** Slow cooked Chine of beef with roasties and Yorkshire puds with a glass of red yum.
- Q.** Where is your favourite place for a holiday?
- A.** I have a flat on Lamanga Mar Minor strip, Spain's best kept secret. (Quick plug. Flat for rent haha)
- Q.** What are your favourite sports or sports team?
- A.** Like to watch the rugby or if football is on Albion.
- Q.** What are your hobbies/what do you like to do in your spare time?
- A.** I play an awesome game of golf and also scuba diving for scallops in Plymouth just off the race.



**Niall Mackie**

- Q.** What is your role within the team?
- A.** Maintenance manager at Maybole.
- Q.** What do you do on a typical working day? (What are you responsible for?)
- A.** I am responsible for ensuring the smooth running of the machinery and services within the plant. Leading a small maintenance team of two engineers across two shifts, dealing with planned maintenance, spares control, health and safety, ordering, contractors and the day to day aspects of plant maintenance.
- Q.** What do you like most about working at SAS?
- A.** I particularly like the structured nature of SAS. Everyone knows what has to be done to succeed and has the increased drive to do so.
- Q.** What do you find most challenging about your role/job?
- A.** The constant fluidity of the workload and tasks at hand.
- Q.** What is your favourite food and drink?
- A.** Favourite food is Chinese, favourite drink is Glennfiddich 12 year old single malt whisky.
- Q.** Where is your favourite place for a holiday?
- A.** Favourite place for holiday is St. Maarten in the Caribbean. The best Scuba diving in my opinion.
- Q.** What are your favourite sports or sports team?
- A.** My favourite sport is football, following Glasgow Rangers FC and both the Scotland national football and rugby teams.
- Q.** What are your hobbies/what do you like to do in your spare time?
- A.** My spare time is taken up by my young son. Showing him the beautiful Scottish country side.



**Hugh Bell**

- Q.** What is your role within the team?
- A.** Maintenance Engineer at Maybole. I am responsible for the repair of any plant breakdowns and for keeping the site running to the best that I can. The role has changed over the years because the site now has two buildings, so there is a lot more to do than in the past.
- Q.** What do you like most about working at SAS?
- A.** Over the years the changes in technology have been good because you can find more ways to effect repairs and get spares more easily. The culture hasn't really changed, everyone wants everything done yesterday!
- Q.** What do you find most challenging about your role/job?
- A.** Keeping everything running and the manager happy.
- Q.** What is your favourite food and drink?
- A.** Favourite food is curry and fried rice.
- Q.** Where is your favourite place for a holiday?
- A.** My favourite holiday location is Sharm El Sheikh in Egypt.
- Q.** What are your favourite sports or sports team?
- A.** My favourite sport is football, following both Glasgow Rangers FC and the Scotland national team.
- Q.** What are your hobbies/what do you like to do in your spare time?
- A.** Going home to put my feet up after a hard day's work is what I most enjoy.



**Colin Macintyre**

- Q.** What is your role within the team?
- A.** My role within SAS is as part of the backshift engineer, focusing on all aspects of maintenance and repairs of the plant at Maybole.
- Q.** What do you do on a typical working day? (What are you responsible for?)
- A.** My normal day is following the planned maintenance schedule and dealing with any breakdowns that occur.
- Q.** What do you like most about working at SAS?
- A.** I like the fact that SAS has a clean safe working environment.
- Q.** What do you find most challenging about your role/job?
- A.** Working practices change so fast that it can be a challenge to keep up with new developments.
- Q.** What is your favourite food and drink?
- A.** I enjoy any sea food and a good white wine to accompany it.
- Q.** Where is your favourite place for a holiday?
- A.** My favourite holiday area is the Channel Islands.
- Q.** What are your favourite sports or sports team?
- A.** Favourite sport is lawn bowls, which I regularly play.
- Q.** What are your hobbies/what do you like to do in your spare time?
- A.** My spare time is taken up by game fishing and DIY.



metal ceilings | partitioning | doors | room comfort | architectural metalwork

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