



Merton College

SAS were chosen to provide both Integrated Service Modules (ISMs) and System 600 acoustic lighting rafts
Back Cover



Porsche Supercup Update

Team SAS reports from Bahrain, Barcelona and Monaco
Page 10



SAS Interview

Dominic and Scott answer questions on ISO and future plans at SAS Apollo Park
Page 6



INSIDER

Metal Ceilings • Partitioning • Room Comfort • Architectural Metalwork

June 2007 Issue 3

SAS Bridgend & Apollo Park attain ISO 14001

SAS Apollo Park and Bridgend have both attained ISO 14001 in Quarter two.

The hard work by both factories has paid off and the accreditations have been completed in accordance with the ambitious SAS ISO schedule.

Both factories have conducted staff training in ISO 14001 outlining the importance and benefits of an environmental management system.

Gaining the accreditation means that consistent measurement takes place to ensure that the environmental aspects and impacts of manufacturing SAS products meet agreed targets.

The remaining SAS factory in Maybole is due to receive accreditation soon. ISO 14001 compliments the ISO 9001 quality standard. Both Bridgend and Apollo Park are now working towards ISO 18001, the health and safety standard that is also recognised internationally.

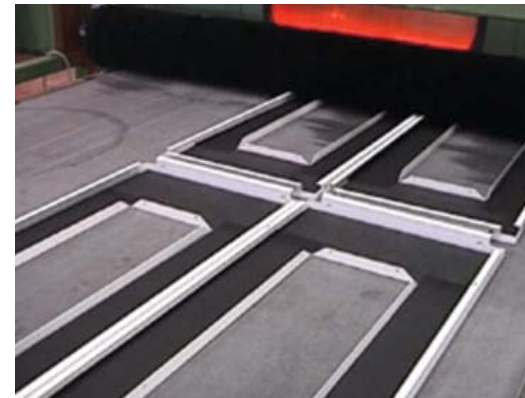
Information regarding all ISO standards is regularly being requested by customers and specifiers. If you require ISO information please contact the marketing department at Reading.

Congratulations to everyone involved in the ISO process..

Andrew Jackson
Marketing Manager



ISO 14001 certificate



Bridgend paint line



Active ISM mock-up at Apollo Park

The new showroom area in Apollo Park has had its first mock-up installed. Three active Integrated Service Modules (ISMs) were installed in preparation of a visit from a project design team.

Each ISM featured a different supplier's luminaire and the design team were able to compare and contrast the relative merits of each one. The showroom features an advanced building management system with both hot and cold water pipework and at 150m² will prove a real asset to the company. It is also available as a conference room and the sales team recently held a sales meeting there.

Three New RAS Auto Bending Centres For Bridgend



The machines flexibility will enable the forming of trapazoidal and triangular panels. With tool changes of less than 60 seconds multi position projects can be more easily accommodated.

Next month Bridgend will be running a course for SAS staff who wish to gain a better understanding of its capabilities. Those who wish to attend should contact Paul Smith.

This investment of £1.5 million will have benefits across all the businesses, the second machines arriving in July for Maybole with the third arriving August.

Chilled Ceiling Association

We highlighted in Issue two that SAS recently received an Energy Carbon Saving Award from the CPA (Construction Products Association) for SAS Coolceil.

Did you know that SAS are members of the Chilled Ceiling Association. Formed from leading manufactures of chilled ceilings and beams, the CCA's objective is to promote their use within the building industry and encourage best practice in their development and application.

The CCA is currently working on a practical guide to chilled ceilings and beams, which maybe published in conjunction with an organisation such as CIBSE (Chartered Institute of Buildings Services Engineers) or BSRIA (Building Services Research and Information Association).

By producing a best practice guide the CCA aim to establish itself as the primary information source in the industry. In the past there have been various "myths" regarding cooling products and it is the aim of the CCA that the new guide will set the record straight.

Every quarter a representative from an area of the SAS Group reports on Company activities, any important news and what to look out for in the forthcoming quarter.

Quarter two continued to build upon our strong start to the year, with both order intake and enquiry levels greater than we experienced for the same period of 2006. The market place remains buoyant and with the first six months now behind us, we look forward to the remainder of the year. Our continuing analysis of the market place has been reassuring and projected sales look encouraging for the noticeable future.

Levels of opportunities across all sectors and regions continue to be high, with many major developments starting to commence on site. The level of enquiries for comfort heating & cooling products has increased as Part L of the building regulations takes effect.

We have completed the installation of an active chilled beam mock-up at Apollo Park. The mock-up for lawyers Evershed, is currently at tender stage and has provided an extensive opportunity for SAS Project Management (PM), providing the client with a one stop shop.

Taking the proactive approach in building a working mock-up, has given us an excellent, fully functioning active heating and cooling beam, enabling us to demonstrate to clients that SAS are serious contenders for business of this nature.

The 'go-live' implementation of our new business management system, CUBES was postponed due to third party problems totally outside of our control. Although bitterly disappointing for all those concerned and for SAS as a whole, we are working to resolve this issue and will announce a new 'go-live' date as soon as possible.

Mark Jones
Director

In Ireland, our Dublin office continues to witness high levels of enquiries and opportunities not only for manufacturing but also SAS PM. Having presence in Ireland has really opened our eyes to the potential that exists. Our immediate challenge remains to obtain SAS product specifications for immediate wins and prospect future business.

Off-site fabrication is becoming the norm for many clients. Since the first building at Chiswick Park our offering in the market for factory installed light fittings, grilles and other services is becoming ever more popular. Taking out a site process is really beneficial to the client, not only financially, but also for speed of construction and quality. Recent projects include the factory installation of 4,000 light fittings at New Street Square in London, 1,600 grilles at Colemore Plaza in Birmingham and 7,800 grilles at Old Broad Street in London.

Phil Smith
Sales Director

The new look website is attracting plenty of hits, and the soon to be available new radiant heating brochure will help focus and highlight attention to the product even more.

We recently completed some great orders such as Freston Road, Faryners House, Barnet Hospital and have plenty of other schemes in the pipeline with a marked increase in refurbishment work.

We have lost a few staff recently largely due to retirement, but the business is now lean and mean, and ready to take on any challenge in the market.

The integration within SAS continues with Bridgend now fully online with the production of radiant panels, but as nice as I am sure it is in Maybole, Bridgend, Apollo Park or Reading, the sound of seagulls first thing on a sunny costal morning has to win hands down in terms of location, location, location.

Robin Dixon
HCP General Manager

Everyday at Maybole, due to the specialist nature of our products, brings different manufacturing challenges as well as supporting our customers expectancy on lead-time and quality.

The ability of SAS to offer a bespoke solution to meet project requirements gives us a significant advantage in the market place. Hopefully in the forthcoming months with on-going investment, supported by the local skills base, we will continue to meet customer expectations in all areas of the business including reducing lead-times for our product.

John Gemmell
Maybole Works Director

Project Management (PM) has experienced a quiet first half year but tender levels for new projects have remained very buoyant, which should result in an influx of orders during the summer and autumn.

The publicity concerning the 'green' environment in the construction industry has prompted considerable interest in chilled ceilings, beams, System 600 and ISMs. Eversheds proposed new head offices in Wood Street, London W1 is the largest project recently quoted by PM. We hope to secure the design, supply and installation valued in excess of £3 million. A working "mock up" of the system was recently installed at Apollo Park for the client and design consultants to experience.

The latest completed PM chilled ceiling project is the headquarters for the China Shipping Company in Felixstowe. The smaller EDF Energy Ipswich office project has also recently completed ahead of programme.

Due to the nature of System 600 and ISM projects, ISMs (SAS providing a initial design and performance solution offering warranties on systems in use), SAS directors have taken the decision that all future System 600 installations should be handled by PM wherever possible.

Our partnership with active cooling and heating experts Krantz of Germany is working well providing SAS with new project opportunities and two recent project awards; The Clinical Sciences Block at St James Hospital, Leeds and Kings College in the Strand, London. The preference to use acoustic ceiling rafts for the Building Schools for the Future (BSF) has resulted in an increase volume of enquiries from contractors undertaking BSF projects.

In the second half of 2007 SAS will deliver ceiling materials for two college buildings representing the next phase of the King Saud University development in Riyadh, Kingdom of Saudi Arabia. Over the last 14 years we have established a close relationship with some of the best contractors in Saudi Arabia and remain firm friends with the University's own architects and consultants.

These two KSU projects, the Community College and the College of Language and Translation, (a combined area of 47,000m²) follow on the heels of the four previous orders; the College of Computer and Information Science, the College of Architecture, the Applied Medical Centre and the Oasis Building, all supplied with SAS metal ceilings in the last four years. The ceiling systems are designed to interface with the monobloc partitions and to enhance the acoustic performance of the teaching and office space.

In the summer of 2006 we hosted a visit of three architects from Qassim University and impressed them with our manufacturing facilities.



China Shipping, Felixstowe

PM recently installed a mock-up during half term in a classroom in Edinburgh as a pilot towards the hopeful award of nine schools in the Edinburgh area for Crown House Technologies, the first two of which are due to start later this year.

PM, operating under SAS Dublin based company SAS Building Factors Ireland Ltd, has recently secured two prestige projects in Dublin which start and complete within 2007. International House is a chilled ceiling project consisting of a part refurbished and part new build office block; and Charlestown Shopping Centre involves architectural metalwork including a Chek Lap Kok style daylight reflector.

Unfortunately PM lost the services of designer Richard Shekell in May who, after a number of years with SAS decided to travel the world and start off as far away as possible, in Australia!

David Bland
Operations Director

From England the team travelled to Germany, France and Italy to inspect our competitors, judging that SAS remain the specified product supplier for the Qassim projects.

We still come under pressure from other manufacturers. The Universities of Saudi Arabia set extremely high standards when specifying materials, as they expect a 25 year life span from their buildings. SAS have been specified to supply System 350 to Qassim, an assembly which consists of a special modular suspension system that allows the ceiling panel, trimstrip and crossing box to be completely dismantled in any given location, leaving no grid to hinder access to the ceiling void.

The opportunity to win more orders from the Saudi Universities looks strong. The country has increased its' education budget due to a growing population and the King has decreed everyone must be educated to degree level. SAS should maintain their strong presence in this market.

Jon Wood
Export Director



Basildon Hospital, Essex

Quarter two has been active in terms of quotes, orders and general activity, and signs of a good year for HCP. The health-care and education sectors are proving to be a great source for radiant panel work and interest for this product is increasing every quarter. HCP marketing activity is having a very positive effect and it is helping to keep our name in people's minds when considering trench, perimeter and radiant heating.

As part of our on-going improvements and to increase manufacturing floor space to accommodate our new automated bending centre, due in July, we are currently re-locating some of our manufacturing process above the main offices. This re-location, will be completed and operational soon.

Over the past few months we have been manufacturing a number of major construction projects from the UK and abroad. Customer visits to the factory have included the main client for the St. Pancras/Kings Cross Station project due to open July 2007. Our ISO 14001 quest is gathering momentum and we are confident we will attain certification in 2007.

Passenger Terminal EXPO

SAS International recently exhibited at Passenger Terminal Expo 2007. The Expo is the world's leading international conference and exhibition dedicated to airport terminal design and technologies.

The SAS stand was one of the most innovative at the exhibition and featured:

- Wall panels and column cladding
- Bulkheads
- A micro perforated System 120 ceiling
- 2 x Integrated Service Modules (ISMs)
- An integrated plasma screen

Designed by Mark Sutton, from the Reading design department, components for the stand were manufactured at our Maybole facility. Each part of the stand was painted in a special polyester powder coated 'dark grey sparkle' colour or our SAS standard RAL 9010. Metal storage units and furniture were incorporated into the stand, reflecting the importance of metal in the SAS manufacturing process. Lighting manufacturer, Luxonic, supplied the luminaires for the ISMs.

Mark also designed a series of 17 reusable shipping containers to protect the components during transit and storage, which Maybole Manufactured. The components were shipped to the Reading mock up area, where a team spent several days assembling the stand to ensure everything, including the lighting, was in working order.

The stand was then disassembled and repacked for transit by road to Barcelona. Thankfully all the components arrived safely and Kye Edwards, Design Manager, Andrew Jackson, Marketing Manager, Elisa Vignaga, Senior Export Sales Coordinator, and our Spanish distributors Acadinsa and Sistesul reassembled the stand at the exhibition centre.

The stand prominently displayed large posters of various SAS airport projects, Torres Repsol and Espacio, Madrid and Palaces of Justice, Valencia, plus ISM projects Imperial College London and Vodafone's Global HQ.

Over the course of the 3 day event, SAS met specifiers, contractors, suppliers and distributors to the airport sector. Thanks to all who helped in the design, manufacture and assembly the stand, all of whom contributed to the exhibition's resounding success.

John Staunton

Room Comfort Brand Manager



SAS at Passenger Terminal Expo

Key Facts

- The stand had a footprint of 36 M² and a height of 4.5 meters.
- The design took 12 days.
- It took 3 engineers 4 working days to engineer the CNC programs to enable the manufacture of the product. In total 41 different manufactured components were supplied from Maybole to complete the stand.
- It took over 2 tonnes of sheet metal of various gauges and specifications, special CNC and press brake tooling and over two working weeks, operating on 3 shifts to manufacture.
- It took 2 men 3 working days to assemble the bitumen and/or mineral pads to the rear of the product post polyester powder coating. 5mm Bitumen based damping sheets we factory bonded to the rear of the wall panels which added a further 10 kilos per m² to the weight of the product.
- Over 1,200 nuts and bolts were used during assembly.
- 17 Shipping crates, which equates to nearly a full articulated lorry, were used to transport the stand to Barcelona.



Off-site fabrication by SAS International

SAS are now able to offer customers off-site fabrication reducing on-site installation time and cost for clients and main contractors. Installing these services in a factory environment ensures correct installation without the risk of damage caused to either ceiling tiles of the M&E services.

Over 1,500 air diffusers were fitted for Colmore Plaza in Birmingham. Reduced installation costs were achieved for the main contractor with SAS able to ensure the diffuser was tightly bonded to the ceiling tile without causing any damage.

At Bridgend special adhesive tape was applied to the grilles before fixing on to the tiles. These assemblies were then placed in a heated vacuum press, to ensure proper adhesion; this is a process which could not be carried out on-site.

Mark McElhinney
Managing Director

New Facility for cutting plasterboard

SAS Bridgend process 13,000m² of cut plasterboard, which is used to enhance the acoustic performance of tiles. One project alone in Barcelona has over 400,000 pieces of plasterboard.

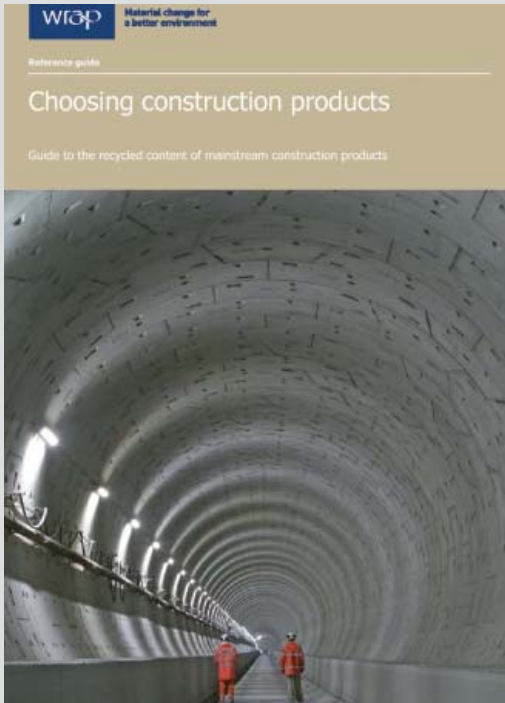
Markets such as Paris demand very high levels of acoustic reduction and with SAS expanding into ever increasing export markets a solution was required to enable greater volumes to be processed.

Paul Smith, Bridgend's Engineering Manager produced the specification for a new automated line which is fed from full stacks of plasterboard. Cutting four sheets at a time both length and width means the new line will produce the current requirements in a single day.

Automated cutting machine

Mark McElhinney
Managing Director

SAS have things wrapped up!



The wrap guide is also available on line

SAS International products have been specified in the latest guide from WRAP (Waste & Resources Action Programme). The second edition of "Choosing Construction Products: Recycled Content of Mainstream Products" shows SAS International ceiling systems with a recycled content of 20%.

The inclusion in the WRAP guide is additional to the overall sustainability of steel. Unlike other suspended ceilings, SAS metal tiles are 100% recyclable at the end of life with a residual value.

Steel is the world's most recycled material and is one of the easiest materials to recover from waste streams; it can be recovered just using a magnet. The properties of steel remain unchanged no matter how many times the steel is recycled.

Manufacturing waste is recycled as apertures are pre-formed this reduces on-site wastage and landfill costs. Metal suspended tiles have a AAA rating from the BRE for recyclability, recycled currently and energy saved by recycling.

A recycled content statement to send to Architects and other specifiers is available from the Marketing Department at Reading.

New RIBA CPD



The Royal Institute of British Architects (RIBA) insists its registered architects complete 35 hours of CPD (Continuing Professional Development) each year.

SAS have just had a CPD seminar on Architectural Metalwork approved, which brings the total number of CPD sessions offered by SAS to six.

Metal Ceilings: Specification, Integration & Performance

Chilled Ceilings: Energy Efficient Cooling

Chilled Beams & Integrated Service Modules: Specification, Design and Performance

Clean and Safe Ceilings: An Anti-Bacterial Solution

Factory Tour – Bridgend site

CPD seminars are generally provided at lunch time by a member of the sales or marketing departments at an architects practice and are a great way of increasing their knowledge about a certain product area.

If you know of anyone who requires a CPD seminar, please contact a member of the marketing team.

Malcolm Stamper
SAS Brand Manager

Trevor Snaps 200 Projects

In 2003 our photographic database consisted of pictures of projects, mock ups and products that were out of date. 2004 saw Trevor Amor armed with his brand new Canon EOS 20D digital camera.

Previously he used a Mamiya large format camera only capable of taking 12 shots per film and took five days to get developed!

Trevor has spent some time travelling the UK to ensure SAS have updated photos of our entire product portfolio and completed projects.

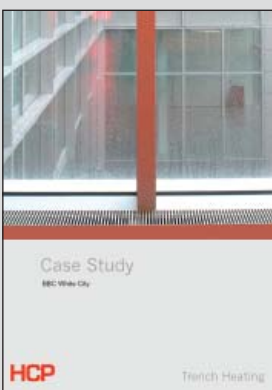
Trevor has now photographed over 200 projects since 2004. You can see some of Trevor's shots on page 9.



Insider Feedback

Thanks to everyone who has contributed with stories or feedback for the Insider. This issue will be the first available outside SAS. Many of our customers and specifiers have found it interesting to learn about who we are and what we get up to! If you would like to appear in the Insider let us know. Please remember something you might think as uninteresting could be hugely useful to someone else. Let us know (good or bad) what you think of the Insider. All comments welcome.

Case Studies Prove Popular



There are two new case studies available for Metal Ceilings, Room Comfort and Architectural Metalwork products and two new HCP case studies.

Due to the strength of the photography, showing SAS products in finished buildings, the case studies have proved phenomenally successful with specifiers. If there is a particular project you feel would be worth making into a case study, please contact a member of the marketing team.

Priory House

Bedfordshire County Council

Completed last year, Priory House, Shefford, Bedfordshire is the striking new purpose-built 6,000m² facility for the Mid-Bedfordshire District Council. Working with SAS International, Hamiltons Architects introduced some innovative and natural ventilation solutions for the project, which incorporated SAS International's acoustic vertical baffles and wall panels in this environmentally progressive building.

Acoustic ceiling-mounted baffles were chosen for the main office areas. They provide acoustic absorption in the office, to the client's required performance levels; while keeping the concrete soffit fully exposed for energy-efficient natural cross ventilation cooling.

Hamiltons Architects developed the baffle details alongside SAS International. Design constraints included; the depth and width of the baffles (which directly affected the performance of the soffit-mounted luminaires), the amount of air flow between baffles and localised acoustic requirements.



The baffles needed to be as narrow as possible, without compromising their performance or structural stability. Manufactured in one wrap-around section with no exposed fixings, the final baffle solution also accommodated the variation in height expected from tolerances and deflection of the slabs, giving performance and aesthetic consistency throughout the office areas.

Project Architect at Hamiltons Architects, Jorge Ortega commented: ***"The baffles were an ideal solution because this is a naturally ventilated building which relies on cross ventilation at high levels to cool down the exposed concrete soffit, which in turn provides the thermal mass for this particular strategy to work."***

"Baffles also provide vertical surfaces which are easy to clean, permitting extremely low maintenance at a very competitive cost."

The building's double height Council Chambers were a further challenge. They had been designed to be flexible: suitable for concerts, functions and exhibitions as well as their designated function. Acoustic wall panels were proposed by Hamiltons Architects to comply with the acoustic requirements of the Chambers, and sixteen full-height acoustic wall panels were specified to absorb any reverberated sound.

The benchmark was to provide a vertical acoustic device for the same cost as a standard suspended ceiling system. A solution based on SAS standard ceiling components, but placed vertically as opposed to horizontally, was developed with tiles fitted into a special frame to hold them together to meet this requirement.

SAS International's System 150 ceiling tiles were specified for use along the corridors of the building, connecting the cores. The clip-in hinge-down system was specified for reasons of aesthetics, accessibility and robustness as the corridors contain the main service routes; total flexibility without compromising the building aesthetics was a key consideration, and this was achieved in this modern and minimalist design.

This exciting new building has regenerated a brownfield site, formerly occupied by the MOD at Chicksands allowing the Council to centralise its facilities in a modern and sensitive space, providing creative solutions for limited budget.

Malcolm Stamper
SAS Brand Manager



Timeline	
Date	Event
1086	Mentioned in William the Conqueror's Domesday Survey as a Manor at Chicksands.
1100-1147	Property inherited by Baron of Bedford, Payne de Beauchamp.
1147	Manor given to the Gilbertine Order.
1164	Thomas Becket took refuge at Chicksands, disguised as a Canon.
1538	Priory and lands sold by crown to Richard Snowe.
1936	Chicksands purchased back by the crown, with custodianship turned over to the Ministry of Defence. The Ministry of Defence developed the Priory and lands for use in the reception of German Signals for Bletchley Park.
1950	United States Air Force establishes the 10th Radio Squadron Mobile (10th RSM), a permanent Security Service Base at Chicksands.
1995	USAF deactivates RAF Chicksands, turning the base over to the Ministry of Defence. Chicksands becomes a Joint Services base for the United Kingdom.
1996	RAF Chicksands becomes the new HQ for Defence Intelligence and Security Centre (DISC) and Joint Services School of Intelligence.
1997	Restoration on the original Priory buildings begins.
2005	In May Work commences on Priory House.
2006	In June Priory House, new offices for Mid-Bedfordshire Council opened.

Facts
<ul style="list-style-type: none"> Chicksands a former Priory for Monks and Nuns has the most substantial remains still standing in England. It still retains 13th century vaulting, medieval roof timbers and stained glass family portraits, paintings and other historic items relating to almost one thousand years of history. Chicksands Priory is first mentioned in the Domesday Book, 1086, together with Hugh de Beauchamp. Some years later his descendant, Payne with his wife, Countess Rohese, gave the manor to the Gilbertine Order, circa 1150. The former Chicksands military base in the heart of Bedfordshire was home to the joint armed services intelligence departments. Very hush hush, as they used to say in the 1940s. During World War II and throughout the Cold War, Chicksands was an important signals gathering station, later part of the NATO's direction finding network. In World War II, Chicksands received German Enigma transmissions that were then passed to the cryptanalysts at Bletchley Park. During the early 1960s Chicksands' "Fighting Chicks" base basketball team was renowned throughout England and Europe and had many tremendous battles with Hahn AFB.

Continuous Improvement

One likes the theatre and the other owns a reptile. Andrew Jackson met up with two of the team that are managing, measuring and auditing the way to continuous improvement. The environment is top priority across society, media and particularly the construction industry (40% of European carbon emissions come from buildings) it's important not just to innovate as a company, you also have to consider how you impact the environment and community around you.

With the SAS Group commitment to attain ISO 9001, 14001 and 18001 the team at Apollo Park are well on course to complete all accreditations.

Having attained ISO 14001 in quarter two they have important environmental plans and targets for 2007 and beyond.

Scott Beckett is the Apollo Park Quality Manager. Having been at SAS for eight years he knows all the aspects and impacts of the manufacturing and factory processes. His girlfriend Rachel also works at SAS as an administrator, he has no kids but does have two fish tanks of tropical fish and a 2ft long Corn Snake!

Dominic De Sousa has been with SAS for two years as Paintline Manager, he splits his time between managing the new factory paint line and working on environmental aspects. A qualified powder chemist, Dominic supports Aston Villa and is a regular at Warwickshire Cricket Club. He and his wife Clair are expecting their first child together. Dominic has two children from a previous marriage; a 15 year old son and a 13 year old daughter. He enjoys swimming and the theatre.

Together Scott and Dominic have been responsible for attaining these ISO and environmental milestones at the new factory. I asked them a few questions on their future plans.

Is it not easier getting an ISO standard in a new state of the art factory building like Apollo Park?

"No! New machinery and processes give everyone a chance to start from scratch. However, the integration of all teams working under one roof can introduce large changes quickly. Especially when the factory is busy and work needs to be managed. People take the environment for granted generally. Simple housekeeping, training and being well organised is the key for being environmentally proactive both in the factory and at home."

Dominic and Scott swear that their success in attaining and developing their EMS (Environmental Management System) is in the attention to detail. Moving from the Kelvin Way factory meant forging relationships with the local council, environment agency and Severn Trent effluent water authority.

Dominic: *"The new paint line needed a permit and that process can take up to three months.. Without it you can't switch it on. There are also permits for the use of chemicals and certain production processes all of which had to be achieved before Apollo Park was fully operational."*

Details during pre-planning are important but does it always go to plan?

Scott: *"No, the truck wash drainage was due to be fed in to the storm drain as the building and facilities were being designed. Because we were so heavily involved with ISO we double checked and they advised us to use the foul drain instead. This was due to the use of detergents. The truck was added to our existing consent limits which include limits for the amount of zinc, chrome, and nickel that can be put in to the water supply. It sounds simple but if it had gone wrong it could have caused serious delays luckily we were constantly involving the council and various agencies."*

What staff training was required for ISO 14001 ?

Dominic: *"All staff at Apollo Park were given an introduction to what ISO 14001 standard involved and its potential benefits. All charge hands were given waste control training and meetings took place to ensure everyone was clear about their responsibility to maintain the environmental process. But training is ongoing we need to keep everyone updated."*

How do you measure your progress and how you operate in accordance with the Aspects and Impacts of the environmental standard?

Scott: *"There are lots of controls in place. We have our targets to meet that are set every year."*



Scott and Dominic at Apollo park

We monitor our progress monthly. Areas include wastage in tons, recycled waste, energy saving objectives particularly for electricity water and gas

The fantastic element about being in the new building is that the building management system is an automated measurement. Everything is measured and can be controlled by the system. It saves work hours and it's completely accurate.

We constantly check factory emissions. They have to fall within a certain parameters set by the council, if we exceed the levels we have to stop production. That has never happened."

So now we have ISO 14001 what's next?

Scott: *"Well we have to maintain and develop the standard. What we are doing here saves money for the company as well as contributing to the environment. Dominic, Matthew, John, Rachel and I will all be working together a lot more in the future which means the team is developing as the work does."*

Dominic: *"We wish to get the European Qualicoat standard for the paint line. This is a global coating specification."*

It involves rigorous testing in Florida for two years. Matthew Hill a quality technician and pre-treatment chemist recently joined us to help with this."

Scott: *"Obviously we are working on ISO 18001. John Humpage our new Health and Safety Officer will be instrumental in getting the standard. Although involved in 18001 I am concentrating on obtaining our Forest Management and Chain of Custody certification. This ensures that timber produced in certified forests has been traced from the forest to the end user." (see below)*

What's it like working for Steve Horner?

Dominic: *"We get massive support from Steve. He drives our commitment to better ourselves in the quality and environmental areas. He is constantly looking for ways to give our customers what they want and for us to be as efficient as possible."*

Thanks for your time guys, last question, its lunchtime... **What is your favourite food?** **Dominic:** *"I like all food except shellfish"* **Scott:** *"It's a dead heat between KFC and a curry!"*

What is the FSC?

FSC (Forest Stewardship Council) is an independent, non-profit, non-governmental organisation. FSC runs a global forest certification system that includes two key aspects: Forest Management and Chain of Custody certification. This ensures that timber produced in certified forests has been traced from the forest to the end user.

At Apollo Park we need the Chain of Custody certification because?

Having a timber or wood product means you will need to have Chain of custody certification otherwise the chain is broken our customer buying a timber product such as a door will have no proof of FSC certification.

Chain of custody has three distinct labels:-

FSC 100% - timber is marked and / or separated from uncertified timber through all processing stages from the forest to the retail shelf. FSC certified products contain only material from FSC certified forests.

FSC MIXED SOURCES – the product either contains a verifiable amount of FSC material and also can contain a high proportion of reclaimed material.

FSC RECYCLED – products contain only verified reclaimed product.

What are the benefits of certification?

It provides added value for our customer and gives the product a verifiable social and environmental quality. It demonstrates that we take environmental concerns of our customers and staff seriously. It also assists with continued market access in an increasingly environmentally aware sector.

The first step.

We drafted and issued a Supplier Questionnaire for Timber Products so that we can determine how many of our suppliers are already FSC certified with a Chain of Custody. Our CPL doors are already certified and marked "FSC Mixed Source" as are our External Paint grade doors. CPL doors are a lot easier to match due to the repetitiveness of the veneer. Natural veneers can vary considerably. CPL doors are perfect where different size doors are used in one location (i.e. Full height, one hour and half hour fire rated). The customer still gets consistency with the veneer finish. Certification applies for all timber products (Doors, beading, lipping, doorframes etc). When feedback is received we will work with FSC UK to implement the systems we need to gain our certification.

Scott Beckett
Quality Manager



SAS Front Page News

©Modern Building Services

SAS International featured on the front cover of May's issue of Modern Building Services (MBS). With a readership of approximately 16,000, MBS is the largest magazine in the UK building services industry.

The front cover features an SAS Integrated Service Module (ISM) in front of the Faculty Building, Imperial College, London.

ISMs were specified at Imperial College as an alternative to traditional air-conditioning system and incorporated both up- and down- lighting plus smoke detectors.

SAS ISMs offer high cooling performances, long term value, the integration of building services and can be designed to meet specific aesthetic requirements.

Two recent System 600 Project Management projects have been highlighted in "School Building" magazine.

School Building is published bi-monthly and keeps architects and specifiers informed of developments in the education sector.

The installations at Kaleidoscope, Lewisham and Grace Academy, Birmingham both received full page articles following a targeted campaign of press releases promoting the benefits of System 600 in the UK.

If you would like copies of these articles please contact the Marketing Department at Reading.

Architects for Aid



It has been a hectic start to the year for A4A, and it doesn't look like it is going to slow down. So far this year we have been called upon to assist 22 projects, in 13 different countries. In February teams returned from successful trips in Kenya, Tanzania and Lesotho, and A4A have started work on developing these projects. Below are a just handful of our projects. These illustrate our aims to provide voluntary building expertise and skills to charities, and champion adequate shelter as a basic human right.

Transylvania, Romania

A4A were delighted to receive the RIBA McAslan bursary for the conservation project in Transylvania Romania, collaborating with Mihai Eminescu Trust (MET). This wouldn't have been achievable without the fantastic Julia Brunning, who is project leader. At one point a regeneration plan for Transylvania was the "Dracula Park." This dreadful plan, has been shelved largely because by restoring villages and giving hope and livelihoods back the MET has kick-started much more responsible tourism: People want to see the natural beauty, (think Richmond Park with bears.)

The McAslan award enabled A4A to send a team of nine, who have catalogued the history and architecture restorations are underway.

We have also championed what the communities want and worked on their buildings, first to help them improve their day to day facilities. It's not all about tourism, quality of life is so important as well as the economy, so we are thinking bigger.

Lesotho Child Counselling Unit

A4A is working in collaboration with Sentebale, the Princes' Foundation, on providing a new home for the LCCU.



LCCU pupil

The need for a new intervention was obvious, so A4A volunteer Pedro Clark was sent out in Mid March to undertake a feasibility trip.

During this trip Pedro undertook an assessment and survey of the site, drew up a new proposal and a programme for the build. Tragically during this trip, the LCCU's current home burnt down, making our project more of a necessity.

In the new proposal, the building will be divided in two blocks, one for sleeping and another for the admin/common areas. We are confident that the new solution is much safer, functional and easier to run one. It is also a scheme that we hope all will feel comfortable in and proud of. In early April, Pedro returned to Lesotho to oversee the construction of the building.

To read about the amazing work he is undertaking on-site, please go to his personal blog at <http://pck4a4a.blogspot.com>.

This work wouldn't be conceivable without the help of companies such as SAS, who as a corporate sponsor, provide vital funds to support our work. A4A's fundraising efforts enable us to provide professional expertise on a voluntary basis for our partner charities and NGO's, those who cannot afford expert support. Our ambitious fundraising target for 2007/08 is to generate £1,500,000. In the forthcoming year we want to double the amount of international projects we are assisting on, and with your help we can do this. Every donation makes a difference!



The extent of the previous build, project to be retrieved by A4A

SAS Induction for Staff

The new induction training reported in Issue 1 has now been up and running with four groups of four completing the Bridgend training. The induction provides an overview and basic understanding on how our product is developed from design through to delivery to our customers.

Staff are able to appreciate and understand each manufacturing process, giving new starters an insight into the complexities of the manufacturing process and an understanding of what the factory has to juggle with on a daily basis. This ensures that lead times are reduced without compromising the quality standards that SAS products are renowned for. With this appreciation, the induction is planned to assist decision making at various stages of projects whether being estimated, design or sales related.

Chris Gwynn, Bridgend Engineering Production Manager, highlights that **"There are the benefits of meeting first hand, people who will be involved in certain projects be it directly or indirectly, by breaking down any barriers that may exist with individuals and allow better lines of communication."**

The latest group of four completed their induction in May, each member of the induction team learnt not only an understanding of how the ceiling tiles are manufactured but also specific insights of the process. We asked this latest group what the most interesting element of the induction was and how it will help and develop their own job at SAS.

Delphine Alvarez, Export Sales Co-ordinator: **"The precise way orders are processed from when they arrive at the factory through to when they are actually put into production is really interesting."**

Alan Cossey, Trainee CAD Technician: **"Its good to see how the information is transferred from design stage to manufacture and the effect decisions made at an early design stage can have."**

Malcolm Stamper, Brand Manager: **"I was impressed by the amount of time spent by managers, supervisors and all members of staff to ensure that quality is maintained throughout the process."**

Ashley Vaughan, UK Sales Coordinator: **said..... "It's interesting to see how changing customer delivery dates and requirements really impacts production schedules".**

Each member of the team thanks everyone that looked after us but also the individual staff on the shop floor that took time out to explain in detail each process of production. All site inductions should be requested and arranged with your own site HR administrator who in turn will organise and make the appropriate arrangement with HR at each individual site.



SAS International (Reading) Vs SAS Project Management

The 'clash of the Titans', a challenge football match between SAS International (Reading) and SAS Project Management (PM) took place on 11th May 2007.

Lining up in Red resembling England's 1966 World Cup winning team, the PM team were: Gavin "The Mountain" Marsh, Pete "Chopper" Taylor, Chris "The Razor" Sharpe, John "The Rock" Hunt, Mark "New Boy" Williams and player-manager Chris "Shambles" Ellingham.

Looking comparable to Real Madrid in their white kits were the boys from SAS:; Richard "The Power" Bland, Sean "Two Pints of Lager and a Packet of Crisps" McFadden, Eurshell "Semi-Pro" Fearon, Paul "There's life in the Old Dog" Day, Allan "Killer" Cossey, Ashley "The Blocker" Vaughan and player-manager Abdul "Mad as a Hatter" Hanid.

PM started off strongly, knocking in a number of goals including a carefully planned set piece which resulted in Ellingham scoring a 20-yard screamer.

With 15-minutes gone and McFadden flagging, Fearon was introduced into the SAS side - McFadden took this opportunity to recuperate by lighting up a cigarette on the touchline! The combination of old-pro Fearon and wonder-kid Bland led the SAS team to start influencing the game and closing the gap.

Hit-man Cossey began to create chances, hard man Vaughan began to win the battle in midfield, veteran Day composed the team and Hanid's penetrative runs were too much for the opposition. SAS then started to pull ahead and the result was looking inevitable.

Play was interrupted for 3 minutes when Vaughan booted the ball over the fence. PM regrouped and started to rally with young guns Taylor, Williams and Sharpe. Led by Ellingham and Hunt the PM boys put up a challenge, however the hatful of goals scored by young Bland resulted in SAS pulling further ahead.

There is some dispute over the final score, but a general consensus is that SAS beat PM 11-7. The victors enjoyed a drink in a local watering hole, bought in good spirits by the losing side. A re-match is planned, with PM thirsty for revenge.

Chris Ellingham Project Management
Abdul Hanid Projects Development Manager



L-R: Kye Edwards, Sarah De Bank, Elisa Vignaga, Mark Williams & Hannah Faithful

SAS Touch Rugby League

Each Wednesday evening after work, a group from SAS Reading meet up to play in two touch-rugby leagues.

SAS field both a men's and a mixed team, although there has been a cross-over of players known from time to time. Both teams have six players (plus substitutes) with a maximum of 4 men allowed to play for the mixed team.

The spring league is well underway, with a summer league due to start in a few weeks time. How well are the teams doing.....well let's just say that it's the taking part that counts!



Alan Green: HCP FOOTBALL CELEB

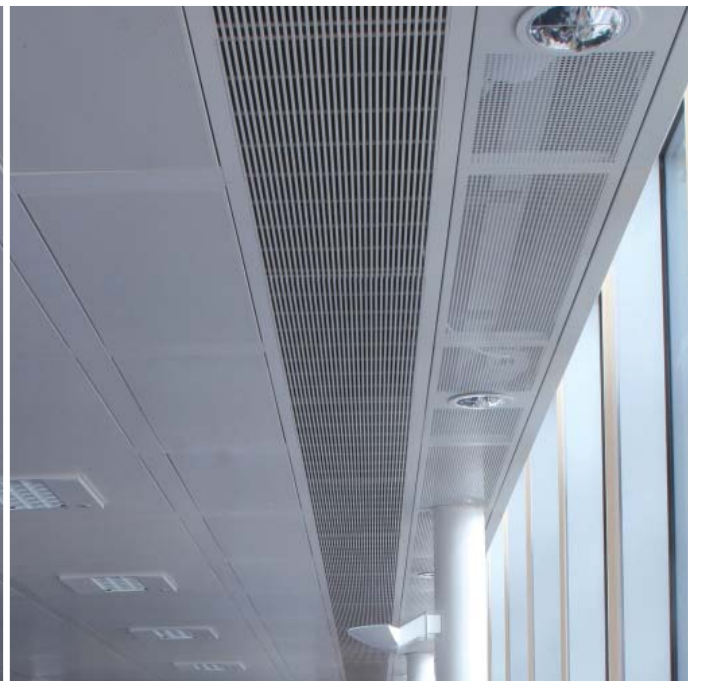
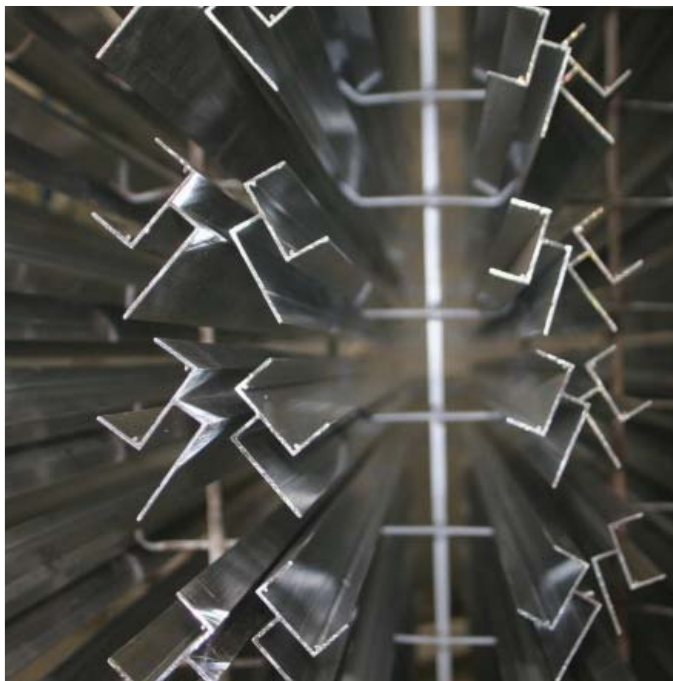
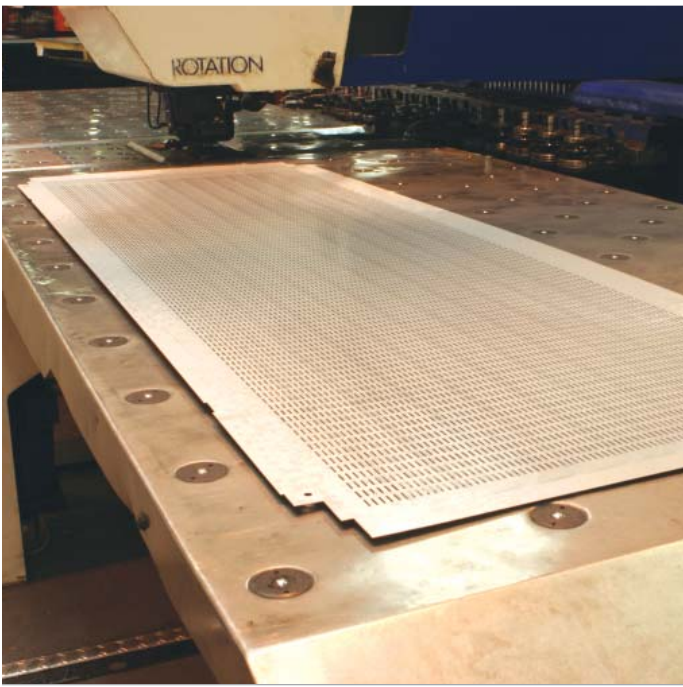
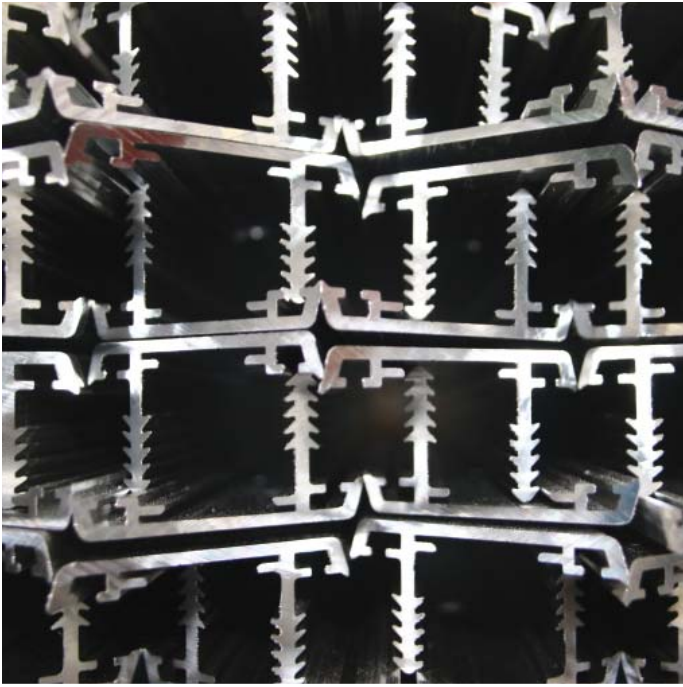
Dear Insider

I went up to Wrexham last week with Nev (Southall) for the Celebrity Soccer Six tournament and ended up playing in his team of DJ's because Brandon Block didn't turn up. The team consisted of Mike Mclean (Big Breakfast), Alex P and Kev Andrews (top DJ's) Spooney and a couple of lads from welsh TV.

Jack Tweed (Jade Goody's other half) was also supposed to be in our team but he didn't turn up although him and Jade were seen at the celebrity party the night before!

Not only did I get to play against legends such as Ian Rush and Lee Sharpe, we actually managed to win it!! We beat Goldie Looking Chain in the Semis, (who were highly fancied) and beat Andy Scott Lee's team in the final.

A bizarre day for me but one I will remember for the rest of my life. Other stars there consisted of Dirty Sanchez, Big Brother's Nikki Graham, Hollyoaks, GLC, 5ive, X factor and many more.



Top Left to Right: Aluminium Trims Apollo Park · Manchester Metropolitan University · Co-Op Fordbridge · **Second Row Left to Right:** BBC Scotland Pacific Quay, Glasgow · 17 Fleet Street, Birmingham · Aluminium Trims Apollo Park · **Third Row Left to Right:** Maybole Production · BBC Scotland Pacific Quay, Glasgow · Stansted Airport · **Fourth Row Left to Right:** Infineum, Abingdon · Aluminium Trims Apollo Park · China Shipping, Felixstowe

Porsche Supercup 2007 Race Reports

29th June-1st July	Grand Prix de France, Magny-Cours (France)
6th July-8th July	British Grand Prix, Silverstone (Great Britain)
20th-22nd July	Großer Preis von Deutschland, Nürburgring (Germany)
3rd-5th August	Magyar Nagydij, Budapest (Hungary)
24th-26th August	Turkish Grand Prix, Istanbul (Turkey)
7th-9th September	Gran Premio d'Italia, Monza (Italy)
14th-16th September	Grand Prix de Belgique, Spa-Francorchamps (Belgium)

If you wish to watch the races on TV please check listings for Eurosport 1 and 2



15th April: Bahrain

Race Result 14th/DNF

Bahrain is a relatively new circuit to F1 and thus Porsche Supercup. It was only introduced to the calendar last year and as the most distant circuit to travel to, Porsche utilise the time by running two races both of which count towards the championship.

Bad luck with weather had meant that Marc had spent little time testing in the Porsche and as the racing is so different to the single seater racing Marc was accustomed to, we expected that Bahrain would be a big learning curve for the team and driver. Marc qualified 25th of 29 and would need to make up some places during the start. After a tough race in extreme desert heat Marc finished up fighting his way through the back half of the field finishing in 14th. Not bad for a Porsche rookie.

In the second race Marc fell foul of the less experienced drivers that make up the last third of the grid. Jostling to keep position a few cars seemed to bumper car their way into space damaging Marc's car and chances of finishing. He retired after 2 laps of racing.



13th May: Barcelona

Race Result 18th

Having spent two days testing in Valencia (to ensure good weather on track) all expected to be full of confidence for Barcelona. However, one day of rain at Valencia also meant that Marc was yet again limited to one day of testing.

Despite this Marc put in some good times during the first ten minutes of the 45 minute practice session at Barcelona competing with the top five Porsche times. However, on his fourth lap the Porsche engine failed and blew spilling oil all over the track. The session was red flagged and the team faced replacing the engine for the rest of the evening.

During qualifying, wrestling with the car and new set up Marc did not manage a quick lap and qualified 23rd out of 32. The race was tight throughout with cars constantly jostling for places. Marc was consistent over 14 laps and finished the race in 18th position.



27th May: Monaco

Race Result 21st

Notorious for being impossible for overtaking the Monaco street circuit is one of the most difficult in the season. Obviously no team can test here throughout the season like other circuits...In Monaco you arrive, test (45 minutes) qualify (45 minutes) and race (45 minutes). Marc fell foul very early on in testing. During the forth lap he was nudged in to the barriers in the tunnel section of the circuit destroying his rear left suspension and ruining the remainder of the session. Come qualifying Marc was on a mission to get a quick time. He eventually ended up 11th on the grid out of 27th managing to get round other cars efficiently and without a scratch.

The race started well with no crashes or retirements in the first two corners, usually the popular places for a "racing incident". However, Marc was hit badly on the Fairmount Hotel hairpin on the first lap. This impact folded the rim of the rear tyre from top to bottom meaning Marc could only limp back to the pits for a tyre change. This put him at the back of the field. After playing catch up for the remainder of the race Marc finally finished 21st.

The standard of teams and drivers in the Supercup is definitely greater than in the Porsche Carrera Cup. With a grid of at times over 30 cars (in the UK its approx 13) it is important to qualify well away from the less experienced drivers who are willing to give their competitors a bit of a nudge for position. We have had our share of bad luck with testing weather, crashes and engine blow outs. However, Marc and the team are growing in confidence.

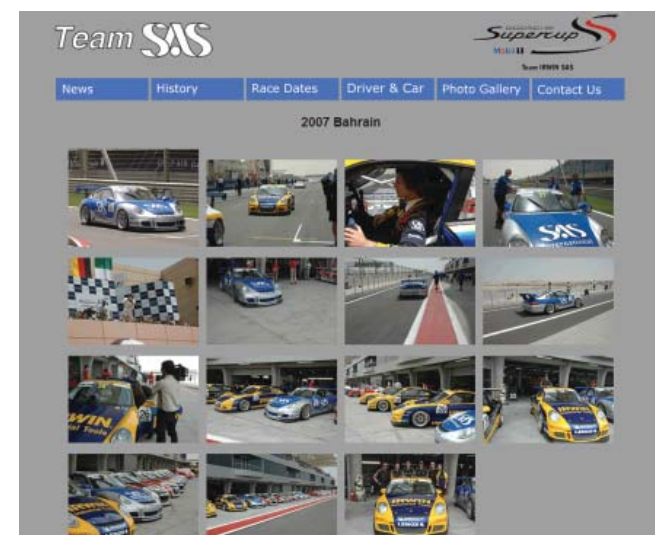
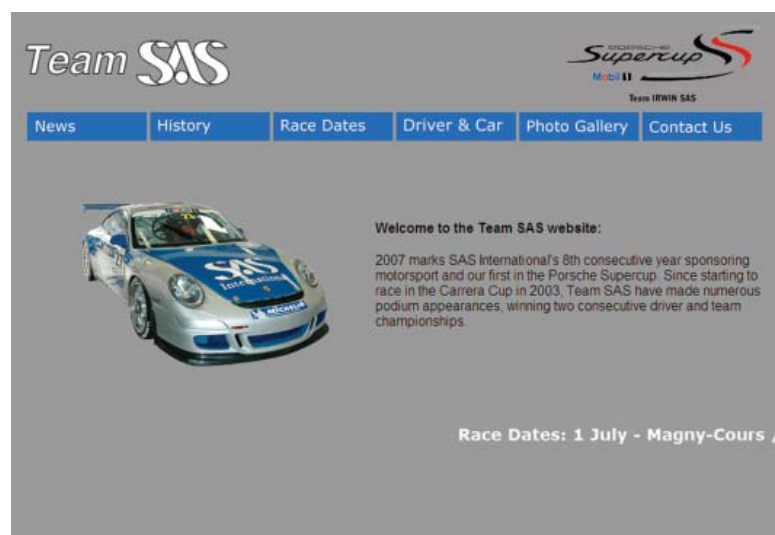
TEAM BUILDING UPDATE

At Barcelona and Monaco we have hosted a team of four different construction professionals. They have experienced the highs and the lows of running a motorsport team. including engine blow outs, crashes, late changes to schedules and team decision making.

Representing different disciplines such as contractors, architects, M+E Consultants and project managers each has taken away a different experience that interests them individually as well as a team. The result is ensuring that we all understand the difficulties we face as project teams and the importance of communication and relationships. The initiative has been well received by the eight guests that we have already hosted.

New Team SAS Website

A new Team SAS website has been developed which has info and pictures from all the races. If you are interested please check out www.sasint.co.uk/teamsas



Meet ... Maybole

Q&A

How did you end up working at SAS and what is your current role ?

The best thing about working at SAS ?

And the worst ?

If you could change one thing about working at SAS what would it be ?

First job ?

Hobbies ?

Your proudest achievement and why ?

What is your favourite music ? ?

Favourite food

David McGregor



I used to work for Douglas Manufacturing before SAS took over the factory. I am now Shift Teamleader.

Tea time.

Sunday night-shift and working backshift.

More parking spaces.

Machine Operator in a sawmill.

Football / golf / horse riding.

Getting this job and being able to tell people what to do.

Atomic Kitten.

Chinese.

Debbie Robertson



Dropped out of college and needed the money so ended up working in the paint shop. I then transferred to the office as holiday cover for Pauline and am still here 14 years later. I now work in the SOP department.

I like the diversity of the job.

Stress.

Dress down Fridays and music in the office.

Children's entertainer at Butlins.

Drinking, Watching movies, Thai boxing, spending money and moaning.

My kids obviously but apart from that passing my driving test after many, many failed attempts.

Snow Patrol, Kaiser Cheifs, The Kinks, Oasis, Stereophonics Green Day etc.

Homemade potato scones.

Joan Clark



I have been employed as a Despatch Clerk for 18 months after being made redundant.

My colleagues.

Coffee machine.

Flexi-time.

Office Junior.

Reading, gardening & TV.

Watching my children grow into responsible adults. Learning to swim at the age of 40.

Shania Twain/Diana Ross.

Chicken and all kinds of desserts.

John Shedden



Manufacturing Manager, previously Programming Engineer at Maybole 1991/92. Rejoined SAS in 2000 after 8 years at Volvo Bus Assembly Plant as Production Engineering Manager.

Variety of product, methods and processes. Every day gives a different challenge.

Occasionally short lead time to manufacture complex products.

We continually strive to improve methods and change when necessary to improve effectiveness.

Production Planning Engineer, Rolls-Royce plc.

House DIY , car maintenance & skiing.

Birth of my daughter, graduating from university.

The Clash, Green Day.

Seafood, roast chicken.

Julie Heath



My mum noticed an advert for Commercial Acoustic Products, Scotland in a local shop window.. I started with the company 20 years ago. My current role is Personnel Manager.

I enjoy the variety of work, there is always a lot going on and at SAS you never know what is going to happen next!

Due to the nature of manufacturing, you do not always get time to organise and plan properly.

I would take John Gemmell's mobile phone away from him. When he is out of the office, he phones in so often that he would be as well being in at work.

I was 14 yrs old. I worked in the local chip shop for about 3 months before they had to "let me go" because I could not work the till properly!

I have just bought a motorbike, a Honda VT Shadow 125. I have still to do my compulsory basic training before I can hit the road.

My daughter, Jade. She is 11 and recently told me that she thought I was a really cool mum.

My taste in music is varied, I loved Take That the first time round and even had a crush on Howard. I also like Razor Light and Savage Garden.

Anything that is not healthy.

Pauline McBirnie



I took this job until "something better came along" - still here 19 years later. I work in customer service / sales order processing.

The pay, the locality & speaking to different people every day.

Headaches & Monday mornings.

The air-conditioning in the office (lack of).

Painting & Decorating - after dropping out of college.

Reading & sleeping.

My son Steven & passing my driving test.

Doctor Hook, Reo Speedwagon, Meat Loaf, Rod Stewart & loads more. Anything except rave / hard core.

Fish & pasta.

Richard Taylor



I was made redundant from a similar job at a sheet-metal company. I am now engineering/commercial manager at Maybole.

The variety in my job and working with a great team of people in my department.

Some of our lead times and poor communication.

To start at 8am instead of 8.30am - finishing at 4.30pm instead of 5pm.

A draughts man for an electrical switch-gear manufacturer.

Music, football, gardening.

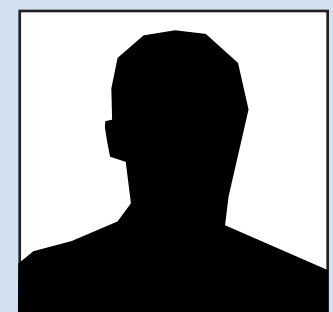
Passing my driving test first time, after finally getting around to it at the age of thirty.

Bruce Springsteen Ian Hunter, Bob Dylan, Lucinda Williams, Tom Petty etc etc.

A well-done fillet steak and a cold lager!

Long Service Awards 2007 April - June

Month	Name	Location	Years
April	John Nunnerley	Reading	10 Years
	Terry Clark	Apollo Park	20 Years
May	Michael Whitehouse	Apollo Park	10 Years
	Douglas Winkles	Apollo Park	10 Years
	Antonio Jones	Bridgend	20 Years
	Ivor Allison	Bridgend	20 Years
	Mark Jones	Reading	20 Years
	June	Martin Harrison	Apollo Park
Hussain Swift	Apollo Park	10 Years	
David Brimble	Bridgend	10 Years	
Nicholas Ardon	Apollo Park	10 Years	
Simon Harper	Apollo Park	10 Years	
James Curtis	Apollo Park	10 Years	
Dave Goodwin	Bridgend	20 Years	
John McDowell	Maybole	20 Years	
Robin Milligan	Maybole	20 Years	
Debbie Evans	Apollo Park	25 Years	



Nominate Your Team

No one is excluded from appearing in the "meet the team" section of the SAS Insider. Please let us know if you would like to appear or whether you would like to nominate another SAS department.

Merton College

Surrey

Merton College recently invested £20 million in the redevelopment of their London Road campus in Morden, Surrey. The project involved the refurbishment of existing buildings and the development of new a three story, state-of-the-art, 5,600M² teaching block.

SAS were chosen to provide both Integrated Service Modules (ISMs) and System 600 acoustic lighting rafts for this scheme and SAS Project Management oversaw the installation programme.

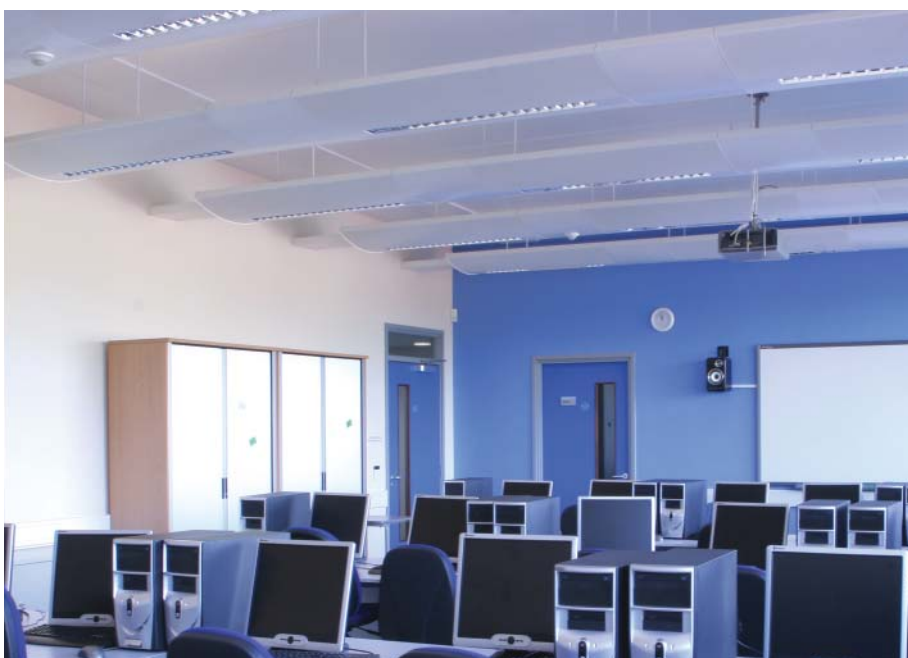
Architects Nightingale Associates specified the SAS ISMs in classrooms, laboratories, offices and general study areas where they provide a modern and robust solution in the new state of the art teaching block. Over 350 metres of ISMs were installed in the building, which were manufactured in Maybole.



ISMs featuring both up- and down-lighting



ISMs specified in all computer rooms



System 600 Acoustic lighting rafts feature in all classrooms

Working with M&E Consultants Max Fordham, the project included the design of a number of key features that were critical to this educational environment. As well as environmental considerations, lighting, acoustic absorption and security/safety were particularly important in this educational setting.

The SAS ISMs proved ideal; being a pre-fabricated and an easy to install solution, which combined luminaires, chilled beams, cable trays and apertures for other building services, such as PIR (Passive Infra Red) sensors. Being suspended directly from an open soffit or within coffers, they allowed the free air movement to the exposed concrete slabs for sustainable natural mass cooling.

The ISMs also featured an acrylic lighting diffuser on the top of each module, which allowed up-lighting onto the building's soffit - The ratio of down- to up-lighting was approximately 80:20.

Merton College Key Facts

- New 5,600 M² three story building
- Officially opened by Bill Rammell, Minister for Further Education and Lifelong Learning
- Over 350 linear meters of SAS ISMs installed
- Over 800 linear meters of SAS System 600 specified
- The library contains over 20,000 books
- The learning centre boasts more than 100 computers
- To help finance this project, Merton College sold off its other campus on Central Road

“One of the main design features of the building was using thermal mass cooling as an option, reducing the need for mechanical ventilation,” said Gary Waugh from Nightingale Associates. “In the IT rooms, additional cooling requirements determined the choice of chilled beam technology which uses less energy than standard air conditioning. SAS International’s Integrated Service Modules were ideal for this, and were specified to match the beam profile employed elsewhere in the building.”

SAS System 600 acoustic lighting rafts were also specified to help absorb sound and provide adequate lighting, both of which are particularly relevant in a class room environment. Over 800 meters of System 600 were also manufactured by SAS West Bromwich for this scheme.

Security considerations are also critical in this type of environment and both the ISMs and acoustic lighting rafts offer the ability to protect the building services. Furthermore, a series of metal panels were specially designed and manufactured by SAS International to fit between the end of the ISM or System 600 raft and the wall, to hide cabling and pipework for additional protection and aesthetic considerations.

The result is a striking, modern and very functional interior throughout, which fulfils the key requirements for this exciting development.

John Staunton
Room Comfort Brand Manager

The SAS Insider welcomes news and comments from everyone at SAS International and HCP. Please email sasinsider@sasint.co.uk. Contact Andrea England on 0118 929 0900 or any member of the marketing team.

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SAS INSIDER

SAS
International