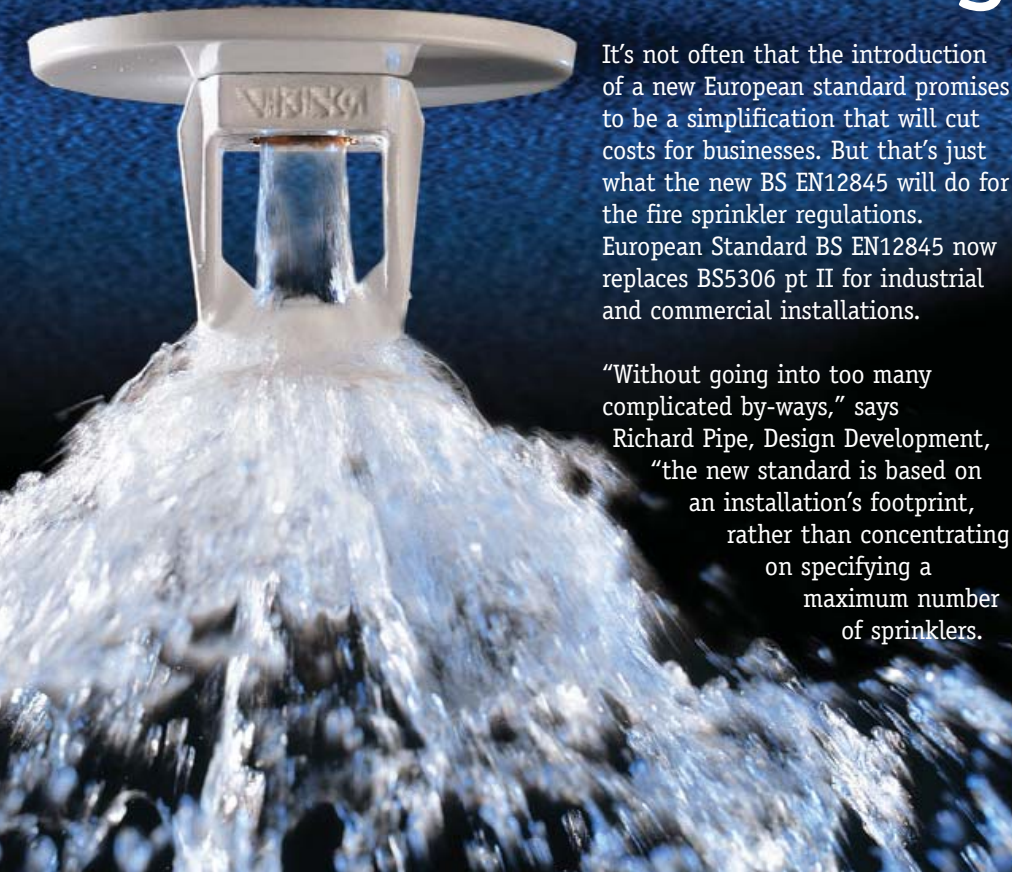


# Protecting the Princess

Princess Yachts' proud claim is that the company makes the most sophisticated yachts in the world. And who would argue with that? They are beautiful, sleek, fast, luxurious... and not a little inexpensive. But even the manufacturer of these big-ticket boats balked at the rapidly-rising cost of insuring its production unit in Plympton, Devon. Following a fire there in January 2001 (when the company was known as Marine Projects), the yacht-maker's insurance premium went through the roof – putting future production at serious risk. Fire Defence was called in to engineer a solution...

...continued on page 2

# New standard is good news



It's not often that the introduction of a new European standard promises to be a simplification that will cut costs for businesses. But that's just what the new BS EN12845 will do for the fire sprinkler regulations. European Standard BS EN12845 now replaces BS5306 pt II for industrial and commercial installations.

"Without going into too many complicated by-ways," says Richard Pipe, Design Development, "the new standard is based on an installation's footprint, rather than concentrating on specifying a maximum number of sprinklers."

"In fact, working from the performance ratings of modern equipment, it will lead to a simpler, safer system being installed for less money."

The design of an installation is determined by the insurance industry: the higher the risk, the more water needs to be released into a given area per minute. Sprinkler heads are spaced and pipework sized according to hydraulic calculations, so there is always sufficient flow and the right density of water discharged. The design and calculations take into account the size and construction of the building, the category of goods stored in it and the occupancy.

"Essentially," says Richard, "to meet the new standard, we can now install fewer alarm valves for the same supply of water, which will mean lower installation costs and less maintenance."

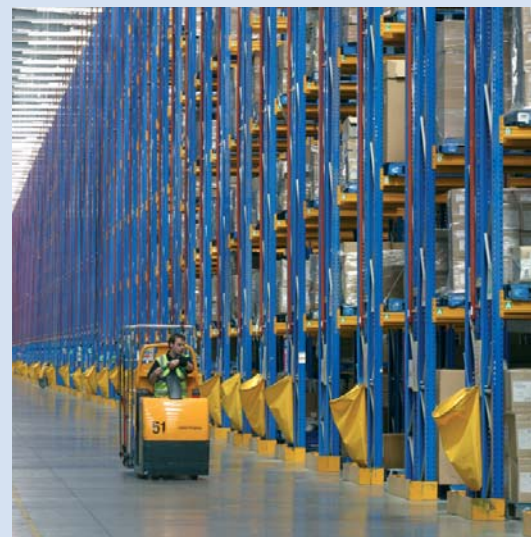
## Safety in store for Tesco

The new generation of supermarket distribution centres seems to be getting bigger – and bigger.

One of the latest is Tesco's new centre in Livingston, Scotland. A massive 85,000 sq m (914,940 sq ft), the £75 million project will supply all the company's stores in Scotland and employ 1,400 people. The fire protection system chosen by Tesco is Fire Defence's. And to protect a building like this, it too is pretty

huge. It will include 10,000 roof sprinklers, 13,000 rack sprinklers and the provision of a diesel and an electric fire pump, together with a 500m<sup>3</sup> water storage tank.

"At £1.6 million, this is certainly one of our biggest single installations to date," says Fire Defence's Design Manager Andy Maynard. "But despite its size, relatively straightforward." Completion of the sprinkler project is expected in early Summer.



## Protecting the Princess

*Continued from page 1*

"The production process here is high risk," says Mike Charlesworth of Princess Yachts. "So we were looking at a very high level solution. In fact to meet the criteria set, we needed to supplement the system with foam enhancement."

As you would imagine, such a system doesn't come cheap: something in excess of £300,000, which is what you'd expect to pay for one of Princess Yachts' lower range models. But that cost was actually less than the annual excess premium the insurance company would have levied.

The system was installed, the insurance premium slashed and production of world-class yachts swiftly resumed. In fact, Princess Yachts is so pleased, it has just placed another contract with Fire Defence to install a system in another part of its factory – now one of the most modern boat-building facilities in Europe.

# In the pilot's seat

As MD of Fire Defence, the company he set up 20 years ago, Bill Johns can readily be described as being at the helm. Except that's a role he gave up when he left the Merchant Navy. Equally, he could be described as the power behind the business. Except that was where he spent his intervening years – at the Central Electricity Generating Board.

So for now he's happy to be known as piloting the company's fortunes. Which is appropriate as he spends a great deal of his spare time flying his own light aircraft – a Dyn'Aero VLA 218.

"It's another world up there," he says, "a place where you have to focus your thoughts on an entirely different set of challenges." Unlike his fictional flying forebear Biggles, (penned by another W Johns,) Bill's biggest concern is avoiding

the flight paths of other planes, rather than bandits at 3 o'clock. Many of his flights take Bill and his wife Sharon over to France to where his daughter now lives.

*"It's another world up there, a place where you have to focus your thoughts on an entirely different set of challenges."*

## Flying high

Bill's move into sprinklers was, he readily admits, entirely accidental. "I was asked by a friend to help him out on an installation. I thought to myself 'I could do this' and looked into the market and realized that there weren't that many companies looking after smaller businesses.

"I started off in the traditional way – working from a garage. The company just grew like Topsy from there. Because I was living in Devon, that's

where the headquarters have stayed. But these days distance is no object. We really are a national company."

And with sales up in the current financial year by more than 20%, it's a company that's flying high.

"It's a fascinating business to be in," says Bill, "and I have to say rewarding. I often quote the statistic that no one has ever died in the UK in a building protected by a fire sprinkler system. So we're in an industry that saves lives, every day of the year.

"But it's also a responsibility. A system is only as good as its installation and maintenance programme. It might sound glib, but we really do care about that – get it wrong and lives will be lost. I want to sleep at night and the way to do that is to make sure we do our job. Every time."



Bill takes to the air in his Dyn'Aero VLA 218

A close-up photograph of two young girls in school uniforms. The girl in the foreground is smiling and looking towards the camera. The girl in the background is also smiling but is out of focus. They are wearing dark blue school jackets with yellow stripes on the collar.

*seeingred*

# Save the children

*Schools still on learning curve with fire safety*

**Fire Defence is working with a growing number of local authorities to provide sprinkler systems in the nation's schools. These include a new Strategic Partnering Arrangement with Nottinghamshire County Council and a contract worth £1,070,000 to sprinkler-fit six schools in Kent.**

### Wise up to Fire

Every year, according to Britain's Chief Fire Officers Association, there are more than 1,000 fires in schools – three quarters of which are thought to have been started deliberately.

Yet 75 per cent of local education authorities do not have a policy on installing fire sprinklers in schools – something the “Wise up to Fire” Campaign, spearheaded by the British Automatic Fire Sprinkler Association, wants to see changed.

The nation's firemen are in full support. Phil Toase, president of the Chief Fire Officers' Association (CFOA), says: “Fire services are put under huge pressure – particularly over the summer – and on past records we expect to attend about 200 fires in schools during July and August in England and Wales. Fire sprinklers – common in many public buildings – are rarely installed in schools. In fact, fewer than 200 schools have them.

“Sprinklers can and do stop a fire in its tracks: not only does this considerably reduce the cost in terms of property damage and loss of facilities, but also helps ease the strain on our firefighters, and, most importantly, protect our children and those who work with them.”

### Spending billions

The reason cited by many local authorities for not installing fire sprinkler systems retrospectively is that it causes disruption. The CFOA offers the forceful argument that installing a sprinkler system clearly brings less disruption than dealing with the aftermath of a fire. Sprinklers ensure that the fire is controlled at an early stage, not only saving lives, but containing damage within a small area of a building.

“The Government is spending billions on building new schools and academies, and refurbishing existing ones,” says Fire Defence MD Bill Johns. “It seems less than sensible that the relatively small amounts of money needed to install a fire sprinkler – between £40,000 and £250,000 for new build and slightly more for retrofits – should be one area where local authorities seem prepared to skimp.

“Nobody has died from fire or smoke in a sprinkler-fitted building in the UK – ever. That's a statistic I would like to frame and mount and present to every local authority which is reluctant to spend money where it really, really matters in schools.”

**DID YOU KNOW?** Schools with sprinklers experience around one tenth of the losses in a fire compared to those without them.



**Quick and easy to fit, pillar-box red and yet apparently “green” – is Aquatherm the future shape of sprinkler systems?**

# In the pipeline

Steel has been the standard material for piping since fire sprinkler systems were first installed. But its heavy carbon footprint and unwieldy reputation mean that suppliers and customers are seeking a nimbler, cheaper, eco-friendlier alternative. Aquatherm is the lighter, greener rival which is poised to change sprinkler history. It claims to use less embodied carbon in its manufacture than carbon steel and so will be the choice for sustainable development projects of the future.

The product is made from Polypropylene, a plastic which established itself as a popular piping material decades ago. Perhaps understandably, it was not immediately considered suitable for fire prevention applications. The leap came in 2003 when – as “Indupipe” – it was installed in the Hilton Hotel, London Docklands. But while other countries have adopted it wholeheartedly, the UK has lagged behind.

To date, Aquatherm has received certification in 15 different countries, while LPCB (Loss Prevention Certification Board) approval in the UK is limited to applications up to 125mm.

“The market here is always a bit more conservative,” says Keith Thomas, Fire Defence’s Technical

Sales Manager. “And a lot of customers are waiting for the product to receive LPCB approval for all applications. But for those companies who self-insure, it’s a no-brainer.”

***“Fast-forward a couple of years and this will be the standard material in fire sprinkler systems”***

*Fire Defence MD Bill Johns*

## **An absolute dream**

The engineers who use Aquatherm are understandably enthusiastic, as installation takes a fraction of the time required for steel. Socket-fusion jointing is ultra-fast, there are no messy solvents, it’s the work of minutes to cut pipes to length and it’s far, far lighter. “There are threaded tees and elbows for head connections and flexibles,” says Mark Broadbent, a Fire Defence installation engineer. “And the threads are all metal, not plastic, so there are no concerns about cross-threading. It’s an absolute dream to work with.”

But how does it perform when it really matters – in a fire? In fact, that’s when Aquatherm really comes into its own. Cut open the bright red tube and you’ll see that it’s fibre-reinforced to make it rigid over long distances. The pipes are pressure-rated up to 48bar and the smooth

hydraulics of the surface actually deliver water faster than steel.

Tesco plc was among the first to experience the benefits that the use of Aquatherm could provide. The pipework was fabricated on site at its new supermarket in Sowerby Bridge, Yorkshire, so saving the cost of subcontracting to a specialist. “We tried it as a realistic alternative to steel pipes as costs were escalating so quickly,” says Mark Tutton, Tesco’s Fire Officer. “We are very happy with the way the Sowerby Bridge project has gone and will certainly be using this system on future projects.”

## **Sheer lightness**

Fire Defence, one of the few users of Aquatherm in the UK, believes that plastic pipes will prove ideal for retrofits. “If you have a school, hospital or office block which is still in use, you’d far prefer to have a simple, clean system like this being installed rather than having the welding, swarf and toxic fumes you get with steel systems,” says Keith Thomas.

Another important potential application is in the new generation of large distribution sheds, where the sheer lightness of Aquatherm will make a significant difference to the load-bearing requirements of the roof structure.

# redfaces

## Our men in the Midlands



Peter Speer, Customer Liaison

As Fire Defence's customer portfolio grows and spreads further North, its staff resource is expanding too.

2006 saw the opening of the company's new Midlands office in Halesowen, with some highly-experienced personnel at the helm. Project Principal Simon Jesson will be working with Richard Pipe, Design Development, and Peter Speer, Customer Liaison. Together they have more than 50 years of direct experience in fire sprinklers between them.



Richard Pipe, Design Development

"We've all worked together in the past for another major player in the business," says Simon, who heads up the Midlands office. "We were delighted to be able to come together and run this operation."

The office is strategically located next to the motorway network, making access to customers in the North and Midlands even easier. "A lot of people incorrectly assume that because our headquarters are in Devon, our business is mainly in the South," says Simon. "That's in no way true: ours is a nationwide operation. But having a customer support team in the Midlands will



Simon Jesson, Project Principal

make it a lot easier for us to manage the many new projects now coming on board between here and Scotland."

The design facilities at Halesowen mean that any job taken on by the Midlands team will be specified, designed and managed from there. And the man that most customers will be speaking to is Peter Speer, who readily admits to being one of the "veterans" of the fire sprinkler industry. "Given a choice of early retirement or working with these guys again, it was no contest," he says.

**DID YOU KNOW?** In buildings fully protected by sprinklers, 99% of fires were controlled by sprinklers alone and 60% were controlled by four sprinklers or less. Source: BAFSA (The British Automatic Fire Sprinkler Association.)



“It’s certainly not a sales pitch – our job is to educate and inform.”

# Education, education...

Every year, our technical team gives dozens of presentations to consultants, specifiers and interested companies up and down the country. Fire Defence experts are equipped to explain the hows, whys and wherefores of specifying a fire sprinkler system.

“It’s an area where having a broad technical insight into the equipment and regulations controlling the use of sprinklers can increase safety and minimize costs,” says Richard Pipe, Design Development.

“It’s certainly not a sales pitch – our job is to educate and inform. We

explain how systems work, clarify the approach of insurance companies in setting premiums, and make plain the different sorts of system required for each type of commercial application.”

There are five Fire Defence seminars:

- 1 Sprinklers: an introduction
- 2 Sprinklers for warehouses and distribution centres
- 3 Sprinklers for shopping centres and retail units
- 4 Sprinklers for schools
- 5 Systems for high-hazard locations (deluge, foam and water spray systems)

The recent move from British to European standards is also explained, and how this change will result in cost savings to businesses. Talks are usually arranged over a lunch hour and are currently being assessed with a view to making them count towards Continuous Professional Development awards.

Fire Defence is happy to provide as many presentations as a company requires, without charge. If you would like to learn more, call Sales Co-ordinator Colette Jones on 01769 574070.

**STOP PRESS!** Fire Defence reports a record year for new business, with £8.5 million of contracts awarded since April 2006. A long list of exciting projects includes: 1) a £900,000 contract for John Lewis' Project Beacon – part of a stunning £60 million renovation programme at the company's flagship store on Oxford Street in London's West End – and 2) a £390,000 installation for Connect Distribution Service in Birmingham.