



## Flamgard Calidair gets fit for nuclear new build

Specialist manufacturer Flamgard Calidair has had its fire dampers approved for nuclear new build with support from the Fit For Nuclear programme.

Flamgard Calidair designs and produces specialist dampers for a wide variety of industries. These are safety-critical stainless steel fabrications which sit within the heating, ventilation and air conditioning (HVAC) ducts of power stations, oil refineries, submarines and other complex environments, and stop the spread of fire, fumes or blast forces.

The firm's dampers are protecting lives around the world, from oil platforms in the Russian Arctic to road tunnels in Monaco – and all are made to order by the 50-strong workforce in Pontypool, South Wales.

**"The products we make save lives,"** says managing director Steve Edwards. **"There's no compromises. Everything we do stops the spread of harmful airborne chemicals or fire."**

Founded in 1981, Flamgard Engineering focused on the oil and gas industry but moved into nuclear when it acquired Calidair Engineering in 2007. Calidair had produced dampers for UK reactors including Sizewell and Hinkley Point. The merged group has also supplied major projects at Sellafield and other sites.

**"We see a lot of growth potential for our company within nuclear,"** says Edwards. **"We looked at the market three or four years ago, knowing at the time that the French**

**companies were the most prominent. Looking at standards and the competition within France, we decided that our existing products, even though compliant in the UK, didn't meet the European legislation."**

The firm secured grant funding and support from the Welsh assembly government to develop its products for the nuclear new build programme. As part of the support, the Welsh assembly highlighted the business development support available through the Fit For Nuclear (F4N) programme and organised a visit to the Nuclear AMRC. **"We were extremely impressed with what we saw – the technology was brilliant,"** Edwards recalls.

Edwards' team completed the online F4N assessment, and worked with a F4N assessor on a follow-up site visit. **"We had a pretty good score because we were already in the nuclear market and used to the audit trail, so a lot of what was required was already in place,"** Edwards says. **"There were some key areas from the business perspective that we didn't have in place that were highlighted. We've turned around and addressed that through training and a couple of focus groups, and that seems to be giving us a benefit at the moment."**



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Flamgard Calidair has put its profits back into the business over the past few years, investing in new workshop facilities and IT infrastructure at its 3,500m<sup>2</sup> manufacturing facility.

“The manufacturing processes have changed – in the past, it used to be very manual oriented machines, and everything had to be checked,” notes Edwards. “We’re now using computer-controlled machines and laser cutters, and we know everything is 100 per cent accurate coming off the machines. That’s given us the confidence and ability to take cost out of the product while ensuring quality.”

Staff have embraced the new ways of working, Edwards says. The firm invests heavily in staff development, as demonstrated by walls filled with training certificates.

“When we bring customers in, we like to show them the pride that people here take, and that’s reflected in the quality of the product,” Edwards says. “All our product is identified by the people who made it– it’s like Aston Martin, where the people who build the engine put their names on it.”

With support from F4N and the Welsh assembly, the company has now redeveloped its fire dampers for nuclear new build applications, passed all the necessary testing, and is the first UK manufacturer to produce an EN 1366 qualified damper which meets the standards for integrity, insulation and smoke. What that means, Edwards emphasises, is that the firm can supply Areva and EDF with British-made products that have the same qualifications as their French suppliers.

The company continues to invest in product development, and is currently working on an R&D project to improve the performance of its blast dampers for applications including nuclear decommissioning. By developing new markets in nuclear, oil and gas, defence and marine, Flamgard Calidair aims to double its turnover in the next five years.

“We’d like to be suppliers of choice for every individual site in UK new build, and in decommissioning,” Edwards says. “We’re the only company that’s done the testing and validation.”

[www.flamgard.co.uk](http://www.flamgard.co.uk)

December 2015

**Fit For Nuclear (F4N)** helps UK manufacturers get ready to bid for work in the civil nuclear supply chain.




F4N was developed by the Nuclear AMRC with leading industrial partners. More than 300 companies have completed the online F4N assessment, with most receiving ongoing support and development to help them close any gaps.

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