

Bish, Bash, Bosch!

When your facility's roof is no longer water-tight but the show must go on, how do you ensure that maintenance and repair work do not disrupt 24/7 production cycles?

Wayne Swiffin went to the Bosch alternator manufacturing plant in Cardiff to find out how an ethos of partnership kept production running throughout a 12-week re-roofing project. The plant produces millions of precision-engineered alternators each year for the automotive industry, and it is crucial that the environment is clean and leak-free.

So when Bosch Mechanical Facility Manager, Ed Male spotted a problem with the roof he swiftly took action.

Calling on the expertise of FDT Technical Manager, Steve Cleminson, who supplied the roofing membrane, and MD of SPV, Howard Evans, who was contracted to carry out the work, Ed quickly got the matter in hand with a strong team all dedicated to completing the task with minimum disruption to plant production.

The problem was pinpointed to a small amount of water penetration as well as areas of minimal cover.

"Water penetration could have led to a big job. The problem with the Durox blocks that form part of the roof structure is that they have steel rods



through the middle to give strength but, if they get wet, the rebar corrodes. We weren't able to just re-do the problem areas as we have 1,000 employees and there's no room inside to move machinery around while bad sections of the roof are being stripped back and rebuilt," explained Ed.

The alternative was a straight replacement using felt or installing a single-ply membrane and the team were given the challenge of finishing the job in just 12-weeks.

Steve Cleminson said: *"It was a big roof, about 30,000 sq metres and probably one of the largest projects of its kind last year. A typical roof is about 1,500 sq metres, with larger jobs around 5,000 sq metres."*

As well as project co-ordination and sourcing the right materials, through Proos Roofing Supplies (Birmingham) Steve also had to work out wind uplifts and create drawings on how many strips were needed.

"We have quite a unique fixing system called Gripfix made of Velcro strips specially designed by FDT to allow a perfect connection on roofs. The position of the strips is directly dependent on the wind up-lift calculation and is specific to each roof. The original roof was made up of the concrete Durox block with felt insulation above it. Rhepanol can be laid over the existing surface and mechanically-fixed into place to form the integrity with the concrete, it's ideal because it means minimal prep work is involved," explained Steve.

Howard Evans added: *"It really wasn't the best time of the year with the weather conditions. We knew that it would be tight to achieve the project but it's a case of getting on with it. We got the order on the Friday and we started on the Monday. Luckily, the Gripfix system can be installed in any weather – in fact, Rhepanol is being used by FDT in Russia in dreadful temperature conditions."*

Despite the bad weather, everyone pulled together to do an excellent job on the roof, calling in extra operatives to meet the 12-weeks deadline.

Team effort was the key to the job's success.

"We have been delighted by the work but moreover with the ethos of partnership working," said Ed.

"It really was a partnership between FDT, Bosch and the roofing contractor. We had a really good working relationship with a number of people and that was why the project has been so successful," added Steve.



Materials supplied by Proos Roofing Supplies, Birmingham.