Conex | Bänninger

Case Study

Press-fit technology on ACR project helps P&R Heating save over a week in time

Date:	2017
Product:	>B< MaxiPro
Contractor:	P&R Heating
Description:	The replacement of an air-conditioning system with over 200 joints completed
Project:	Gloucester Library
Location:	Gloucestershire, UK

Background

Gloucestershire-based P&R Heating calculated it managed to save days on a recent project to renew Gloucester Library's air conditioning system by simply switching from traditional brazing methods to press-fit technology.

Products

P&R Heating, a mechanical and electrical installation and service contractor, has been working within the local authority and commercial markets for over 30 years. During this time, the company has developed an excellent reputation for the first class service it provides its customers.

On one of its latest contracts, P&R Heating was replacing the old air conditioning system at Gloucester Library. The new system was needed to effectively control the humidity in the important stored documents area within the library. P&R Heating decided to trial press-fit technology for the first time over brazing. It was this decision that has ended up being been a complete game changer for P&R Heating, and the company now will never look back.

Ben Smailes, an engineer at P&R Heating who has over 26 years experience in the sector, commented: "We've been using flame-free press jointing on plumbing and heating projects that we've worked on for a number of years based on its speed and ease of installation. However, this was the first time we've decided to switch from braze to press on an air conditioning job.

"The reason for this was simple. As a business, we are constantly looking at ways we can raise the bar and utilise innovative solutions that will not only enable us to get the job done more efficiently, but can also save us time and money.

"Press-fit technology has been around in the ACR sector for a while now, but it's never really taken off. However, there's been a lot of talk recently about the investment that manufacturer's are making to bring more advanced press-fit solutions to the market, like Conex Bänninger's new >B<MaxiPro solution.

"I'd heard about >B< MaxiPro via Twitter and my colleague had read about it in the trade press, so we decided now was the time to give it a try! We contacted Conex Bänninger and were directed to our nearest merchant stockist to order."

Conex Bänninger's >B<MaxiPro is an innovative press system that is quick and simple to install, providing a secure and permanent leak-free joint. Utilising 3-point-press-technology (one press each side of the bead and one compressing the O-ring), >B< MaxiPro is designed

for use in systems with operating pressures of up to 48 bar and is available in a host of fittings types including: Straight Coupler, Reducing Coupler, Fitting Reducer, 90° Bend, 90° Street Bend, 45° Obtuse Elbow, Equal Tee and Stop End variants.

Ben continued: “We used approximately 100 fittings on the Gloucester Library project, so there were roughly 200 joints to be made. Following the initial preparation of the joint, it only takes up to five seconds to complete using a press tool. This is approximately three times faster than traditional brazing.

“It’s not just the speed of jointing that saves you time though. Because it’s flame-free, you don’t need a hot works permit on-site, which also saves valuable time and money and means it makes minimal disruptions to the commercial environment you are working in. We also saved valuable time by not having the carry out complicated risk assessments that you have to do with brazing, which can sometimes take up to two hours a day.

“We therefore calculated that because we used press-fit technology, across the whole project, it has saved us a number of days in time compared to if we were brazing. This is a massive amount of time saved for any business, enabling us to complete the project much quicker. In addition, the time we saved more than covered the investment we made in the press tool on this one job alone!“

Engineers from P&R Heating completed Conex Bänninger’s >B<MaxiPro certified training course before the start of the Gloucester Library project to ensure they were confident and competent using this solution. The course includes a complete overview of the product and its benefits, along with giving engineers and contractors the opportunity to use Rothenberger’s press tool and jaws for >B< MaxiPro installations, the recommended press tool for this solution. By completing the course, the guarantee on >B< MaxiPro installations is increased to five years against manufacturing defects.

“I’d definitely use >B< MaxiPro again,” concluded Ben. “In fact, I’d never use anything else again unless I absolutely have to. There are a whole host of benefits why. Most importantly, it just makes a job so much easier and quicker.”

>B< MaxiPro fittings can be used with annealed, half hard or hard copper tube that conforms to EN 12735-1 or ASTM-B280 in air conditioning and refrigeration applications. The fittings are available from a number of merchants and wholesalers, nationally.

>B< MaxiPro is also approved for use with a range of refrigerants, including R-32, R-134a, R-404A, R-407C, R-407F, R-410A, R-507, R1234ze, R1234yf, R-718, R-450A, R-513A, R-448A, R-449A, R-407A, R-427A, R-438A, R-417A and R-422D.