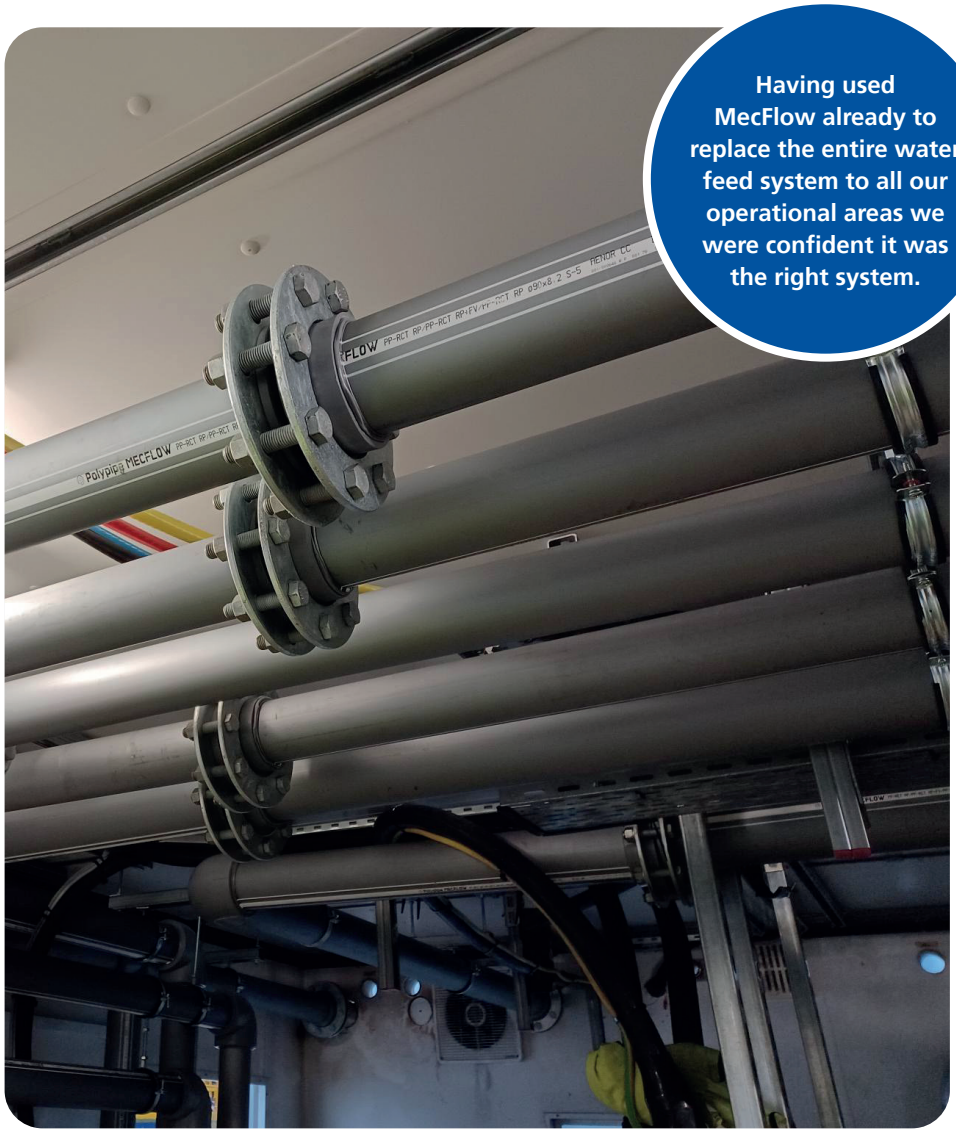
Manufacturing downtime minimised with easy installation using MecFlow.



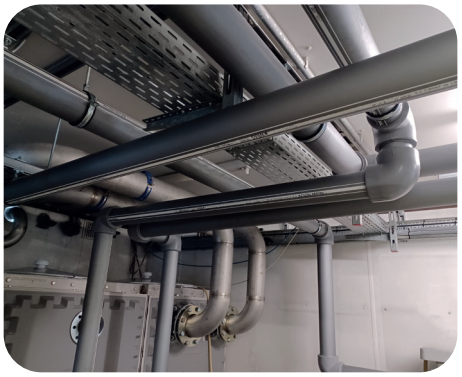
Having used MecFlow already to replace the entire water feed system to all our operational areas we were confident it was the right system.

Jim Pullar, Polypipe Building Services Site Services Manager, said:

"One of our challenges was that the replacement system needed to be completed in the shortest timeframe possible to minimise downtime and avoid expensive disruptions to our manufacturing process.

"This meant we had a shutdown window where the replacement chiller and associated pipework all had to be completed.

"The other challenge is that the chiller plant sits within a room which creates a very confined space to work in and this also means that to fit the connecting pipework it needs to change direction several times."



The chiller plant at Polypipe Building Services site in Aylesford is a vital part of the business, supplying the mixing plant and pelletising process with cold water. A failure of the system could result in significant costs to keep production going whilst repairs or a replacement was arranged. But at over 20 years old the chiller needed to be replaced – and offered the chance to upgrade to a more efficient system at the same time.

Jim Pullar, Polypipe Building Services Site Services Manager, chose to upgrade the chiller plant to a new 'free air' system. This means when the ambient air temperature is below 15°C, the chillers switch off and use the outside cool air to chill the water, saving electricity to the tune of £36k per year. The free air coolers were manufactured by Eurochiller, part of the Atlas Copco Group.

CASE STUDY

Project
Chiller plant upgrade at Polypipe Building Services.

Client
Polypipe Building Services, Aylesford.

Application
Water cooling supply.

Products
MecFlow loose.

Two different types of installation

Jim adds: "Having used MecFlow already to replace the entire water feed system to all our operational areas we were confident it was the right system to use for this project as well, being both lightweight to manage and highly adaptable for such a confined space within the plant.

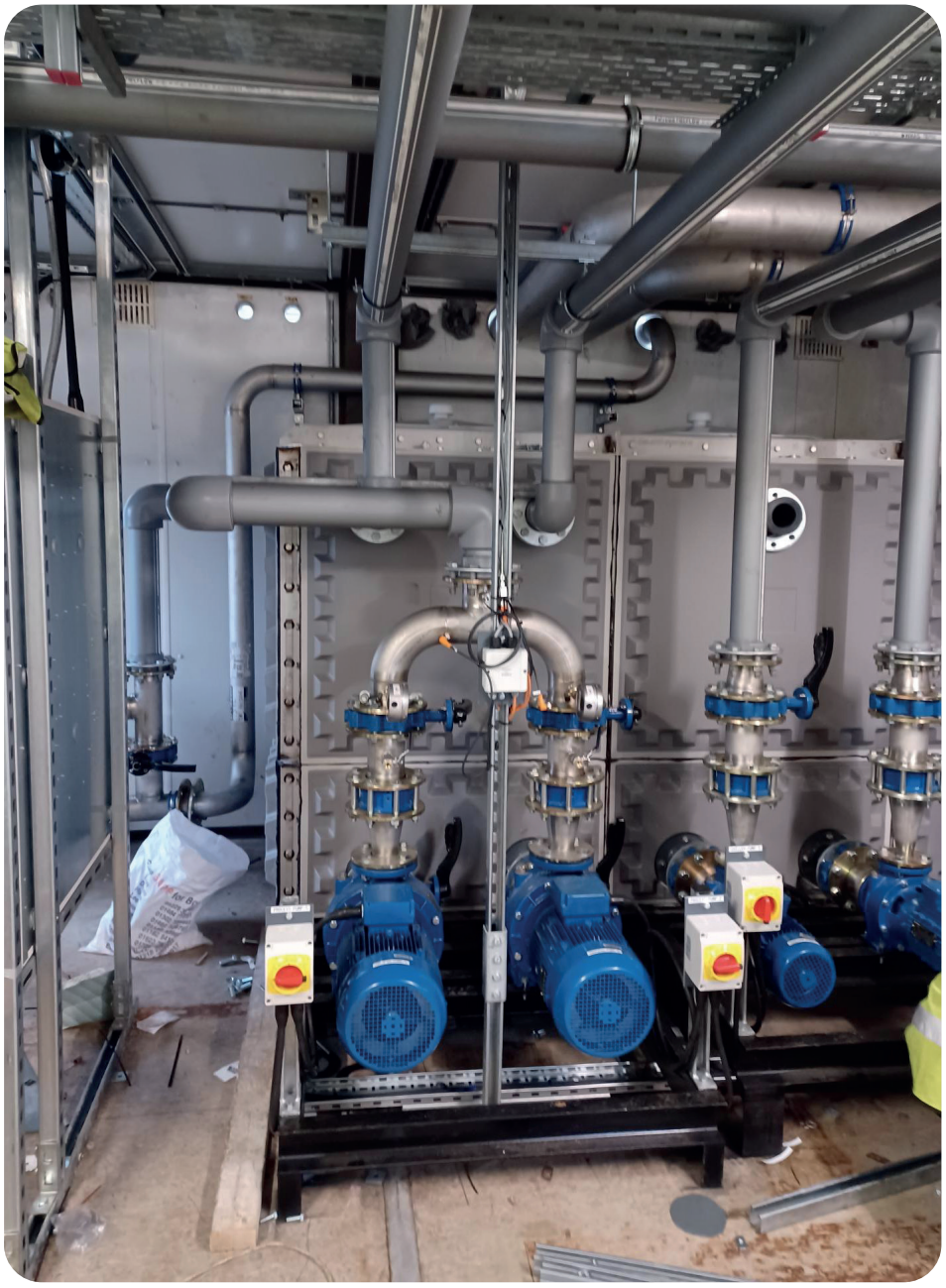
A specialist design and installation team from IsoCool PCS, another division of the Atlas Copco Group, based in Essex were brought in but they had never installed MecFlow before as all their installations are carried out in welded thin wall stainless steel. Standard pump skids and coolers are supplied with stainless steel connections, so they were used to using conventional TIG welding to make the pipework connections.

The Advantage team at Polypipe were able to help with some product training support in fabricating and welding the loose parts which the IsoCool team picked up quickly.

Mike Lloyd-Hole, Senior Project Manager at IsoCool, explains:

"This was our first time installing MecFlow and it was so easy to use and much quicker to make up each individual joint. All the interconnecting pipework was also installed using MecFlow which we did in loose parts as there were so many changes of direction.

"We had to allow for the insertion depth of the MecFlow weld joint, which was a slight change to working with stainless steel, but it was good to see how easily the two types of installations and materials came together. It was possible to achieve a seamless join to the stainless-steel pipework of the pumps, so the system works very well."



Faster assembly

Mike adds:

"We found MecFlow extremely easy to weld, and we could assemble spool pieces quicker than our conventional TIG welded stainless steel pipework, saving our installation team at least an hour each day, and the system works very well.

"The feedback I've had from my team were that they really liked using it. Usually, they would be welding stainless steel, but with MecFlow you simply measure and cut the pipe, the jig heats the socket, and you force them together until they meld so it goes together relatively smoothly and quickly.

"Having done a couple of fittings with it we now feel we can definitely make up a system and use MecFlow with confidence and there's no reason we wouldn't use it in one of our projects in future."

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