Bring home the Bacon!

Paxton's custom-designed air delivery device solution blows grease off bacon strips.



THE CLIENT

Established in 1936, a pork producer and food-processing company located in the East Coast has been the largest pork producer in the world. In addition to owning over 500 farms in the United States, the Pork producer contracts with over 2,000 independent farms around the country. Outside the United States, the company has five facilities in different countries.

THE CHALLENGE

The pork producer manufactures packages of strips of pre-cooked bacon. The pork is laid on a mesh conveyor that was harvested from the carcass, stripped of excess meat, shaped into a rectangular shape, cured with salt and sugar, hung, and smoked for multiple days, then sliced into bacon strips. The bacon is then cooked, using 7 industrial microwave ovens. The manufacturer places air knives in the ovens to blow-off the excess grease from the bacon while cooking.

The manufacturer wants to carefully control the amount of grease remaining on the bacon after cooking. If the grease is not adequately removed from the bacon, the grease can soak through the baking sheet causing secondary packaging issues. The manufacturer needs the same solution for five of their lines. The manufacturer called Paxton for their air knife expertise to see if their grease issue could be resolved.



THE SOLUTION

The Paxton team worked with the pork producer to define the number and configuration of the air knives needed in the oven to remove the grease and allow the bacon to meet their specifications. These knives are powered by 10 hp PX-1000 blower. Although Paxton's Air knives are not compatible with the ovens, the bacon manufacturer was able to provide knives that were compatible with their ovens. Because Paxton application engineers have extensive experience in air flow technology, they matched the manufacturer's air knife curve with the Paxton blower's curve to ensure there would be no back pressure or overamping to cause harm to the blower. Further, to ensure that the blower is not damaged by any outside grease or water spray, the blowers were placed in washdown enclosures.

For more information on the ultra-high efficiency PX-series centrifugal blowers, click here or scan this QR code with your smart phone.



