Proving a point

Anything that saves both time and money and produces great-quality bread is a boon for the modern bakery business. Retarder provers do just that, says Andrew Don

Most *British Baker* readers will probably have had at least some experience of retarder provers, but for those who have not had the pleasure, put simply, they hold raw product at a given temperature in stasis until required, after which the proving process is kick-started.

Why are they such great pieces of equipment? Steven Lamb, Benier UK sales manager, explains they mean a better quality of life for the baker, plus there is no need to pay staff to be on the premises at 4am to make and prove the bread. The end-product is better, too, because dough is allowed longer to rest between mixing and proving.

Indeed, Lamb says a good model can retard the bread for up to three days – allowing for Bank Holidays – and can also hold the dough in a frozen state.

Richard Lyon, UK sales manager of Koma, says the alternative to retarding is to produce all the dough from scratch and use some form of heated, moist area for the proving of the product. "This gives less control of the process," he says, "and will require more night-time working."

But with a retarder prover you can make your product in the afternoon of the previous day and the developed product will be ready to go into the ovens when you come in the next morning.

There are a host of models to choose from, including Koma, Lillnord, Miwe, Sitep, Fermatic and Smartbox. The key is to get the model that is right for you. Nick Garner, national sales manager of Williams Refrigeration, says he would consider the staff who are going to be using the machines, the machine's usability and its durability. "You can get very different types of structure," he explains.

Clockwise from top left: Sitep retarder prover; two-door Avant by Polin; Sveba-Dahlen Fermatic retarder prover; Williams Refrigeration RPC1T and small refrigerator

Support is also crucial for a machine that will be rarely switched off. "A machine that is constantly running needs maintaining properly, so you need next-day parts availability," says Garner. "If a retarder prover fails, it affects your production."

Norbake, which sells Lillnord, says it questions potential customers about the type of product they want to put in the equipment and the weight. David Charlesworth, sales and marketing manager, says retarder provers are widely used, both by small craft bakeries, family bakers with six or seven outlets, and larger plants. Meanwhile, Williams Refrigeration estimates that, of the traditional bakers with a scratch bakery at the back, 60% have retarder provers, and this number is growing. They can cost from about £5,500 new at entry level to around £40,000 for a 20-rack Koma unit.

Brook Food Processing Equipment, which supplies retarder provers from Williams Refrigeration, Foster Refrigeration and Polin, says refurbished models can start at as little as £2,800.

The choice is manual or computerised. Models with microprocessors will control humidity, airflow, heat and how a product ➲

is mixed. Equipment controlled by a microprocessor should tell you if a fault occurs, for example, and what that fault is.

Retaining control

According to Garner, "bells and whistles" to a basic model include controllability, as well as the flexibility and usability of the control panel. "The control system has got to be easy to use, but it also has to allow the whole process to be completely flexible," he says. "You can extend or decrease your recovery time. It is important to be able to change your temperatures and times as easily as possible."

Williams Refrigeration has designed its controls based on hole-in-the-wall cash machines. "If you can use a cash machine, you can use our Doughmaster control system, which is in the door of the retarder prover," says Garner.

Chris Ryder, engineering manager at Eurobake, supplier of Sitep, advises bakeries to look for a well-built, solid cabinet with a strong floor, simple-to-use controls and a steam supply that does not make the wall and the floor wet, thereby avoiding slippery floors. "Different models have different qualities, from the very simple, single-rack to the very large tunnel ones. You could go for cheaper versions but customers should look at insulation, stainless-steel quality, controls, steaming facility and compressors, as these items can make a big difference if they are not of a high standard."

Ryder says there are no disadvantages to having a retarder prover. "Some people might buy a separate prover, because they don't produce during the night, and people buy separate freezers to use as holding cabinets. If you buy a retarder prover, you have the best of both worlds," he adds. "If your business expands, you have the added advantage of being able to use this machine during the night."

Koma CDS retarder provers with single doors

European Process Plant offers Miwe retarding and proving systems to cope with the production requirements of anything from a few trays upwards. Its GVA machine has five programme sections: fast-cooling, proofing interruption, proofing retardation, proofing and the support phase. It can operate between -25°C and 45°C and with humidity levels between 68% and 98%.

Energy efficiency is important nowadays, with energy costs going through the roof and increased emphasis on all things green. Koma's Richard Lyon says his company makes all its own panels to high levels of thermal efficiency; this, allied to the careful design of its cold technical cycle, is conducive to low levels of energy consumption – and therefore running costs. "We have done some trials on a typical installation," he explains, "and a 60g dough piece would use 4W of energy on a 24-hour cycle and 7.5W over a weekend cycle. This means the running costs of a Koma retarder prover are in the region of £3/kg of dough per annum."

It all makes perfect sense. As Norbake's Charlesworth says, retarder provers pay for themselves. "If you have two members of staff, you will save five hours a day, or 30 hours over a six-day week" he says.

If bakers are paid about £10 an hour, that is a £300 saving a week, or £15,600 a year. Who can argue with that kind of logic?

Case study: Wigan firm points up retarder prover advantages

J G Fletchers & Son (Bakers) of Wigan is a small family baker that has five Lillnord 15-rack retarder provers. The business supplies rolls or "barm cakes" to sandwich shops, cafés, restaurants, nursing homes, schools, convenience stores, markets and hotels within a 30-mile radius of the Lancashire town.

The ovens turn on automatically at 4pm. An hour later staff know exactly what they need to make for that night. The main sellers – or any items that need to be ready early – are packed into the retarder provers.

Chairman Jim Fletcher explains: "We have a shift starting at 6pm and we start and finish off what we need for that night. Once that production is done, the retarder prover is filled again for the next day. We would have to have a shift coming in early doors to fulfil that if it were not for the retarder provers."

The investment, made over six or seven years, was £125,000.

Fletcher says the equipment is simple to learn to use, even though there are lots of different settings, including airflows and temperatures. "It is what suits your products at the end of the day."

He says that, for anyone buying a retarder prover for the first time, it is the quality of the retarder that is important. "You need to get an even airflow and humidity," he adds.