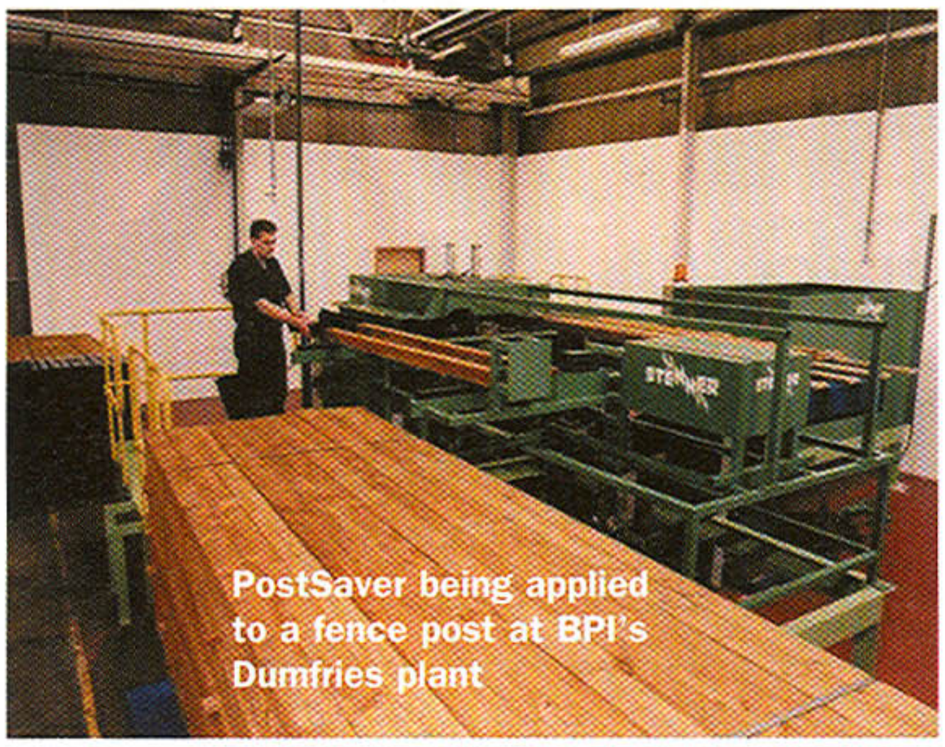
PostSaver being applied to a fence post at BPI's Dumfries plant

A polythene boot designed for wooden fence posts is one of the newest players in the timber protection market

SUMMARY

- Development of PostSaver has taken seven years.
- The polythene boot is heat shrunk onto fence posts.
- Production capacity is four million posts a year.
- The product is billed as ideal for use with CCA-free preservatives.

Keeping posted

Upcoming European restrictions on the use of arsenic in wood preservatives present timber product manufacturers with a major problem: arsenic-free preservatives do not provide the same level of protection against rot, so many timber products, particularly fence posts and decking supports could face a reduced life.

British Polythene Industries plc (BPI) says it has come up with a solution to this problem. Its PostSaver system, a thick polythene boot, internally coated with bituminous sealant, is placed over the in-ground section of the post then heat-shrunk tightly onto it. The heat causes the bitumen to melt into the contours of the post, creating a strong bond and sealing the surface of the wood.

The core of the application process is heat-shrinking the boot onto the post. This is performed on heat-wrapping machinery, specially developed for PostSaver by sawmill equipment maker Stenner.

At this point some timber merchants reading this might be scratching their heads and thinking "but plastic is a rival material". This may be true, but it's not the first time that other materials have been used in conjunction with wood and plastic isn't seriously going to rival timber as a fence material. That's not what it's trying to do.

PostSaver, which received the Design Council Millennium Award for Innovation and is patented in 15 countries, has been designed to give wooden fences and other timber products a longer life.

Two posts are treated together, the process taking a mere 30 seconds, and extensive trials have shown that a single operator can produce over 1,500 booted posts in an eight-hour shift.

Current boot production capacity is considerable – about four million posts a year, with boots available for 75mm and 100m square posts; 125x75mm; and for a wide range of round posts including utility poles. They are made at BPI's recycling plant in Dumfries.

The end result, says the company, is a permanent, tough dual-layer barrier between the post and the in-ground moisture and organisms, which cause rot.

PostSaver, the outcome of a seven-year research programme, thus permits the use of low-level or arsenic-free preservatives, both meeting the proposed new regulations and resolving environmental concerns without compromising post life. The added value of the process is also seen as boosting consumer confidence and offers an opportunity of enhancing margins on otherwise basic products.

BPI says the booted posts can be handled like any other fence post – placed in pre-dug holes and back filled with earth, set in concrete, or driven into the ground. If the boot's exterior is damaged during erection, an unlikely event says BPI, the heat-sealed bitumen still provides a barrier against moisture and damaging organisms.

The polythene boot on a fence post

It is seen as especially valuable in the construction of wooden decks where the failure of structurally-critical supports could have serious consequences. The visible end of the boot on the support is seen as promoting confidence in the structure.

Other applications include the in-ground protection of high value utility poles, in this case PostSaver is supplied as separate sleeves which can be overlapped and used in conjunction with a boot to protect as much of the pole as required.

BPI says the Building Research Establishment has carried out accelerated independent tests which have shown dramatic improvements in moisture content and weight loss in booted posts. Therefore, the company sees the product as comparing favourably for longevity with concrete or steel alternatives, yet still much cheaper to buy. So, is this timber/plastic combination a match made in heaven?

BPI says its product has aroused a "great deal of interest" in both wholesale and retail markets, plus enquiries from the US. In fact, the level of customer interest has led to the company organising a series of open days at its plant on November 20, 27 and December 4 (by appointment) to allow trade buyers and specifiers to examine the manufacturing process and end products at first hand.

"It is not often that problems created by changing environmental concerns can be solved so quickly, easily and cost-effectively, but the timely introduction of PostSaver has eliminated what was expected to be a major headache for the timber industry."

More information on the product can be found on www.postsaverusa.com ■