

# THE FARROWING CRATE CONUNDRUM – A SOLUTION

Following an article in the *March Building Supplement*, in which he set out the conundrum over the future of farrowing crates, AM Warkup's Nick Maclvor presents a farrowing pen design which he believes answers the concerns

Lockdown has not stifled innovation, according to AM Warkup consultant Nick Maclvor, author of a thought-provoking article on the future of farrowing crates in the recent *Building Supplement*.

The company has threaded its way through all the various restrictions and managed to research, design, prototype, trial and subsequently refine a new variable geometry farrowing pen. It is about to build its first 180 places using the system with another 600 pending.

"What was so pleasing to us was the change from on-farm scepticism to enthusiastic adoption post-trial," Mr Maclvor said.

"Our worst scenario is having to champion an imposed change with little or no benefit to the user. The combined performance benefit of allowing the sow to express more natural behaviours and extra space for the piglets was plain to see

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in comparison to the more conventionally farrowed peer group."

He stressed that there is currently no legislative requirement to change existing systems. But when it comes to building new or replacing existing farrowing accommodation, this poses the fundamental question for producers as to what systems they should be putting in.

Warkup's new design is based on a standard width of 2.4 metres. "This is not set in stone, but it is our standard," Mr Maclvor added.

The length of the pen from front to

back can be varied to provide any square meterage required – for example 2.4m x 2.4m, 2.4m x 2.5m and 2.4m x 2.7m, giving an overall pen area of 5.75, 6.0 and 6.5m<sup>2</sup> respectively.

To set any of these variations only requires an alteration to the length of the PVC planking pen side walls – the metalwork remains the same.

"Along with the rest of the industry, we hope that any regulation change will be based on science, with a workable element of flexibility. Our trial pen was 2.4m x 2.4m, giving plenty of room for a big sow and her subsequent large litter. This comfortable state of affairs was achieved with standard floor slats placed over a very common width of slurry tank," Mr Maclvor said.

Trials of the new systems, he observed, seemed to suit all interested parties, both human and animal. "The sow was introduced into the pen (fig 1) a few days before farrowing. Bedding material was provided to satisfy the sow's nesting behaviours. At point of farrowing a temporary crate was formed to house the sow (fig 2) and she remained in the crate for the crucial post-farrowing period, in this case four days," Mr Maclvor said.

"Historic records show that the period of maximum danger for the piglets is the first few days post-farrowing and that temporarily restraining the sow allows the piglets to become stronger, more mobile and find and occupy the heated creep away from mum."

The temporary crate has all the features of the fixed crate, but on opening it reverts to preventing the sow leaving the pen or accessing the creep. The creep features a two-part lid, the fixed part having an LED attraction lamp below it. The integral polymer concrete heat pads fit into the normal slat layout but only have embedded heating elements below the creep lid area.

Mr Maclvor pointed out that, although

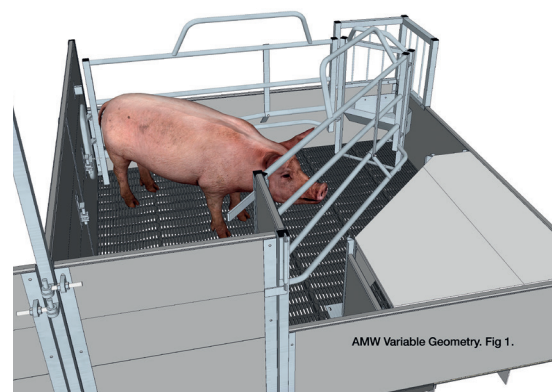


Fig 1: The sow is introduced into the pen a few days before farrowing

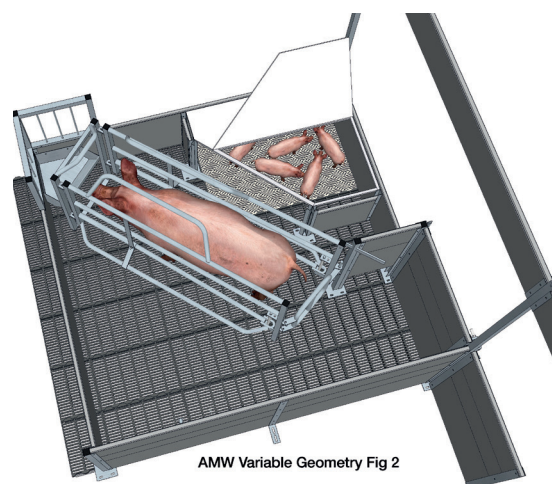


Fig 2: At point of farrowing a temporary crate is formed to house the sow

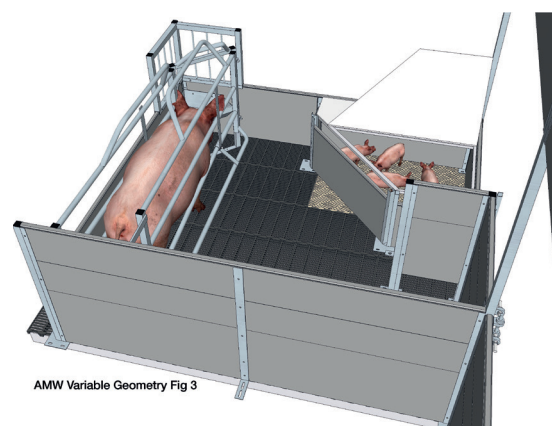


Fig 3: A temporary crate parallel to the back wall can be formed, allowing access to the piglets

this was largely a free farrowing system, consideration had been given to operator safety. "You have the ability to form a temporary crate parallel to the back wall (fig 3), allowing access to the piglets or to treat a potentially aggressive sow," he said.

"Pig farmers operate in a world constantly reminding them of their responsibility to the animals in their care. The fixed crate's days, many believe, are numbered. This pen is an elegant solution, adaptable and an adoptable way forward," he said.