‘RINA DINA’ - MAXIMISING EFFICIENCY IN A CONVENTIONAL SHEARING SHED

Don Boyle, along with sons Damien and Brendon and their families run a flock of 11,000 Merino breeders at Broomehill in southern Western Australia. Damien is a multi-award winning competitive shearer and along with Brendon, takes on the annual shearing duties during the family’s 700-bale wool harvest. Brendon operates Boyle Shearing Contractors with about 32 wool growing clients.

This collective experience in the wool harvesting industry has provided the Boyles with a unique insight into the efficiency of a range of shearing sheds; an insight Don called upon when the time came to upgrade their own facilities.

“Sheep have got to flow and working with the natural behaviour of the animal makes it much easier,” said Don.

“We wanted to avoid back filling pens as sheep are very reluctant to move towards the shearing noise,” said Don. “Front fill pens are the first preference, but side fill is also good if space in the shed is limited.”

Figure 5: side fill catching pen with a slide/swing gate and boarded off chute to remove any trip hazard.

“We use wider, 3-inch (about 75mm) slats on the floor which are far easier and more comfortable for sheep and people to walk on when penning up,” said Don. “The wider slats also reduce the amount of light coming up from under the floor by about half.” Combined with even overhead lighting which minimises shadows, these wider slats laid across the direction of sheep flow can significantly improve the movement of sheep through the pens.

Figure 6: shows the catching pen, with slats running to the board. The boards run across the flow of sheep in both the catching pen and the fill pen reducing the light visible below the shed as sheep move through.

The Boyles have settled on catching pens no bigger than about 2100mm wide by 3000mm deep which can hold 15 woolly sheep. The size of the catching pen means the shearer only needs to take one or two steps to catch a sheep and does not need to remove the harness to reach the sheep as it can swing back overhead into and above the catching pen.

Fill pens are the same size as the catching pens which means shed hands don’t have to split pens or move individual animals. Catching pen doors are split to be 500mm and 300mm rather than even in width, to allow the doors to open and close without the right-hand door interfering with the shearer’s workstation or handpiece.

Once a sheep is shorn, it is released into a recessed chute that is set about 100mm into the board. There is also a vertical drop of 100mm from the board into the chute before the slope increases down the chute.

“The chute is 600mm wide, which creates fewer shadows than narrower chutes and encourages sheep to move into and down the chute, I wouldn’t build them any narrower” said Don. As a result, the shearer doesn’t need to force sheep down the chute as often.

Figure 7: wool room and board with minimal distance travelled by shed staff. Don since has added handrails at the stairs to the raised board, running 900mm above each step.

"Over the years, I noticed that in most situations, shed hands were working harder than they needed to. With this design, shed hands only need to take one step from each stand to the wool table, which really reduces how much walking they do each day," said Don.

Low catching pen doors and a shorter right hand side door, closest to the chute as seen in Figure 5 and 7, help the shearer so they don't hit their elbows on the way back, the right hand door releases earlier as the sheep is dragged past and it does not hit the handpiece when swung open.

The raised board is 700mm above the wool room floor. "This board height, which is lower than most other raised boards, means shed hands do not have stand on the tips of their toes to lift the fleeces from the board. This puts much less pressure on their feet over the course of a day's shearing," said Don.

The wool press is accessible from the wool table so the classer can fill the press with the main line without needing to double handle fleeces. Wool bins are used for oddments only.

Don has built a few sheds in his time and always keeps the cost to a minimum. His most recent shed was primarily built using off cuts and readily available materials, as well as some timber milled from his own property.

"It took me a bit of time to source some of the materials, but it only cost about $50,000 to construct the four-stand shed," said Don.

Don also experimented with a semi-circular board but not being a qualified builder, he found this design more complex to construct.

"My first piece of advice is to consider the existing inefficiencies in your shed, particularly areas that restrict the movement of sheep and where people are walking further or working harder than necessary," said Don. "Then use portable panels or temporary structures to test out your layout before making the fixtures permanent."

Shearing contractors and staff can also provide valuable feedback about how to achieve greater efficiency and improve work health and safety by drawing on their experiences. Seek advice from trusted sources when identifying issues and potential improvements.

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