

SHOREHAM PORT AUTHORITY

‘dunnage placement tool’ that holds dunnage at exactly the right angle at the end of a lightweight pole, enabling dunnage to be positioned exactly where needed with precision and ease

the challenge

Shoreham Port has been operating as a Trust port for over 260 years. Our purpose remains to continually ‘improve our port for everyone’. First and foremost, this means getting everyone home safe and well daily. This is the primary aim on our Masterplan, which we hold each other accountable to every day.

One of our areas of highest risk is our landside operations. A team of around 40 Port Operatives are responsible for the safe and efficient discharge of around 150 vessels a year. In 2023, this small team then loaded the imported timber onto over 12,000 lorries, ready for its onward journey. Whilst the majority of timber packs can be loaded with dunnage attached, occasionally this has to historically required adjustment or supplementation, requiring our colleagues to work at height.

The Port is acutely aware of the risks of working at height. The risk of injury or fatality as a result of a fall from height is significant and this is reflected in the HSE statistics each year. In the latest HSE accident statistics for 2024/25, falls from height remain the leading cause of work related fatalities and the fifth greatest cause for non-fatal injuries in the workplace. We also have had first-hand experience of the life changing impact they can have within the Port, which further motivates us to constantly review our practices to see how we can fulfil our commitment to getting everyone home safe and well daily.

the innovation

We designed a ‘dunnage placement tool’, a piece of equipment that holds dunnage at exactly the right angle, at the end of a lightweight pole, enabling an Operative to stand on the ground close to a lorry and use the tool to position the dunnage exactly where it is needed with precision and ease. Removing the need to work at height and minimising any manual handling challenges. The tool also holds a sufficient portion of the dunnage to prevent it from accidentally falling out and striking anyone.

We collaborated with our Operations colleagues on the project; as the end users, their feedback throughout was invaluable. We worked with a local welding firm, converting a sketch into our first prototype. Our first model, made from steel, was too heavy to be used safely. Our second prototype was constructed from aluminium, which overcame the weight issue. Our in-house workshop then adjusted the angle of the tool to optimise it for the task. After several trials, we commissioned the third prototype, with improved ergonomics and by our fourth prototype, we were happy we had got the design right.



We then brought all the team together, to share the updated procedure for lorry loading and demonstrate the new tool, and to revisit why we had placed so much energy and focus on this in the first place. Keeping health and safety relevant and engaging our colleagues in our mission to make the Port safer is of primary importance to us.

how it was implemented

The tool was implemented in close collaboration with our Colleagues to ensure that it met their requirements for regular use and did not introduce any additional risks.

The tool itself went through several iterations to ensure the ergonomics were suitable and colleagues were consulted throughout the process.

We also ensured that the tool was sufficiently robust for use in the Port by having its safe working load independently assessed.

Once introduced, we brought all the team together, to share the updated procedure for lorry loading and demonstrate the new tool, and to revisit why we had placed so much energy and focus on this in the first place. Keeping health and safety relevant and engaging our colleagues in our mission to make the Port safer is of primary importance to us.

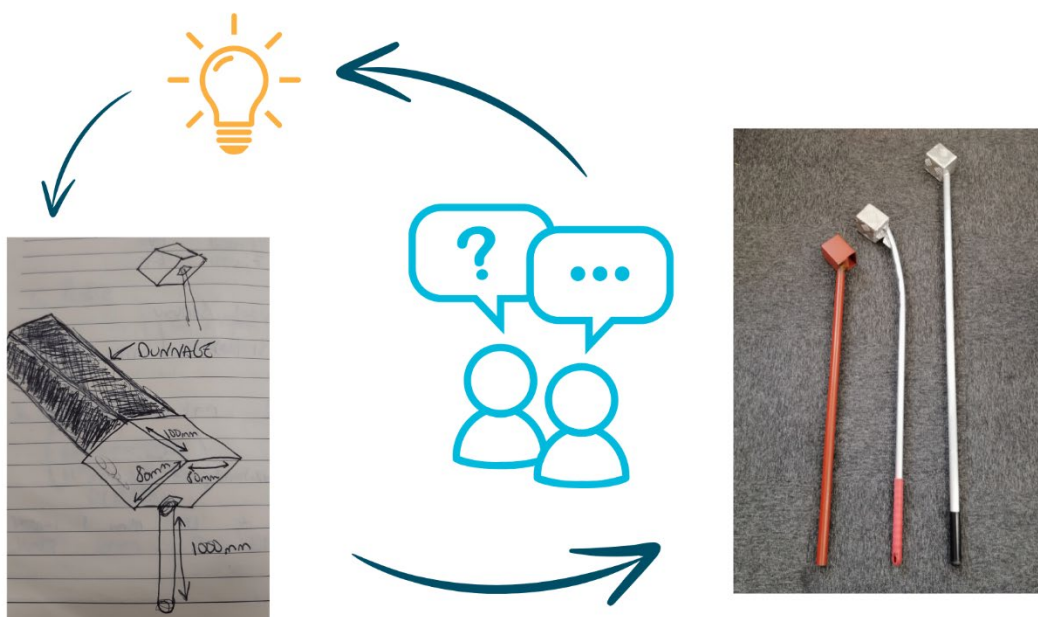
result

The immediate and primary result of introducing the dunnage placement tool was the complete elimination of the need to work at height while loading lorries. This single innovation made the Operations team substantially safer by removing the hazard responsible for the most common cause of fatal workplace injuries.



On an operational level, the tool allows for the necessary placement of dunnage with high precision and ease while standing on the ground, without impacting the operational efficiency required to load over 12,000 lorries per year, and without introducing other manual handling challenges.

The success of the implementation is evidenced by the safety data: since the new process was introduced, there have been no reports of accidents, near misses, or safety observations related to the updated lorry loading procedure.



conclusion

The Shoreham Port dunnage placement tool is an example of a "grassroots innovation"—an effective solution developed by the front-line team to solve a specific problem with a tool which is not available on the commercial market.

We view the tool as a success story that demonstrates our commitment to a risk-based approach and constant improvement in health and safety, ensuring our mission to improve H&S and make sure everyone goes home safe and well daily.

The result is an improvement that has made our colleagues safer and reduced the risk profile whilst maintaining operational efficiency

LINK: <https://www.shoreham-port.co.uk/>



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