



Aussie Natural Spring Water

CASE STUDY

Aussie Natural Spring Water is an Australian owned and operated company based in Perth. The business required a high-density storage solution to replace its existing Selective Racking to store an additional 1500 pallets of bottled water. APC's solution involved the manufacture and installation of a Drive-In Racking system capable of storing more than 2000 pallets.



PROJECT OVERVIEW



IMAGE LIBRARY



Project Overview

BRIEFING

Aussie Natural Spring Water supply water to homes and throughout WA. An increase in stock during summer and a contract to supply a major Australian supermarket saw the need to optimise their warehouse storage capacity to increase the potential storage to an additional 1500 pallets of bottled water.

CHALLENGE

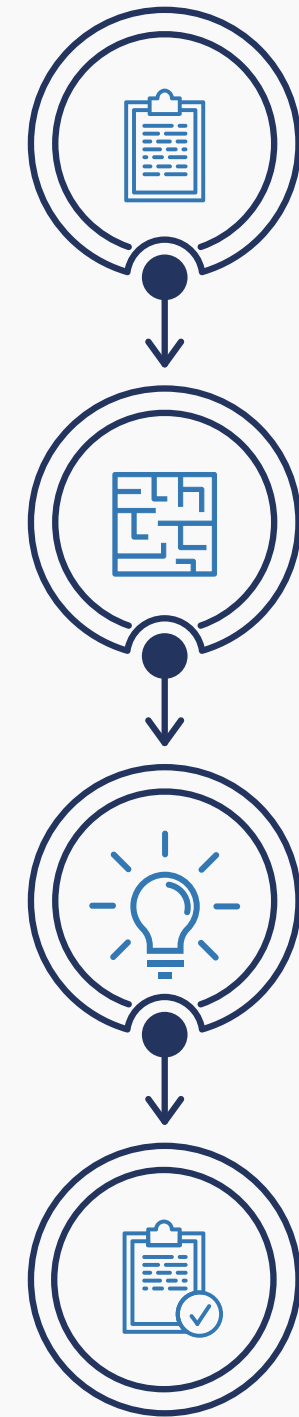
The warehouse roof had trusses; therefore, our in-house design and engineering team were involved to ensure the racking worked around these obstructions and still offered the maximum amount of storage while maintaining a safe working environment. Another challenge was to provide levelled racking across the unlevelled warehouse floor which featured some large fluctuations and also contained a drain at one end.

SOLUTION

We installed a combination of single entry and double entry Drive-In Racking. Drive-In Racking allows forklifts to enter the rack to both unload and retrieve goods. The high-density pallet storage is achieved by driving pallets into the system, guided by rails, thus storing them more deeply. These rails have been designed to protect the system from forklift damage and to prevent pallets from dislodging. This system creates more efficient use of space when compared to Selective Pallet Racking where there are many aisles to account for 100 per cent selectivity. The system has allowed for an increase of 300% in storage within the same space when compared to the initial Selective Pallet Racking layout. Drive-In Racking is ideal for Aussie Natural Spring Water as they store numerous pallets of the same product. APC Angle Guards were also fitted to each post in the main entry aisles, designed to deflect the frontal impact while minimising loading obstruction. Angle Guards will help protect the racking and products from forklift-related damage, ensuring the longevity of the system. Our Drive-In Pallet Racking system was installed in stages, with the new racking installed simultaneously with the dismantling of the existing racking. This allowed the client to continue to bottle and store product without interruption to their business. Due to the roof trusses, some racking elevations had to be altered to work around these interferences, easily done by reducing the pallet racking bay height where required. APC's team worked to offset some of the posts using grout and shims, ensuring level racking across the entire warehouse. The drain was filled using concrete.

RESULT

APC worked closely with the client to schedule the dismantling of existing racking and installation of the new racking as this was happening, ensuring production was not disrupted. APC designed its solution to accommodate the roof trusses and was able to offset the posts across the unlevelled floor, resulting in levelled racking. Our Drive-In Racking solution provides a high-density and durable solution - manufactured in Australia - capable of increasing the stock holding capability by 1500 pallets when compared to the clients existing Selective Racking system.



Drive-In Racking

To store an additional 1500 pallet of bottled water, Aussie Natural Spring Water required a high-density storage solution to replace an existing Selective Pallet Racking system. Drive-In Racking was selected because it is ideal for storing large quantities of similar pallets. We installed a combination of single entry and double entry Drive-In Racking.



Heavy Duty HDG Rails

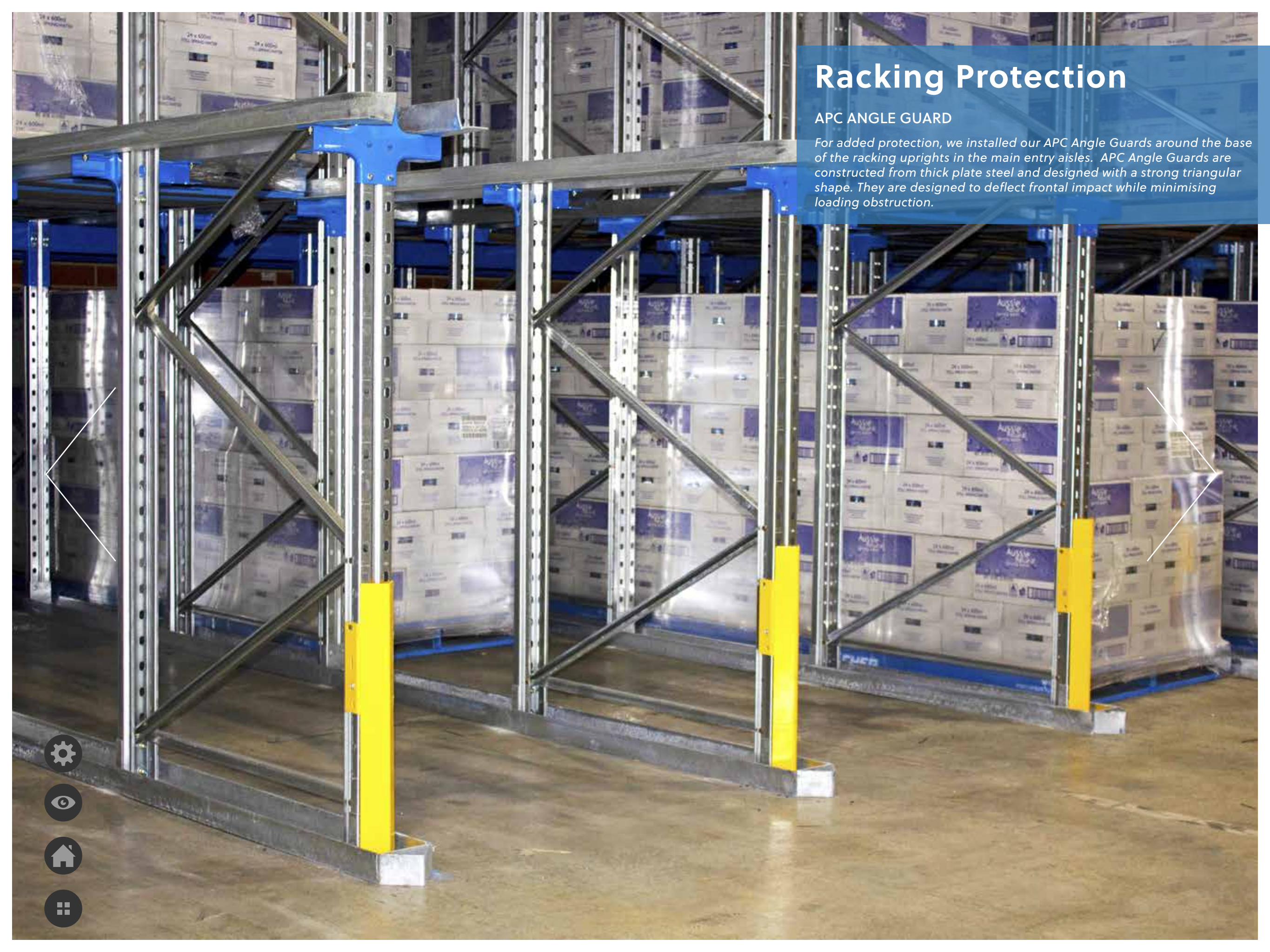
With this system, pallets are guided into the racking by Heavy Duty Equal Angle Rails. These rails have been designed to protect the unit from forklift damage in addition to preventing the pallets from dislodging.



Racking Protection

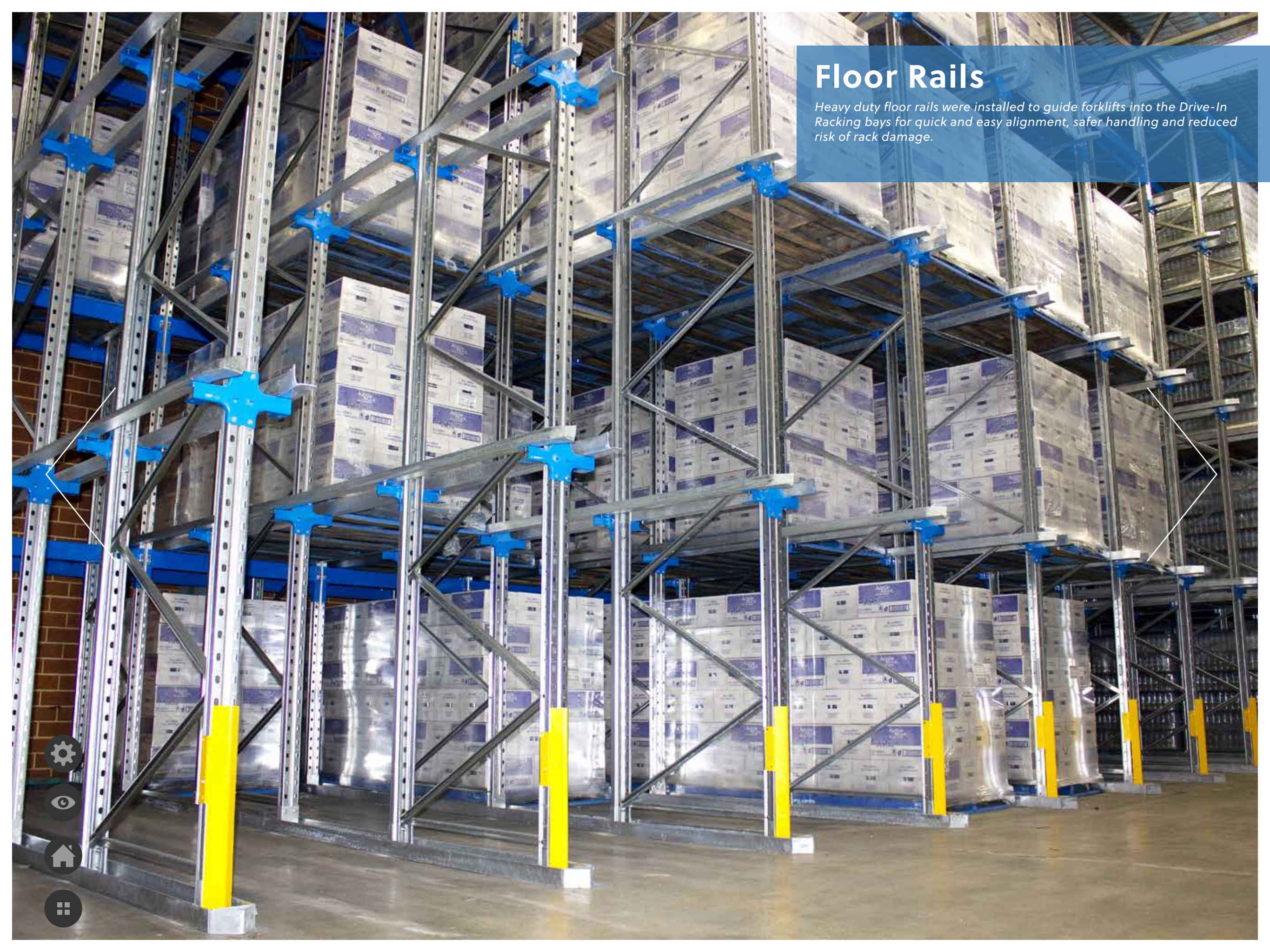
APC ANGLE GUARD

For added protection, we installed our APC Angle Guards around the base of the racking uprights in the main entry aisles. APC Angle Guards are constructed from thick plate steel and designed with a strong triangular shape. They are designed to deflect frontal impact while minimising loading obstruction.



Floor Rails

Heavy duty floor rails were installed to guide forklifts into the Drive-In Racking bays for quick and easy alignment, safer handling and reduced risk of rack damage.



Unlevel Flooring

One challenge the job presented was to provide level racking across the unlevel warehouse flooring. APC's team worked to offset some of the posts using grout and shims, ensuring level racking across the entire warehouse.





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