



## OPTIMISING WAREHOUSE STORAGE SPACE – “A TALE OF 2 LOSERS!”

### BACKGROUND

There are a number of ways to improve cubic utilisation in your warehouse. Some that come to mind include:

- Go with narrow-aisle
- Go up; with taller storage fixtures
- Use Fit for Purpose materials handling equipment
- Improve your product slotting performance, on a continuing basis
- Better inventory management, so that you have the right inventory, of the right quantity
- etc etc

The theme of this brief note is to present another way to improve cubic utilisation, best described as: **LOOK AT THINGS DIFFERENTLY!** Below I present a real-life case study that illustrates the point.

### SCENARIO

Our firm, Supply Chain Services Australia, was recently on the bid team of a major EPC contractor (*sorry, can't provide names for confidentiality reasons*) as specialist Logistics Design Consultant for design & construct of an 8,000m<sup>2</sup> warehouse facility for a mining company to house large inventory and equipment items (small items located in a nearby facility). There was also a laydown area of a similar size.

Sadly, the EPC contractor with whom we were aligned did not win their bid. That explains who the first “loser” was.

### DISCUSSION

The mining company had issued a detailed functional specification (as they do!), detailing their requirements.

The specification called for universal access by a 16 tonne forklift across the whole 8,000m<sup>2</sup> footprint of the warehouse, and also within all of the laydown area. The specification was written this way because that's the way the mining company always did it. Forever, in living memory.

As part of our team's bid, we closely analysed the detailed inventory list, and projected the number of lifts by size of forklift unit.

The results of our analysis were most interesting. We determined that the % of lifts that required a 16T forklift was only 4% of the total number of lifts p.a. inside the warehouse and only 7.5% in the laydown area, and that the very great majority of the number of inventory items would be handled by either a 5T or smaller forklift unit.

We developed a design concept that rationalised the locating of inventory items in zones by general size, both inside the warehouse and in the laydown area, in order to significantly reduce the width of the forklift aisles, because 8m aisles to accommodate the 16T forklift were now only needed in a portion of the warehouse and yard.

The impact of our alternative concept would have reduced the overall warehouse footprint by a massive 40%.

### THE MESSAGE

Our message is simple: **LOOK AT THINGS DIFFERENTLY** when developing your warehouse design brief, and see how you can make dramatic improvements in optimising warehouse storage space.

So, who was the second “loser”? It was the mining company. Because they built an 8,000m<sup>2</sup> warehouse that was 40% larger in footprint than it needed to be to fulfil the same operational requirement (in our opinion)!

