



THISTLE SYSTEMS
MAX THE CUBE™

Discover The Seven Hidden Costs In Your Warehouse

Introduction

When was the last time you evaluated the true cost of existing racking? What factors did you take into consideration?

Thistle Systems has compiled data from over 3000 installations and projects over the last 10 years in an attempt to identify how people measure their racking systems and what they believed were the costs involved in the project.

As you may expect, most companies focused on the initial upfront costs of the installation with some breaking down the total project cost to determine the cost per pallet.

Whilst this provided a degree of measurement when comparing initial quotation, the simple equation only examines a fraction of the overall financial impact your racking system will have on your bottom line.

The pressure to reduce costs at all level of business has never been greater and through our extensive research we have identified 7 hidden costs within your racking system that, if addressed, could transform your company's performance and provide you with a real competitive advantage.

1. Hidden Cost of Providing the Space

The footprint of your racking system has a major impact on the true cost of any storage solution and must take into consideration the relevant proportion of the overheads it consumes. This means at the very least taking into consideration the rent and rates together with a proportion of energy consumption.

We also need to factor in the opportunity cost of having the space used as storage as opposed to production space. This is a key factor when weighing up the long term capacity requirements of the storage system to build in room for growth.

Where projects involve new buildings or extensions to existing facilities being constructed to house storage, the building costs should also be taken into consideration.

2. Hidden Cost of Handling Goods

To determine the true cost of the racking solution, we need to understand the impact the design has on the day to day costs and the overall efficiency and effectiveness of the operations.

For example, the accessibility of any storage system and how well it meets the demands of the warehouse will play a key role in determining the effectiveness of the storage solution.

The accessibility requirements will be determined by the number of SKUs, stock turnover and average batch sizes.

As the required level of accessibility increases, the maximum storage capacity is likely to be reduced and the amount of working aisles is likely to be increased.

However, increased accessibility will also have an impact on the travel times of trucks to deliver and retrieve pallet.

Once the average travel time reaches a certain level, this has an impact on the number of forklift trucks required in order to facilitate the loading and unloading of wagons in a timely manner.

3. Hidden Cost of Stock Relocation

In the perfect solution, a pallet should only ever be handled twice. Once to deliver the pallet into the racking and once to retrieve it.

However the nature of solutions such as drive in racking means that pallets are regularly moved in order to maximise utilisation of the racking system.

In some instances, companies can employ an entire night shift just to relocate pallets in preparation for the following day's activities.

And it's not just the wage bill that needs to be taken into consideration. Add in the fuel/energy costs of the trucks and the costs start to quickly rise.

This double, treble and even quadruple handling has a massive impact on the overall cost and efficiency of the operation.

In some instances, changing the design of the racking can reduce the number of fork lift trucks required to maintain the performance levels.

4. Hidden Cost of Maintenance and Repairs

The initial investment you make in your storage facility is one thing however every racking solution will require an element of maintenance and repair dependent on the type of racking, the products being stored and the level of human/forklift interaction.

It's a bit like when you buy a car. There are models on the market that are widely known to have reliability issues and consumers also have to take into consideration the price of replacement parts and servicing which can vary greatly. However, when it comes to buying cars consumers can refer to various magazines and consumer watchdog organisations to find out the good from the bad.

Unfortunately, it's not as easy to determine the likely ongoing costs of racking. We know, for example, that drive in racking is widely recognised as one of the most likely racking types to experience damage. With forklifts having to enter the racking, potentially working at high levels with a small margin for error, the potential for things to go wrong is far greater than for example static pallet racking.

We have also seen clients having issues obtaining replacement parts for racking purchased from a supplier who managed to secure a special deal from an obscure manufacturer who no longer exists or will take 6 months to ship the products.

The financial impact stretches further than simply the hard costs of the replacement parts and the labour costs. Companies need to take into consideration the downtime, the effect on operations and the alternative arrangements that need to be made.

5. Hidden Cost of Marshalling areas

One of the main KPIs used in many warehouses is the time taken to load and unload wagons. To facilitate these KPIs, companies often use marshalling areas where a dedicated floor area is created to allow pallets to be quickly unloaded from a wagon – enabling the warehouse team to manage the goods at their leisure or indeed turn the pallet to enable it to be stored in the racking.

This marshalling area is often seen as a necessary element of any racking solution, however it immediately impacts on the costs of travel times and requires an element of overheads to be apportioned to what is effectively a holding area.

With careful design and well managed operations, the floor area could be eliminated altogether and used for additional storage capacity or at the very least be minimised by using systems such as push back racking.

6. Hidden Costs of External Storage

Using external storage providers can be seen as an effective short term solution to accommodate seasonal peaks in demand.

However, all too often the initial short term requirement becomes an ongoing cost as the external storage facility becomes a 'necessary' buffer to the main storage.

The weekly costs become accepted as an overhead which appears manageable in comparison to seeking additional budget for capital expenditure.

And it's not just the cost of the external storage you have to take into consideration.

You have to look at the additional transportation costs, handling costs and stock management issues that external storage also demands.

The ongoing annual costs of external storage can often run into tens and hundreds of thousands of pounds every single year – with no real benefit to your organisation.

This was the case with a company in the food and drink sector who approached for

a comparative quote for drive in racking solution they were planning to install in a new storage facility which was being purpose built to reduce their external storage requirement.

The new facility was costing £500,000 to build and the company had hoped to achieve in the region of 1300 pallet positions which would save them approximately £138,000 per year on external storage.

After discussing the project with the management team, we were able to show them a solution which had a higher initial investment but would deliver an additional 1100 pallet positions and save them an extra £123,000 every year.

This solution also reduced the payback period on the project from 4.5 years to just 2.8 years.

7. Hidden Cost of Designing Racking to Suit Building Design

The natural instinct when considering a new build project is to appoint an architect to design the building and gain a building warrant prior to approaching sub contractors.

However when it comes to the design and build of a storage facility, this approach can result in you missing opportunities to dramatically increase capacity with minimal additional cost or indeed significantly reduce the footprint whilst delivering the same storage capacity.

By including a storage specialist in the design team who can suggest a few subtle tweaks to the design could add an extra bay of pallets along the whole facility or take the pallet levels from 4 to 5.

The combined benefit of these small changes to design could transform the overall storage capacity.

Likewise, if the objective of the project is to store 1000 pallets, increasing the height of the building to accommodate an extra pallet level could reduce the required footprint by as much as 40%. This not only delivers significant savings on the overall build cost and therefore the associated professional but will also deliver ongoing savings in terms of rates and energy costs.

By designing the racking to suit an existing building design, compromises may have to be made and this can impact on the utilisation of space.

Conclusions

Many companies make the mistake of viewing their racking as an initial capital expenditure that can be written off over a period of time. The truth of the matter is that your racking will have a major impact on your operational effectiveness and it is vital that you explore the full operational and financial implications every option before committing.

In most cases, the optimum solution uses a combination of storage systems to create the perfect balance of capacity and operational efficiency.

As part of the Max the Cube approach, we offer a free assessment of your opportunities available and can provide critical information on potential ROI and payback periods.

For more information on maximising your warehouse capacity, contact Thistle Systems now on 01236 453888

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