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Breakdown Situations, Supply Chain Disruption, and complicated planning tasks are not the only issues facing Tetra Pak Techincal Service (TPTS). According to them, they are also dealing with an underperforming Spare Part product segment. Or are they?

TPTS provides spare parts for the entire range of products in Tetra Paks Packaging and Processing catalogue. For a long time, the average service level achieved for Processing spare parts have been consistently lower even though both segments are planned with the same process.

The possible reasons for this has been investigated and include: less information regarding maintenance time, higher demand volatility, and not as many planned orders for the processing spare parts.

However, another reason uncovered is of great significance. While there exist several more product categories within the Processing segment, the amount of order lines is significantly lower compared to Packaging. This means that planning them by comparing them to each other might be of a disservice to Processing, as the target service level for a Spare Part is set partly by the sales volume and by the amount of times it is ordered. Thus, Processing Spare Parts have on average a lower target service level compared to Packaging Spare parts.

It should be noted that this factor does not solely explain the lower average service level for Processing, and the previously mentioned factors are still very relevant. It is most likely that it is a combination of several factors that influence each other.

In light of these considerations, it prompts the question of whether TPTS should be comparing or planning the segments in the same manner, given the substantial differences in their input parameters. Is it fair to evaluate the achieved service level for Processing Spare Parts against Packaging Spare Parts when there are numerous other production categories with lower sales volumes? This raises the issue of whether it is a disservice for TPTS to treat these segments equally. Interestingly, certain Processing Spare Parts, despite having similar sales volumes to their Packaging counterparts, performed at a comparable level. This suggests that the challenge might lie in the way TPTS assesses its own performance.

If one was to use an analogy: if you have an unusual shirt size, you know that it is more common for your size to be stocked out than the most popular ones. You as a customer will experience a lower level of service than the average person. This is an active choice by the clothes store: they are achieving a higher average level to a lower cost by not serving all customers to the same extent. The question for Tetra Pak is, what implications does this policy have for customers operating multi-million dollar machines?

This popular scientific article is derived from the master thesis: On the Service Level Disparities between Spare Parts Segments - A Case Study at Tetra Pak Technical Service, written by Henrik Linton and Gustav Heinze (2023) - Division of Engineering Logistics at The Faculty of Engineering – LTH, Lund University