

# Mathematical Approach to the Pallet Loading Problem

*Wednesday, 22 December 2021 11:00 (25 minutes)*

The (manufacturer's) pallet loading problem has been a topic of wide interest for operational research and companies for more than 50 years. It is to find the optimal loading of identical rectangular boxes onto a single rectangular pallet (also allowing for 90 degree rotation).

It was already known that all box layouts in the given pallet are completely determined by the set of efficient partitions of the pallet's width and height in the box dimensions. The main interest of this talk is the enumeration of all efficient partitions.

We review the pallet loading problem and discuss a mathematical approach to this problem.

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