

ABSTRACT OF THE DISCLOSURE

A loading pattern generating system requires only the input of loading pattern generating conditions to automatically generate a loading pattern which satisfies the target capacity within the physical constraints of a loading system. The loading pattern generating conditions include the size of a pallet, the size of a product, data relating to a loading device, and the target capacity to load products on a pallet. A candidate pattern registration device stores a plurality of candidate patterns for loading products on a pallet. A calculation section prepares a loading pattern which controls a loading device corresponding to the loading pattern generating conditions that have been input. The loading pattern is selected from the candidate patterns stored in the candidate pattern registration means device. The calculation section calculates the resulting loading capacity.

This loading capacity is adjusted to satisfy the target loading capacity. The maximum torque on the palletizer is compared with an allowed torque. When the torque exceeds the maximum, the candidate pattern is rejected, and calculation is performed on the next candidate pattern. An output section outputs the resulting loading pattern.

