



Problem Proposal for MiMM 2019, Kongsberg Maritime AB

KONGSBERG

Our products are in most cases too big to be delivered to the customer assembled in one single piece. They must be shipped in parts, individually packed in boxes or wrapped with a protective material.



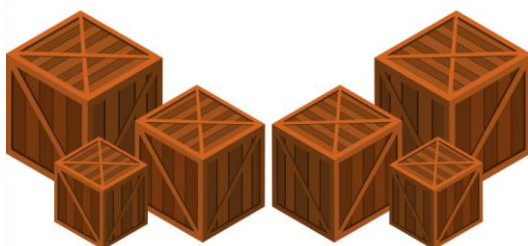
In most cases, the parts are shipped with containers. Containers come in different sizes and with a maximum load weight. The bigger and the more weight the container can take, the more expensive it is. All items are approximated as boxes. Each box can have properties besides length, breath, depth and weight:

“fragile” means no other boxes can be packed on top of it

“heavy” means it must be packed at the bottom

“this side up” means one side must face upwards

The shipping department requires a simple and fast tool to support them in how big and how many containers are needed for each shipment.



How can the packing be optimized to be as cheap as possible?