manufacturer is to optimize transportation process. This problem can be solved by palletization. Move one box or one hundred?

When the concept was first introduced, palletizing has a significant impact on improving performance. Thus, railcars are discharged during an hour or two instead of two days.

Some equipment facilitates pallet stacking by loaders. These pallets are made of rough wood of 4 x 4 ft (1.2 x 1 meter in Europe). This design can take a typical load of one metric ton (1,000 kilograms or about 2,200 pounds), and serves as a basis for mounting, handling, sorting, storing and transporting of goods as a cargo unit.

Continuously improving supply chain operations, pallets seem sometimes useless in the effort to gain reduced space, while transporting and warehousing.

There are many advantages of pallets application: quick turnover delivery and improved efficiency of transport equipment; drastically reduced need for manual processing; reduced temperature risk for perishable products at non-refrigerated docks; less risk of damage to the product; mitigation of occupational injuries; more efficient product movement on the pallets, their effective placement and packaged goods delivery to customers. It is usually easier to use pallets for loading/unloading compared with other devices, such as separating sheets that require specialized equipment. The pallets also provide drainage and air circulation for products.

When palletizing one must adhere to certain rules: similar size of cargo, appropriate height (approximately 1 m) depending on truck and container height, ranging from 2.1 to 2.4 m as well as space-to-load ratio. This ratio is equal to 1.

There are many methods of pallets stacking, but currently the developed countries are opt to the employment of robots to reduce labour costs and switch to automated operations. The largest robots have over 3 meter span, their flexibility and multifaceted options allow handling at least two finished product lines.

Thus, palletizing facilitates transportation processes making them beneficial and cost effective for carriers.

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COMPUTER VIRUSES AND THE WAYS TO AVOID THEM

Due to the Digital Revolution which led to the creation of the first digital computer, digital record and soon the creation of global networks such as Internet, the number of computer users as well as the Internet users started to increase at

the very high speed. There are millions of users surfing Internet at the moment, searching for the information they need, watching films or communicating with each other. But Internet has some problems and one of the most significant is computer viruses and that's why we're going to talk about them.

First of all we need to understand what is the computer virus and what is it capable of?

A computer virus is a type of malicious software (malware for short) which was created to infect computer programs by modifying them. Although it can reproduce itself by copying its own source code and when such replication succeeds, the affected areas of computer's memory are then said to be infected with computer virus.

The idea of developing such self-reproducing programs belongs to John von Neumann who has written an essay "Theory of self-reproducing automata". In his essay he described the way how the computer program could replicate itself. That is why he is considered to be a father of computer security.

The first virus called Creeper virus was first detected on ARPANET in 1970's. It was created by Bob Thomas and it was considered as experimental self-reproducing program which used the ARPANET to infect computers running TENEX operating system. Thus, the Creeper used the ARPANET to gain access to the remote systems where the message " I'm the creeper, catch me if u can!" was displayed.

It's obvious that computer users want to avoid infection with such viruses, so counter measures were made.

The antivirus software is one of the ways to escape infection with viruses because it can detect the attempts to run malicious program, it blocks malicious websites. But you need to update your antivirus base regularly because antivirus can protect you only from a virus that is in his antivirus base and if it's not antivirus won't recognize the threat.

Another way of avoiding viruses is making backup files of your system and when there is a damage done to your system you can just load those files. The only thing you need to remember is that you need to save those backup files on read-only disks because the read-only disks can't be affected with the computer virus.

The last method to avoid consequences of computer virus infection is reinstallation of operating system. It's much more faster than disinfecting the computer system, it's more reliable because it helps you to remove all malware from your system and of course it's very simple to do.

So as we can see no one can be 100% sure that his system is absolutely safe from viruses as they are enhancing rapidly and they are finding new holes in your system. Certainly, the antivirus software helps you to avoid some of the threats but as I mentioned before there is no 100% guarantees that your computer won't be affected with a virus even if a person uses such antivirus software.

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