В данный момент Китай активно развивает сеть маглева по своей территории. Традиционные скоростные железные дороги обеспечивают перевозку пассажиров со скоростью до 350 км/ч. При этом, если, скажем, в Беларуси и скорости 140 км/ч по железной дороге достаточно, то в Китае, который больше Беларуси в 46 раз, даже на скорости 350 км/ч, чтобы добраться из Пекина в Шанхай, необходимо потратить около 6 часов.

Поэтому в 2019 году был представлен прототип, а в 2021 произведён поезд-маглев, который может разгоняться до 600 км/ч [3].

Таким образом, построив сеть маглева Пекин-Шанхай, время движения между этими двумя городами (не учитывая авиасообщение) снизится до 3-3,5 часов в пути. При этом главный недостаток – стоимость возведения – компенсируется, во-первых, скоростью, во-вторых, долговечностью системы в связи с отсутствием трения между поездом и полотном для движения, а в-третьих, меньшим расходом энергии в сравнении с самолётами и автомобильным транспортом. Поэтому в перспективе планируется связать все крупные города страны данным, несомненно перспективным при достаточном финансировании, видом транспорта.

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CORRUGATED CARDBOARD PACKAGING: HISTORY, MANUFACTURE, ADVANTAGES

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Despite the fact that packaging can be traced to the first Western commercial ventures of leather, glass, and clay, packaging has increased dramatically in economic significance since the Industrial Revolution.

In today's market, packaging is intended to protect the goods from handling and environmental hazards, to provide a manageable unit of the packed product to the producer, distributor, and consumer, and to make the product appealing to potential buyers.

Packages must also be easy to manufacture and to fill and they must be inexpensive relative to the price of the final packaged product.

Material used in the transportation of substantiation loads of goods includes corrugated or solid cardboard for lightweight items, metal for liquids, and wood for bulky or heavy items. Generally, cases and crates made of timber are generally used for weights over 220 pounds (100 kg), while fiberboard is usually used for heavier weights.

Wooden panels have replaced crates in some instance. In addition to being used extensively as an impact buffer, it is also used for shipping liquids and perishable food products because of its high durability and insulation qualities.

It’s a pity, but history doesn't know the exact date of the invention of paper and cardboard. The only thing that is known is that cardboard and paper packaging became common as a result of the appearance of these materials. For example, in 1700 cardboard boxes were produced for the first time. And then, only in 1850 decorative cardboard were applied. As for corrugated cardboard, it was patented as depreciation material by Albert Jones and Oliver Long in 1871. And after almost 35 years launch production of corrugated cardboard boxes on a large scale began.

In fact, products are often transported and stored in cardboard packaging with a wavy layer of paper inside. There is a material known as corrugated cardboard, from which the word "corrugated packaging" or "corrugated box" is derived. Besides providing strength to the walls, the corrugated layer also protects the product from external influences. Thanks to this, candy, cookies, and beverages in glass bottles, household appliances, car parts can be transported without worrying that the goods may be damaged.

Packaging, made of corrugated material, comes in a variety of shapes, sizes and assignments. By type of assignment, it can be for consumer, production or transport. By type of shape there are corrugated boxes, trays and containers. And by size it divided into two groups: standard, which is carried out according to the standards of the FEFCO (Fédération Européenne des Fabricants de Carton Ondulé), which means interrace catalogue, and non-standard, when the box is manufactured according to individual dimensions.

The size, quality and strength of the package depend on the purpose for which the packaging will be used. This may be a transport packaging, which is only for

transportation; and presentation (showbox), which performs not only transport function, but also promotional.

Corrugated cardboard packaging is based on cardboard and fluting paper, which can be: 2, 3, 5. or 7-layers. According to the used raw material, cardboard can be different. For example, when using secondary waste paper raw material, cardboard is brown and if whitish cellulose is used - cardboard is white. In tern, paper for the production of corrugated cardboard is divided into two categories: waste paper and semi-cellulose.

And now about the advantages of corrugated packaging. It should be mentioned that it fully respects the principle of "three R": reduce, recycle and reuse. Thus, the environmental friendliness, safety, diversity and versatility of corrugated packaging allow it to be used wherever there is a need to pack a product.

In addition, the ability to manufacture packaging of different sizes and shapes makes it universal for all kinds of industry. Corrugated packaging's popularity can also be attributed to its affordable price, which allows consumers to order and buy it for a wide range of purposes. Products that are environmentally friendly can be produced, transported, used, stored, and utilized with minimal impact on the environment. Corrugated packaging is the safest type of modern packaging. Due to its cardboard composition, it is not capable of damaging the environment when it is assimilated and burned. 75% of its pulp is produced from wood. In contrast to minerals, such raw materials are renewable. As a secondary raw material, such packaging can be reused many times. According to IFEU (Institute for Environment and Energy Research) data, corrugated cardboard packaging contributes significantly less to environmental pollution, does not cause greenhouse effects, and does not deplete natural resources.

As for the CIS countries, including Belarus, they have a huge cardboard corrugated packaging market at the expense of large territories and populations. However, it is mainly oriented towards the import of materials and equipment. The packaging production in Belarus is a number of separate enterprises with different technical equipment, which is significantly improved by the use of foreign technologies and imported raw materials.

To sum up, it should be noted, that there isn’t any kind of packaging absolutely harmless to the environment. However, corrugated cardboard products are virtually free from harmful substances compared with packaging composed of other materials, do not consume a lot of electricity or other resources in production (this makes them easier to manufacture), and are easily recyclable (in natural conditions, they decompose almost completely).

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AUSWIRKUNGEN DER COVID 19-PANDEMIE AUF DIE LOGISTIKBRANCHE

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Die Bedeutung der Logistikbranche für die Versorgung der Bevölkerung ist während der Corona-Zeiten besonders deutlich geworden. Die COVID-19-Pandemie hat nicht nur das Leben vieler Menschen verändert, sondern auch die Situation auf den globalen und lokalen Märkten beeinflusst. Weltweit führten Grenzschließungen zwischen Ländern und die Einführung von Selbstisolationsmaßnahmen zu erheblichen Einschränkungen der Produktionskapazitäten. Die gewohnten Verbindungen zwischen Produzenten und Verbrauchern wurden durch die Corona-Pandemie gestört, was zu grundlegenden Veränderungen im Geschäft der Logistikunternehmen führte. In diesem Artikel werden die aktuellen temporären Veränderungen und Trends analysiert und systematisiert, die sich auf die Logistikbranche im Allgemeinen und auf das Unternehmen im Besonderen auswirken.

Die COVID 19-Pandemie und die Bewältigung der aktuellen Situation, einschließlich der Geschäftsabläufe, standen in den letzten anderthalb Jahren