

TBM signs a sales contract with Indonesia's largest cosmetic container molding manufacturer PT. Kemas Indah Maju for LIMEX Pellet (injection molding grade)

Tokyo, December 8, 2021 – TBM Co., Ltd. ("TBM") signed a sales contract with PT. Kemas Indah Maju ("KEMAS") to tackle environmental issues by introducing LIMEX Pellet as plastic alternatives in the injection molding for the beauty industry. KEMAS is the largest beauty and health plastic molding company in Indonesia that caters beauty brands around the world.

LIMEX Pellet, which contains 50% or more inorganic material such as calcium carbonate, reduces the amount of petroleum-derived plastics by up to 37%, and CO₂ emissions by up to 28% compared to petroleum-derived plastics^{*1}. It can be an alternative for acrylonitrile butadiene styrene (ABS), polypropylene (PP) resin that is used in various cosmetic containers and can be provided at a stable price due to less price fluctuation of limestones, the main raw material of LIMEX, compared to petroleum resin. The cosmetic container made from LIMEX has a luxurious matte texture and a profound feeling as a benefit of the limestone. Cosmetic containers manufactured with LIMEX Pellets are planned to be adopted by major global cosmetic brands in 2022.

To meet the accelerating needs for reducing the environmental burden in the cosmetics industry, KEMAS evaluated LIMEX's environmental performance and price competitiveness, taking into consideration the quality of the major domestic and global cosmetic brands handled by the company. LIMEX Pellets are planned to be utilized for cosmetic containers, such as compacts, cosmetic jars, lipstick, etc.

TBM and KEMAS will contribute to solving the environmental problems of the cosmetics industry by accelerating the expansion of the global sales of cosmetic containers made with LIMEX.

* 1 TBM survey | The calculation range is from raw material procurement to disposal (incineration) | The numerical values are reference values, not guaranteed values.



For Sustainable Beauty



■ Overview

Environmental issues such as climate change, resource depletion, and water resource crisis are rapidly advancing around the world. It is inevitable to respond at the national as well as corporate level. Around 170 countries around the world^{*2}, prohibit or restrict the use of plastic products. However, with population growth and economic growth in emerging economies, the global plastic resin market is projected to grow at a CAGR of 4.5% from 2020 to 2027, reaching \$522.5 billion by 2027^{*3}. It is said that 12 billion units of cosmetic containers are discarded annually worldwide, most of which are not recycled^{*4}. To change this situation, the cosmetics industry is taking various measures such as recycling cosmetic containers, using recycled materials, and proposing refill packaging.

LIMEX Pellet can be molded with conventional molding machines around the world^{*5}, leading to a reduction in plastic usage and CO₂ emissions compared to petroleum-derived plastics. Compared to petroleum, limestone, which is the main raw material of LIMEX, has less price fluctuations, so it can be provided at a stable price.

About LIMEX Pellet: <https://tb-m.com/en/limex/products/>

*2 World Economic Forum <https://www.weforum.org/agenda/2020/10/canada-bans-single-use-plastics/>

*3 Report Ocean https://reportocean.com/industry-verticals/sample-request?report_id=AMR1290

*4 Zero Waste Week <https://www.zerowaste.com/zero-waste-home-guide/>

*5 LIMEX has been patented in more than 40 countries around the world

About TBM Co., Ltd.

TBM is a company based in Japan specializing in developing, manufacturing, and distributing LIMEX[®], an innovative new material mainly made from limestone and inorganic materials. The basic patents of LIMEX have been registered in 40 countries including Japan, China, Europe, and the United States. LIMEX is registered in the sustainable technology dissemination platform "STePP" by UNIDO (United Nations Industrial Development Organization) as a recyclable material that can be an alternative to paper and plastic. By supplying LIMEX worldwide, TBM aims to solve plastic waste issues, resource depletion, and various environmental issues. In 2020, TBM was evaluated as the third-largest unicorn company in Japan.

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