

**TBM and Ricoh have collaborated
in the distribution of a new material, LIMEX Sheets.**
~Strengthen sales of LIMEX sheets for POD market~

"LIMEX" is new material developed by TBM Co., Ltd. ("TBM") which are mainly made of limestone and turned into alternatives of paper and plastic without using water nor pulp. TBM announces that TBM and Ricoh have collaborated in the distribution of LIMEX sheets for POD (Print On Demand) market.

LIMEX sheets that are with high quality of environmental performance, water resistance and durability can be used from a restaurant menu to a business card.

Ricoh Japan Corp. a domestic sales company of Ricoh (Head office: Minato-ku, Tokyo, President/Corporate Officer: Hidetaka Matsuishi) starts to use, and Ricoh will introduce LIMEX sheets to the printing companies, and other industries that use RICOH pro C series/pro L series.

This is the first initiative in collaboration with a printer maker for POD market.

TBM will then eventually collaborate with other printing companies.

Background

Nowadays, companies are expected to concern about environmental issues for SDG's. In 2015 TBM constructed its first plant in Shiroishi city Miyagi Prefecture. In 2016 TBM won the first ever annual Social Impact Award, at the Plug and Play Awards in Silicon Valley, USA. This award is given to a company that is considered as the most influential company to the society. TBM has conducted LCA (Life Cycle Assessments), collaborating with Oki lab, IIS, the University of Tokyo since April 2016. LIMEX, made from limestone which Japan itself is 100% self-sufficient in limestone. There are abundant reserves of limestone available and it is considered virtually inexhaustible. As producing LIMEX paper alternatives consumes almost no water nor wood pulp. SDG's Goal 6: Clean Water and Sanitation is relevant to TBM's business and TBM believes that they could contribute to it. This collaboration with Ricoh Japan Corp. came to agree because TBM and Ricoh Japan Corp. have the same direction to align with strategic objectives toward a sustainable society.

Contents of collaboration

We will strengthen sales of LIMEX sheets through Ricoh's online shopping website called NetRICOH to whom uses RICOH Pro C series/Pro L series, a production printer of Ricoh (LIMEX verification test has been carried out for both). ※ Lineup of LIMEX sheets will be added on Ricoh's paper catalogs for sales.

※ When printing LIMEX sheets with Pro C series, Pro L series.

It is available in a specific setting mode.

For the Pro L series, a profile is newly set up for LIMEX sheet.

Corresponding model of LIMEX sheet and correspondence sheet

<RICOH Pro C series>

Compatible models : RICOH ProC5210S/5200S、 ProC7110S/C7110/C7100S

Expected application : In house printed material, water proof and durable prints etc.

LIMEX sheets that are compatible with POD:

LMB-183 300 (LMK-183 200 、 LMK-183 400 To be released sequentially)

<RICOH Pro L series>

Compatible models : RICOH Pro L4160/4130

Expected use : Sign Graphics

(Point of purchase, posters, banners, tapestries, Colton)

※RICOH Pro L series adopts water-based latex ink with less environmental impact. The water-based formulation is odorless and environmentally friendly, while the use of our proprietary pigment dispersion gives these inks an exceptional print durability in both indoor and outdoor applications. LIMEX sheets could be printed with it.

Printer that compatible with LIMEX sheets :

Small rolled of compatible LIMEX sheet for inkjet printing.

LJD-183 200

LJU-183 200

• Comparison of printing media of LBP (laser beam printer)

Type	Price · function
Laminated paper	It is widely used as it is inexpensive. Processing pouches, lamination and machine are required.
Waterproof paper (Color laser card, Crisper, ECO CRYSTAL etc.)	Printing is possible as it is with waterproof function. Regarding cost, it is equivalent to laminated paper.
LIMEX Sheet	Printing is possible as it is with waterproof function. Regarding cost, it is equivalent to laminated paper.

About LIMEX

While producing one ton of regular paper would normally require roughly 20 tree and 100 tons of water, LIMEX can be produced one ton of LIMEX sheets with 0.6~0.8 ton of limestone and roughly 0.2~0.4 tons of polyolefin and without using wood or water. One box of business card which contains 100 of LIMEX business card could save 10 liters of water. Memory engraved in a box is designed as a design that makes it easy for users to recognize the contribution to water resources when users take out a business card.

- In 2013, TBM was adopted Innovation Centre establishment assistance program (subsidy for advanced technology demonstration and evaluation facility development, and others) run by Ministry of Economy, Trade and Industry.
- In 2014, LIMEX acquired a patent in Japan. It has acquired patents in 6 countries worldwide and applied for patents in 43 countries including America and Europe.
- In February 2015, TBM completed a pilot plant in Shiroishi, Miyagi Prefecture, with an annual production capacity of 6,000 tons.
- In 2016, TBM became the first winner of Plug and Play in social impact sector, one of the three largest incubation in Silicon Valley.
- In March 2017, TBM intends to establish cooperation agreement to explore manufacturing of LIMEX in Saudi Arabia with JGC and NICDP.
- In July 2017, TBM has been selected as one of the five top companies to participate in the Innovation Showcase of Japan US Innovation Awards program held at Stanford University.

About TBM Co., Ltd

CEO Yamasaki Nobuyoshi
Head Office 2-7-17-6F, Ginza, Chuo-ku, Tokyo
Founded 2011
Capital 5.07 billion yen (Including legal capital surplus)
Business description Development, manufacturing and sale of LIMEX and LIMEX products
URL <https://tb-m.com/en/>

About Ricoh Japan Co., Ltd.

President/Corporate Officer Hidetaka Matsuishi
Head Office 3-8-2, Shiba, Minato-ku, Tokyo
Founded 1959
Capital 2.5billion yen/ as of March 2017
Business description As a domestic sales company of the Ricoh Group, Ricoh provides various solutions to support customer's management issues and business tasks in various industries
URL <http://www.ricoh.com/>

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